Vancouver City Council

Anne McEnerny-Ogle, Mayor
Bart Hansen - Ty Stober - Erik Paulsen
Sarah J. Fox - Diana H. Perez - Kim D. Harless

City Council Meeting Agenda
August 11, 2025

In accordance with the Open Public Meetings Act (OPMA), the Vancouver City Council meeting will be open to in-person attendance. Options for viewing and/or participating in the meeting remotely will also be accommodated. The City Council will be attending this meeting in person.

All City Council workshops and meetings are broadcast (live closed captioning available), CVTV cable channels 23 / HD 323, and on the City's Facebook page.

Public testimony will be accepted regarding any matter on the agenda below. Advance registration will be required.

Unless otherwise announced by the Presiding Officer, each speaker may testify once for up to three minutes under each public testimony opportunity below and will be asked to provide their name and city of residence for the record.

Testimony will be accepted in the following manner:

- **Written comments submitted in advance**: Email comments to the City Council until 12:00 p.m. August 11, 2025. Comments will be compiled and sent to the City Council and entered into the record.
- **In-person or remote testimony during the meeting**: Register in-person at City Hall. In-person registration is open until 6:30 p.m. on August 11, 2025. Instructions will be provided on-site. Register to testify online. Online registration is open until 12:00 p.m. on August 11, 2025.

Visit the city's website for more information and to register under Public Participation or call the City Manager's Office at (360) 487-8600.

Further instructions for accessing the virtual meeting (for remote testimony) will be provided upon registration.

Upon request, printouts of agenda materials will be provided, including large print.

Workshops: 5:15- 6:00 p.m.

Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

Downtown Redevelopment Assessment
(Approximately 45 minutes)

Chim Chune Ko, Principal Project Manager, ChimChune.Ko@cityofvancouver.us

Council Dinner / Administrative Updates (6:00 - 6:30 PM)

Regular Council Meeting

6:30 PM
Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

Pledge of Allegiance

Call to Order and Roll Call

Approval of Minutes

Minutes - August 4, 2025

Community Communication

This is the place on the agenda where the public is invited to speak to Council regarding any matter on the Agenda not already scheduled for Public Hearing. (Separate instructions are provided for offering testimony on Public Hearing when applicable.) This includes the option to testify about Workshops. Members of the public addressing Council are requested to give their name and city of residence for the audio record. Speakers are to limit their testimony to a total of three minutes for all items combined. RCW 42.17A.555 and City Council Policy 100-32 prohibit the use of public facilities to support or oppose any ballot measure, or to support or oppose any candidate for elective office. Any violation of these rules could result in a suspension of speaking privileges during public comment periods at City Council Meetings for 90 days or longer for multiple offenses.

Consent Agenda

The following items will be passed by a single motion to approve all listed actions and resolutions. There will be no discussion on these items unless requested by Council. If discussion is requested, the item will be moved from the Consent Agenda and considered separately – after the motion has been made and passed to approve the remaining items.

1. Contract Amendment - Onsite Sodium Hypochlorite Generation Units C-101827

Staff Report: 171-25

Request: On Monday, August 11, 2025, authorize the City Manager, or designee, to finalize and execute Amendment No. 1 to contract C-101827 between the City of Vancouver and TMG Services, Inc. to increase the not-to-exceed amount by $1,200,000 to a total of $1,500,000.

Mehrin Selimgir, Civil Engineer, Mehrin.Selimgir@cityofvancouver.us

2. Resolution Adopting the Clark County Comprehensive Solid Waste Management Plan

A RESOLUTION adopting the Clark County Comprehensive Solid Waste Management Plan.

Staff Report: 172-25

Request: On Monday, August 11, 2025, finalize and approve the resolution for the Clark County Comprehensive Solid Waste Management Plan.

William Elder, Environmental Services Manager, Julie Gilbertson, Solid Waste Supervisor, Will.Elder@cityofvancouver.us, julie.gilbertson@cityofvancouver.us

3. Ordinance Amending Vancouver Municipal Code to Provide Impact Fee Deferral for Multi-family Residential Development

AN ORDINANCE of the City of Vancouver relating to changes to the City's Impact Fee

Ordinance; adopting an amendment to section 20.915, of the Vancouver Municipal Code (VMC); allowing for a deferral of traffic and park impact fee payment, providing for severability, and setting an effective date.

Staff Report: 173-25

Request: On Monday, August 11, 2025, advance the ordinance, setting the date for the second reading and public hearing for Monday, August 18, 2025.

Bryan Monroe, Associate Housing Project Coordinator, bryan.monroe@cityofvancouver.us

4. Ordinance Amending Vancouver Municipal Code to Provide System Development Charge Deferral for Multi-Family Residential Development

AN ORDINANCE of the City of Vancouver relating to changes to the City's Water And Sewer Use – Regulations And Charges Ordinance; adopting an amendment to section VMC 14.04, of the Vancouver Municipal Code (VMC); allowing for a deferral of utility system development charges for connecting to city utility services, providing for severability, and setting an effective date.

Staff Report: 174-25

Request: On Monday, August 11, 2025, advance the ordinance, setting the date for the second reading and public hearing for Monday, August 18, 2025.

Bryan Monroe, Associate Housing Project Coordinator, bryan.monroe@cityofvancouver.us

5. Approval of Claim Vouchers

Request: Approve claim vouchers for August 11, 2025.

Public Hearings

The following item(s) are scheduled for public hearing. Members of the public addressing Council are requested to give their name and city of residence for the audio record. Unless otherwise announced by the Presiding Officer, speakers are to limit their testimony to three minutes for each public hearing.

6. 2025 Site Specific Rezone - 58th Street

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-22 to R-50 at a 1.6 acre property at 7711 and 7809 NE 58th Street, tax lots 107971000 and 107982000; providing for severability; and establishing an effective date.

Staff Report: 165-25

Request: On Monday, August 11, 2025, upon second reading and a public hearing, finalize and approve the ordinance approving the 58th Street rezone to R-50.

Bryan Snodgrass, Principal Planner, bryan.snodgrass@cityofvancouver.us

7. 2025 Site Specific Rezone - Bella Grove

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-18 to R-30 at a 6.2 acre property at 13401 and 13309 NE 59th Street, tax lots 107812000 & 107814000; providing for severability; and establishing an effective date.

Staff Report: 166-25

Request: On Monday, August 11, 2025, upon second reading and a public hearing, finalize and approve the ordinance approving the Bella Grove rezone to R-30.

Bryan Snodgrass, Principal Planner, bryan.snodgrass@cityofvancouver.us

Communications

A. From the Council

B. From the Mayor

Mayor's Appointment to C-Tran Composition Board

C. From the City Manager

Adjournment

City Hall is served by C-TRAN. Route information and schedules are available online at www.c-tran.com. You also may reach C-TRAN at (360) 695-0123 for more information on times, fares, and routes.

Anyone needing language interpretation services or accommodations with a disability at a Vancouver City Council meeting may contact the City Manager's staff at (360) 487-8600 (RELAY: 711). Assistive listening devices and live Closed Captioning are available for the deaf, hard of hearing and general public use. Please notify a staff person if you wish to use one of the devices. Every attempt at reasonable accommodation will be made. To request this agenda in another format, please also contact the phone numbers listed above.



Downtown Redevelopment Assessment

Patrick Quinton – Executive Director, CCRA
Alisa Pyszka – Board Member, CCRA

August 11, 2025



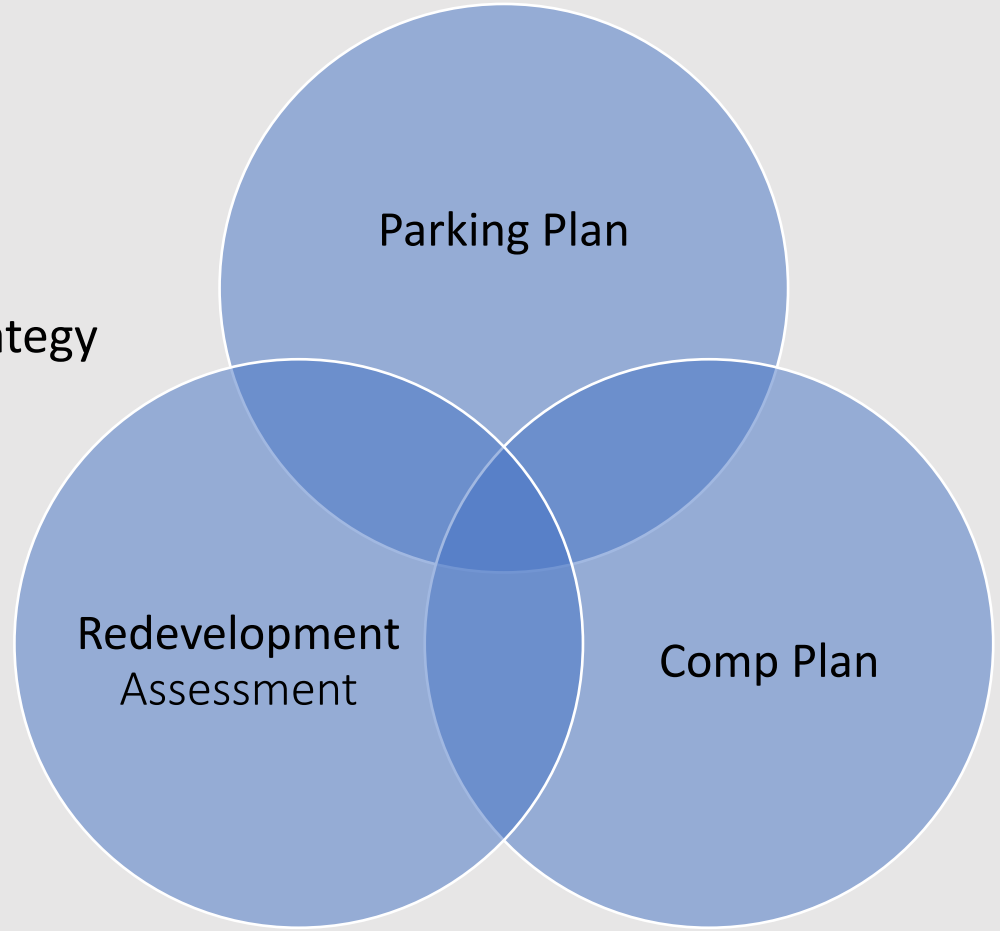
Agenda

- Context
- Project Scope
- Findings
- Strategy Recommendations
- Implementation
- Next Steps

Integrated Planning Effort for Downtown

Maximizing downtown development potential critical to policy goals

Climate Action Framework
Equity Objectives
Housing Action Plan
Transportation System Plan
Economic Development Strategy



Context

Preparing for the Next Wave of Downtown Development

- 40k new housing units and jobs needed citywide over next 20 years – how does downtown absorb its share?
- End of Waterfront development in sight – how can city continue to attract new investment downtown?
- How does downtown leverage transformative infrastructure projects?







Project Scope

BAE Urban Economics performed the following tasks:

- Review downtown development trends
- Study six priority redevelopment opportunity districts
- Identify and analyze strategic parcels
- Project downtown development capacity
- Recommend strategic parcels for redevelopment
- Recommend actions to promote redevelopment

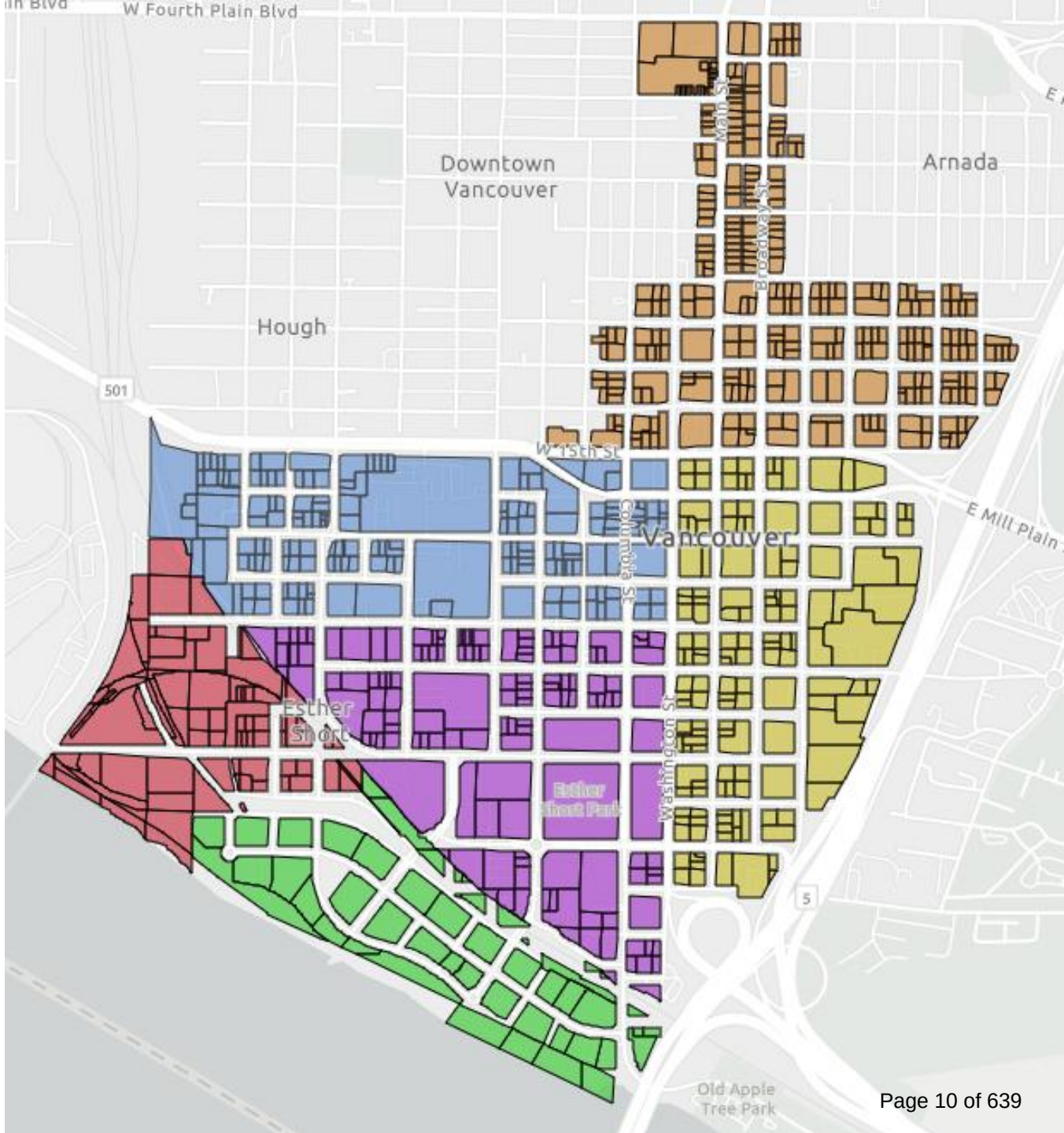


Opportunity Districts

- Main Street
- Uptown
- County Center
- Esther Short Park
- West Industrial
- Waterfront

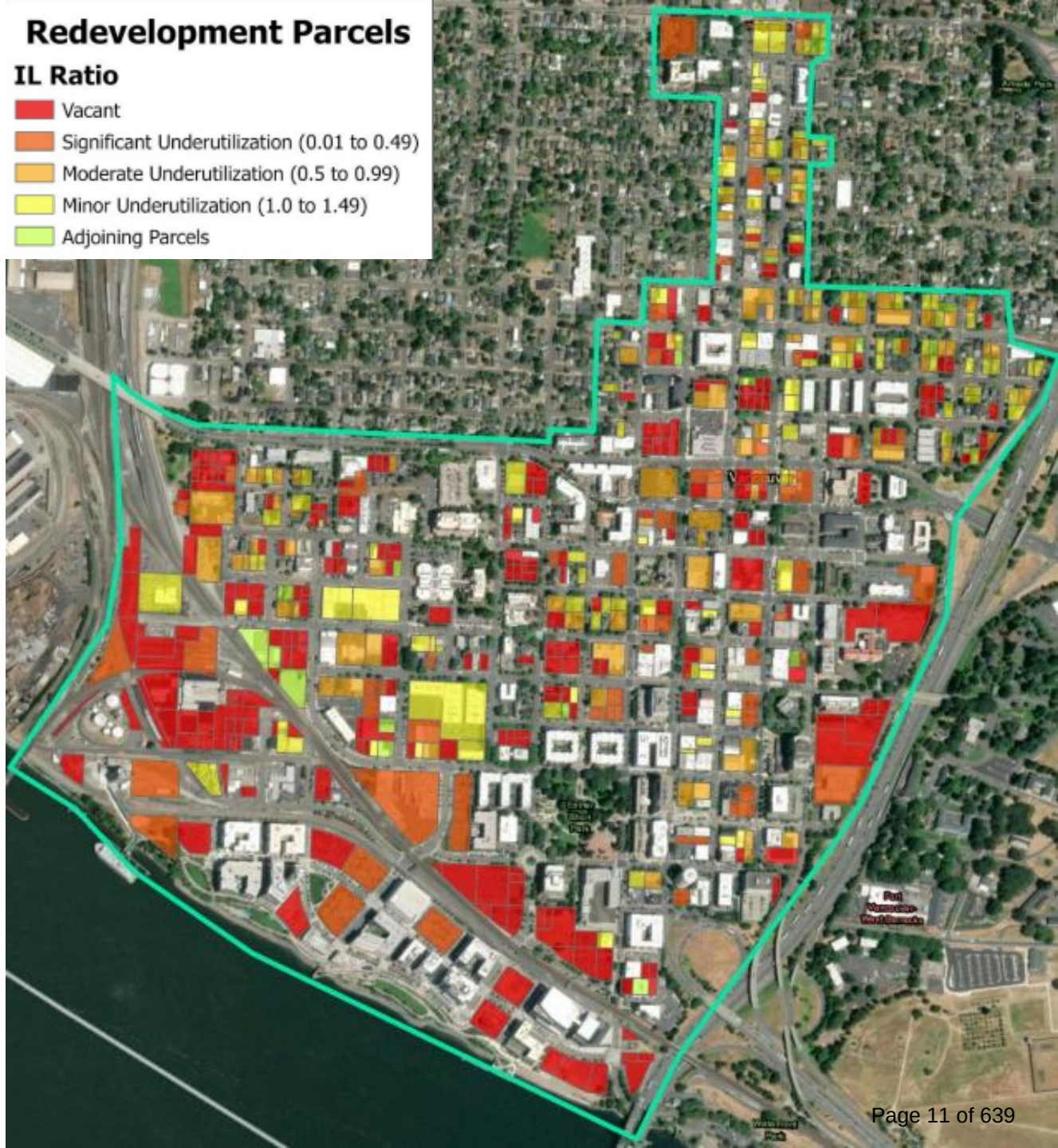
Assessed real estate market conditions to inform redevelopment potential

- Production trends
- Rental Rates
- Absorption



Ample supply of underdeveloped parcels

- Approximately 100 acres or 30% of land downtown is either vacant or significantly underutilized
- Downtown has several large or full block redevelopment sites
- Segmented ownership may be a barrier to large scale redevelopment on large underdeveloped blocks

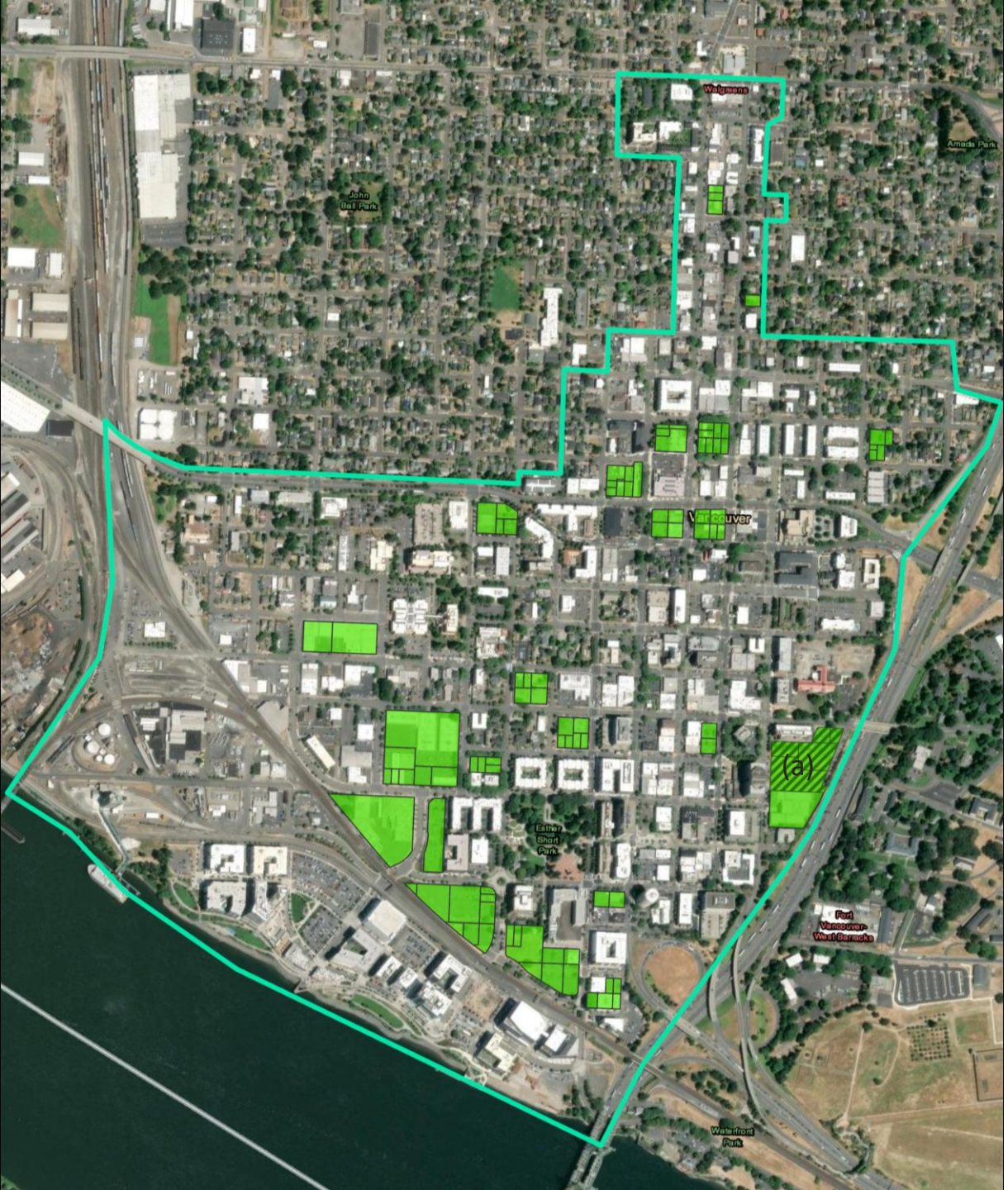


Significant Downtown Development Capacity

Incentivizing high density development is critical to maximizing capacity

Redevelopment Opportunity Area	Residential Yield Capacity (Units)		Office Yield Capacity (SF)	Industrial Yield Capacity (SF)
	Medium Density	High Density		
Esther Short Park	1,800	4,930	530,000	70,000
Main Street	1,790	4,260	390,000	0
County Center	1,610	3,850	400,000	50,000
Uptown	2,480	5,340	240,000	0
Total	**7,680**	**18,380**	**1,560,000**	**120,000**

~40% of development capacity is on sites larger than one acre



Strategic Sites

Methodology

- Select “catalytic” sites
- Represent best opportunities for near-term development
- Outline challenges and opportunities
- Analyze capacity and catalytic potential for surrounding area

Findings

- 20 strategic sites
- 32 total acres
- Potential for 3,800-6,500 housing units

(a) The Library Square Site is considered a strategic parcel but is not included in this analysis given that the city is currently analyzing the development potential as part of the IBR process.



Implementation

- Redevelopment initiated and led primarily by the private sector
- City involvement is to attract and catalyze private investment through:
  - **Partnerships** with private property owners seeking to redevelop consistent with City objectives
  - **Policies** that enhance the development economics for downtown project
  - **Investment** in critical infrastructure
  - Strategic **public-private redevelopment** of catalytic sites

Near Term Policy Recommendations

Changes designed to improve downtown development economics

Policy Change	Impact on Redevelopment
Adopt state environmental exemption for desired land uses and building typologies	High
Increase Height and Density Limits	Medium
Eliminate Parking Minimums	Medium
Reduce Ground Floor Retail Requirements	Medium
Reduce Building Design and Façade Requirements	Low

Potential Capital Improvements

Completed Projects

1 Columbia Bicycle Lane Improvements

2 Esther Short Park Walkway

Funded Projects

3 Kauffman and Jefferson Alignment

4 Main Street Promise

5 Waterfront Gateway Paseo

Planned - Unfunded Projects

6 Amtrak Multimodal Access

7 Waterfront Way Traffic Calming

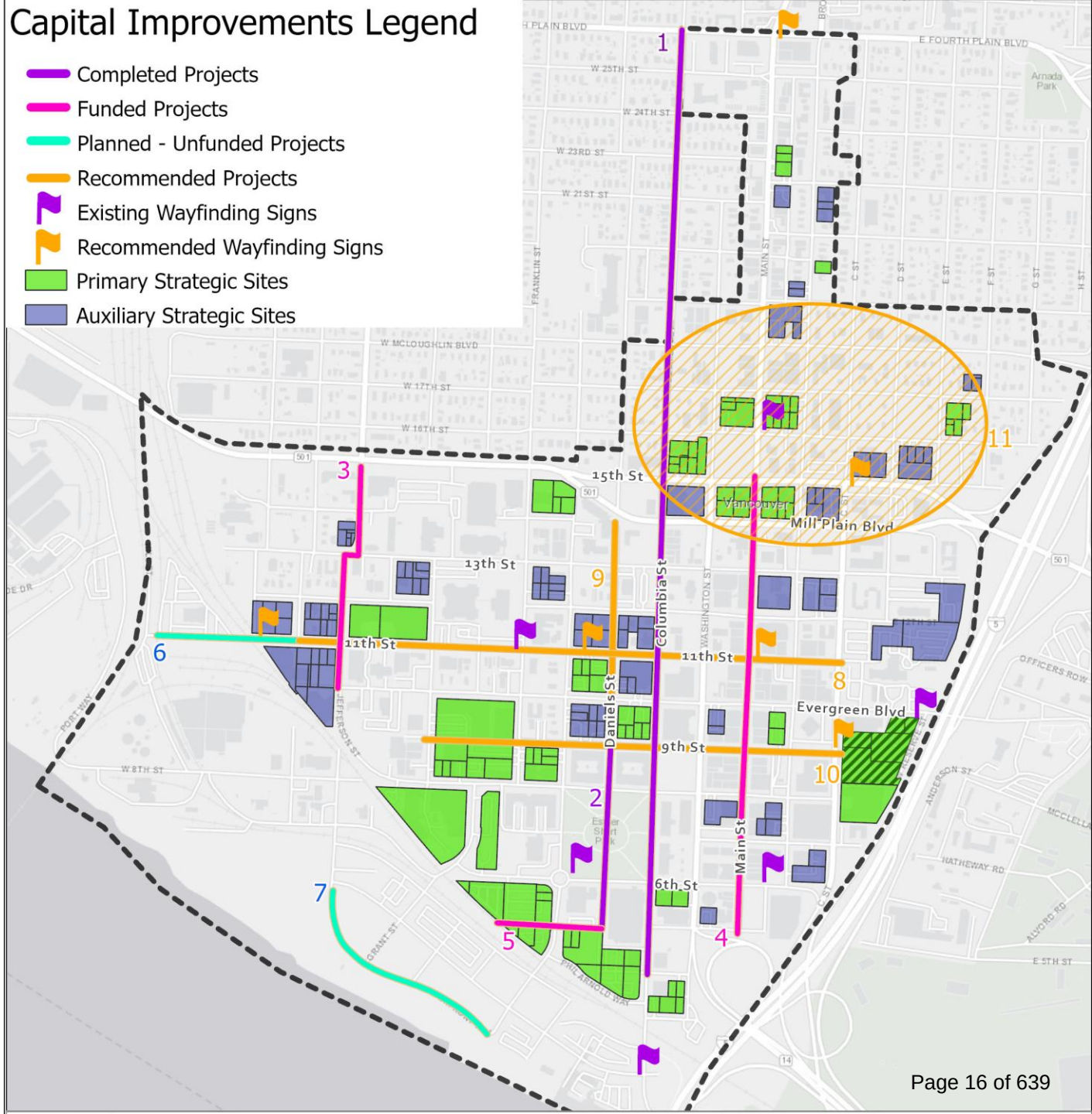
Recommended Projects

8 11th Street Pedestrian and Bicycle Improvements

9 Daniels Street Pedestrian and Bicycle Improvement

10 9th Street Pedestrian and Bicycle Improvements

11 Uptown Park Infrastructure



Strategic Redevelopment

- Leverage publicly-owned sites for redevelopment
- Acquire strategic sites for community needs and public-private projects
- Leverage existing funding sources, including AHF, Parking Fund, infrastructure funds to advance projects
- Establish new funding mechanisms including tax increment financing, Local Improvement Districts (LIDs) and Business Improvement Areas (BIAs)





Next Steps

- Start conversations with property owners
- Explore feasibility of establishing a tax increment area
- Integrate priority infrastructure projects into existing capital improvement plans
- Investigate potential acquisitions



Discussion

- What are Council's priorities for future downtown development?
- How should staff prioritize investments relative to other City priorities?
- What role does Council envision for CCRA in leading downtown redevelopment?
- What additional actions should the City and CCRA take to promote downtown redevelopment?

bae urban economics

SERA

Downtown Vancouver Redevelopment Assessment

Prepared for the City of Vancouver

May 1, 2025



May 1, 2025

Patrick Quinton, Director
Chim Chune Ko, Real Estate Project Manager
City of Vancouver
Economic Prosperity & Housing Department
415 W. 6th Street
Vancouver, WA 98660

Dear Patrick and Chim Chune,

BAE Urban Economics, in partnership with SERA Architects, is pleased to present the following Downtown Redevelopment Assessment for the City of Vancouver. The following report summarizes current demographic, economic, and real estate market conditions within the Downtown Vancouver area. Following the broad assessment of conditions within downtown, the report analyzes characteristics of distinct Redevelopment Opportunity Areas (ROA), including the development capacity of vacant and underutilized sites within each ROA. Based on a parcel-by-parcel analysis of the unique characteristics and redevelopment potential, the report then identifies 20 unique Strategic Parcels that represent critical opportunities to maximize development potential in downtown and catalyze additional development. Finally, the following report provides a range of strategies and recommendations for the City to support redevelopment of vacant and underutilized sites within downtown to accommodate projected growth and economic development goals while addressing historic injustices and ensuring that historically marginalized and underserved communities are able to benefit from this growth.

We look forward to any questions or comments you have on the report.

Sincerely,

David Shiver, MCP
Principal

Matt Fairris, MCP
Vice President

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EXECUTIVE SUMMARY

Project Overview

The following report identifies strategies and recommendations to support redevelopment of sites throughout Downtown Vancouver. The study begins with a review of critical demographic, economic, and real estate market conditions with an emphasis on highlighting how Downtown Vancouver has evolved over the past decade. In addition, the analysis compares Downtown Vancouver to the City of Vancouver and the broader Portland Region to identify key differences in market conditions. Building on the market analysis, the report then estimates the total buildout potential of existing underutilized sites throughout the downtown study area. Based on the analysis of available sites, BAE identified 20 Strategic Sites with the greatest potential to catalyze growth and additional development throughout Downtown Vancouver. Finally, the report concludes with targeted strategies and recommendations to advance redevelopment efforts, while ensuring alignment with the City's broader goals around housing production, equitable outcomes, and economic development.

Downtown Vancouver Market Conditions

Downtown Vancouver is a rapidly changing market, primarily spurred by recent development in the Vancouver Waterfront area. With this growth, the downtown area population and household growth has significantly outpaced growth in the City and region as a whole. In addition, the growth has changed the characteristics of the downtown area, with a significant increase in higher-income renters over the past decade. However, households throughout the remainder of downtown tend to have lower incomes relative to the City and region. With the City projecting to add 10,000 new housing units in downtown by 2045, the following analysis identifies potential locations for redevelopment and provides strategies to support equitable redevelopment efforts.

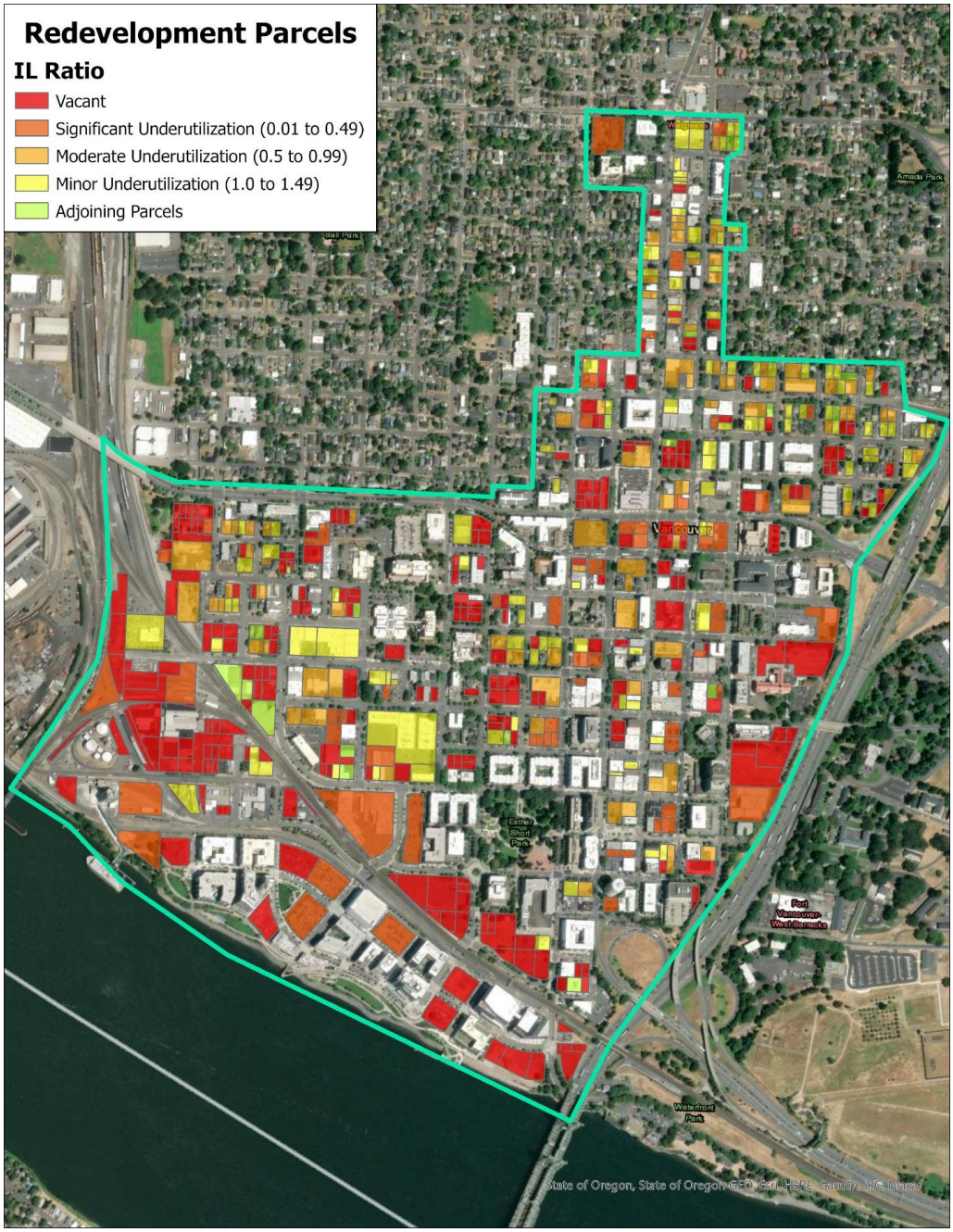
From an employment perspective, Downtown Vancouver is heavily concentrated in office-generating jobs, including: (1) professional, scientific, and technical services; (2) public administration, (3) real estate rental and leasing; and (4) finance and insurance. Employment throughout the City of Vancouver, however, is more heavily concentrated in health care, retail trade, and educational services, indicating Downtown plays a unique role in the economic characteristics of the City. Over the next decade, the entire region is projected to experience modest employment gains, primarily in education and health services, professional and business services, and leisure and hospitality. Downtown Vancouver is well positioned to capture growth in these industries but will need to balance the demand for additional housing units with the need to accommodate ongoing economic generating uses.

Downtown Redevelopment Capacity

Downtown Vancouver has a significant amount of vacant and underutilized sites. As seen below in Figure ES-1, these sites range from small sites of roughly 5,000 square feet to full city

blocks of approximately 40,000 square feet. Leveraging input from SERA Architects, the report estimates that these parcels can support **between 7,600 and 18,400 housing units**, depending on the density of development. In addition, these sites are projected to accommodate roughly **1.5 million square feet of office space** and nearly **120,000 square feet of light industrial space**.

Figure ES-1: Downtown Vancouver Parcels with Redevelopment Potential

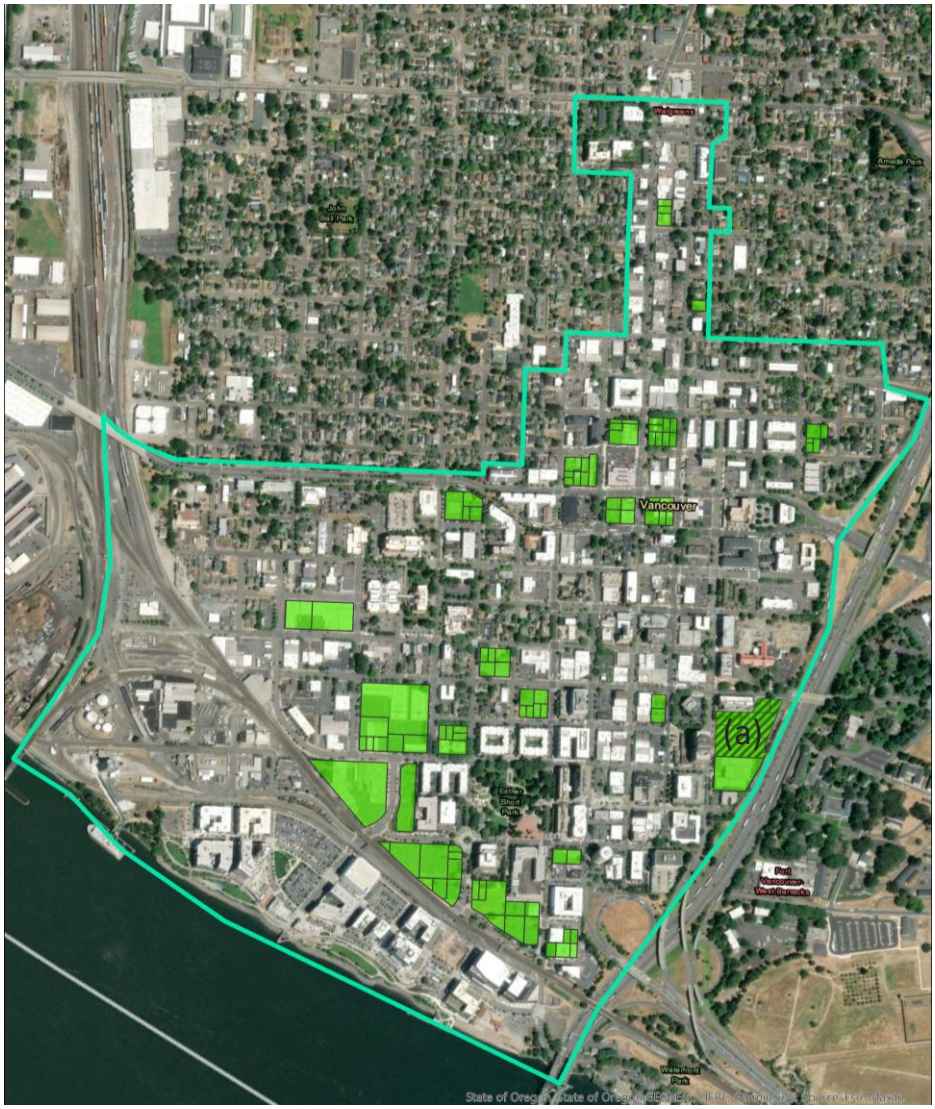


Sources: City of Vancouver; Data Axle; BAE, 2024.

Strategic Sites

While the figure above identifies the full inventory of underutilized sites throughout downtown, BAE also selected a set of 20 sites that serve as unique opportunities to support future development, capitalize on recent public and private investments, and catalyze additional development throughout downtown. As seen below in Figure ES-2, these sites are distributed throughout the entire downtown area and represent unique opportunities to support a range of development typologies. The analysis identifies the unique characteristics of each site, including site size, parcel ownership, and location to identify the potential future development on each strategic site.

Figure ES-2: Downtown Vancouver Strategic Sites



Note:
(a) The site to the south of the new Downtown Vancouver Library is not included in analysis but is considered a Strategic Site for the city that is currently being studied under a separate analysis.
Sources: City of Vancouver; SERA Architects; BAE, 2025.

Strategies and Recommendations to Support Redevelopment

The report concludes with a set of strategies and recommendations for the City to help support redevelopment of vacant and underutilized sites throughout Downtown Vancouver. The recommendations are broken down into five categories, including: (1) Land Use Policies, (2) City Process, (3) Financial Incentives, (4) Direct and Indirect City Investment, and (5) Methods for Raising City Capital. While the report identifies a range of longer-term strategies, the near-term recommendations include:

Leverage Publicly-Owned Sites for Development: The City owns various parcels throughout downtown that can be used to support near-term development. The City can support the feasibility of development by offering the land at discounted rates, either through a low-cost ground lease or fee simple sale. In addition, the City can collaborate with other public agencies to identify surplus sites that could support development. These agencies primarily include Clark County and the Vancouver Housing Authority. The City would not necessarily have to purchase these sites, but rather provide resources and support for future development projects on these publicly-owned sites.

Acquire Privately-Owned Sites: The above analysis identifies a range of privately-owned sites that are currently vacant or underutilized. The City can support redevelopment of these sites through strategic acquisition. The City should target two types of sites: (1) large catalytic sites, and (2) challenging sites with multiple owners. The larger catalytic sites offer an opportunity for the City to catalyze large-scale development through the acquisition of individual parcels. The City acquiring entire sites or portions of sites with multiple owners can support a cohesive and efficient development of these sites, rather than piecemeal development of smaller parcels which will translate into lower density developments.

Analyze Potential to Establish a Downtown TIF District: Given the significant amount of redevelopment potential in Downtown Vancouver, future development will increase the total assessed value, and associated property tax revenue in Downtown. By setting up a Tax Increment Financing (TIF) District in Downtown, the City will reserve a share of this increase in property tax revenue for future infrastructure investments in Downtown. By setting up a TIF district, the City will have flexible funds to meet the infrastructure necessary to support future development and growth in downtown.

Conduct a Downtown Planned Action Ordinance or Adopt State Environmental Exemption: Intended to unlock future development in downtown, the City should either conduct a Downtown Planned Action Ordinance to analyze the environmental impacts associated with the future planned growth, or adopt a state environmental exemption for development in downtown. Aligning with State Environmental Policy Act (SEPA) requirements, a downtown-wide ordinance would develop a strategy to mitigate the environmental impacts of growth in downtown, rather than requiring each individual property to conduct a similar analysis, thus reducing time and costs to individual properties. In-lieu of conducting the analysis, the City may also be able to adopt an exemption for development downtown.

INTRODUCTION

Study Overview

This report examines the development potential of vacant and underutilized sites in Downtown Vancouver. To provide context, BAE first reviews key demographic, economics, and real estate market trends, highlighting how Downtown Vancouver has evolved over the past decade. In this section, BAE also compares Downtown Vancouver to the City of Vancouver and the broader Portland-Vancouver-Hillsboro Metropolitan Statistical Area (Portland MSA) to identify key differences in market conditions.

Building on this market analysis, the report then identifies and analyzes the characteristics of unique Redevelopment Opportunity Areas (ROAs). Specific to each ROA, the analysis reviews critical market conditions to assess the development capacity of vacant and underutilized sites within each ROA.

Based on this analysis, BAE identifies 20 Strategic Sites with the greatest potential to catalyze growth and maximize development opportunities in Downtown Vancouver. Finally, the report concludes with targeted strategies and recommendations to advance redevelopment efforts, while ensuring alignment with the City's broader goals around housing production, equitable outcomes, and economic development.

Importance of Downtown Redevelopment on City of Vancouver

While the City of Vancouver has grown significantly over the past decade, including growth in downtown and the periphery of the City, focusing on redevelopment within downtown has a number of significant benefits to the City. These primarily include:

Maximizing Efficiency of Public Service Delivery – By concentrating development in areas with existing infrastructure and services, the City will increase the efficiency of public service delivery, leading to improved fiscal conditions.

Expanding Tax Base for Long-Term Fiscal Sustainability – New development in downtown will expand the City's tax base, including both residential and non-residential uses, leading to longer-term fiscal sustainability.

Advancing City's Environmental Sustainability Goals – Through the delivery of higher-density development in areas with existing infrastructure and alternative transportation options, downtown redevelopment efforts will help advance the City's environmental sustainability goals.

Strengthening Vancouver's Identity by Enhancing Downtown's Amenities – Increased concentration of development in Downtown Vancouver will increase the amenities offered to downtown and citywide residents. By increasing the amenities in downtown, the City will further strengthen Vancouver's identity and attraction of new residents and businesses.

Diversifying Housing Typologies to Attract New Talent to Support Business Growth – Downtown Vancouver represents a unique area within the City to support the delivery of varied residential development typologies, including moderate-density townhomes to high-density multifamily developments. By supporting a range of housing typologies, the City will not only support more inclusive and diverse residential and population growth, this growth will support business growth in the City by providing a range of housing options for incoming employees.

Building on Recent City Investments – The City has recently made a number of investments, including the ongoing Main Street Promise infrastructure upgrade program and the future Waterfront Gateway development project. The City should capitalize on these investments by supporting redevelopment of underutilized sites in close proximity to the investments.

City Investments to Promote Equitable Development – With increased investment in downtown, the City also has the opportunity to ensure that the growth does not displace existing residents by actively promoting equitable development in Downtown. When the City invests directly in land acquisitions, infrastructure investments, and real estate development, the City can leverage those investments to support affordable housing and commercial space to ensure existing residents and businesses continue to thrive in Downtown and benefit from the increased amenities and services.

DEMOGRAPHIC AND ECONOMIC CONDITIONS

This section is an overview of demographic and economic characteristics within Downtown Vancouver, the City of Vancouver, and the Portland-Vancouver-Hillsboro MSA. To inform these characteristics, the analysis leverages a range of public and private data sources, including the U.S. Census Bureau, Bureau of Labor Statistics, City of Vancouver, Washington Employment Security Department, and Data Axle.

Demographic Characteristics

Population and Household Trends

From 2010 to 2022, Downtown Vancouver grew faster than both the City of Vancouver and the Portland-Vancouver-Hillsboro MSA. As seen in Table 1 below, the population within Downtown Vancouver expanded by roughly 2.6 percent per year between 2017 and 2022. This population growth was somewhat higher than the Citywide annual growth over the same period, at 2.2 percent per year, and notably higher than the Portland region as a whole, which grew by just 1.0 percent per year. Similar to population, the annual growth in the number of households in Downtown Vancouver (4.4 percent per year) outpaced the City of Vancouver (2.6 percent per year) and the Portland MSA (1.6 percent per year). Interestingly, the household growth in Downtown Vancouver was significantly higher than the population growth, indicating that a large share of the household growth was in smaller households.

Table 1: Population and Household Characteristics, 2010 to 2022

Downtown Vancouver	2010	2017	Avg. Annual Change 2010-2017	2022	Avg. Annual Change 2017-2022
Population	4,881	5,293	1.2%	6,009	2.6%
Households	2,341	2,534	1.1%	3,142	4.4%
Avg. Household Size	1.67	1.67		1.64	

City of Vancouver	2010	2017	Avg. Annual Change 2010-2017	2022	Avg. Annual Change 2017-2022
Population	161,791	171,393	0.8%	190,700	2.2%
Households	65,691	68,158	0.5%	77,418	2.6%
Avg. Household Size	2.43	2.48		2.43	

Portland-Vancouver-Hillsboro MSA	2010	2017	Avg. Annual Change 2010-2017	2022	Avg. Annual Change 2017-2022
Population	2,226,009	2,382,037	1.0%	2,505,312	1.0%
Households	867,794	912,368	0.7%	986,857	1.6%
Avg. Household Size	2.52	2.57		2.50	

Sources: 2010 Decennial Census, 2017 & 2022 5-Year ACS Summary Data, BAE, 2024.

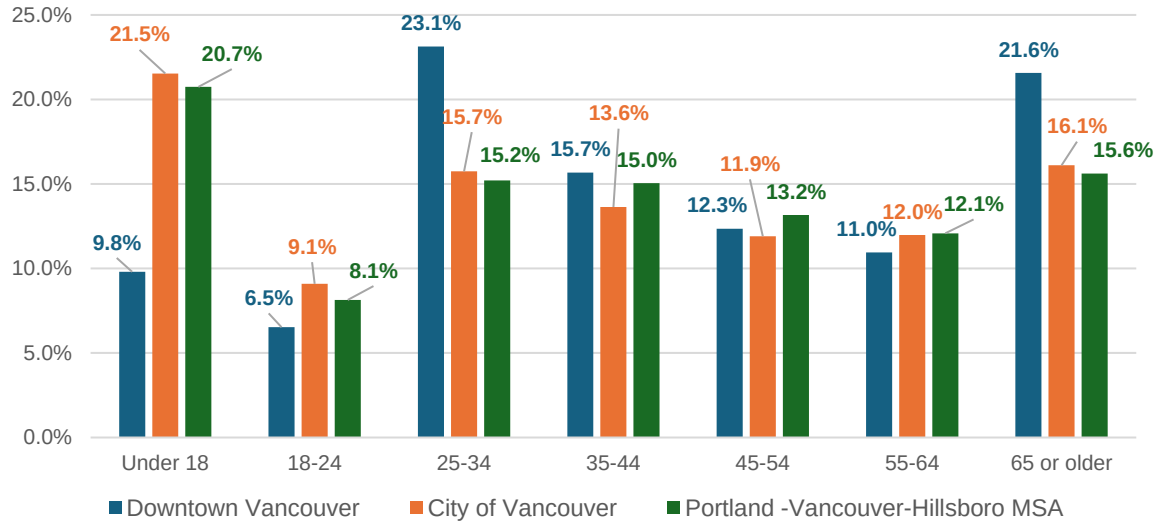
Average Household Size

Downtown Vancouver has smaller household sizes than both the city and the MSA. As seen in Table 1 above, Downtown Vancouver households have 1.64 persons per household on average, which is the smallest of the three regions likely due to the smaller unit sizes in Downtown. The Citywide average household size is 2.43 persons, while the regional average household size is 2.50 persons per household. As noted above, the growth in households between 2017 to 2022 was primarily associated with smaller household sizes, leading to a decreasing average household size in downtown. This is also a trend seen at the city and regional level, where both geographies experienced decreasing average household sizes over the same period.

Age Characteristics

Downtown Vancouver has a significantly high proportion of young professionals and seniors relative to the city and region. As shown in Figure 1, residents between the age of 25 and 34 account for the largest age cohort, with an estimated 23.1 percent of residents, compared to between 15 and 16 percent in the city and region. This high concentration of residents between the age of 25 and 34 is fairly typical of downtown areas that present close proximity to urban amenities and recreation opportunities. Downtown Vancouver has a fairly similar share of residents between the ages of 35 and 64 as the city and region but has a higher share of residents above the age of 65 relative to the comparison geographies. As seen below, this age cohort accounts for nearly 22 percent of all downtown residents compared to approximately 16 percent for the city and region. As a result, Downtown Vancouver has a significantly lower share of residents between the age of 24. These residents only account for 16.3 percent of all downtown residents, whereas this age cohort accounts for 30.6 percent of all Vancouver residents and 28.8 percent of residents across the Portland region.

Figure 1: Age Distribution, 2010-2022



Sources: Decennial Census 2010, ACS 5-Year summary 2022, BAE, 2024.

Household Income

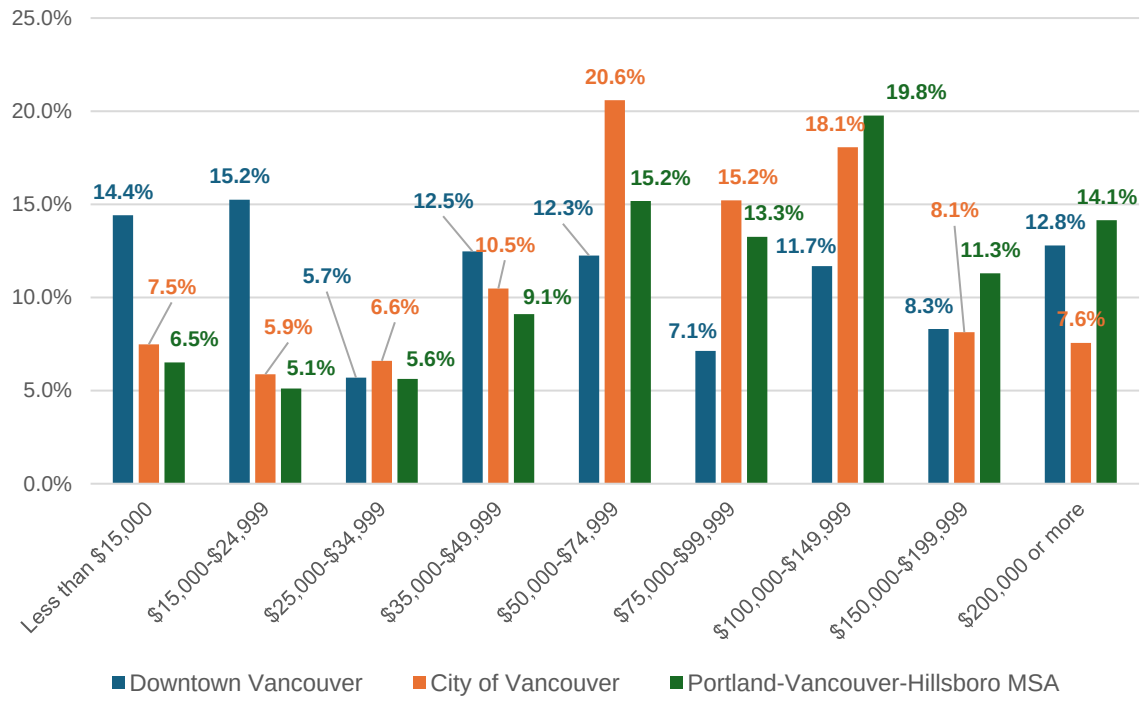
Downtown Vancouver households have lower median household incomes relative to the city and region, but due to the smaller household sizes, actually have higher income per capita relative to the two geographies. As seen in Table 2 below, nearly 30 percent of all downtown households have incomes below $25,000 per year, which is well above the percent of residents in this income bracket in Vancouver or the Portland region. On the higher income spectrum, a larger share of downtown households has incomes above $200,000 per year relative to the City, though the downtown has a much lower share of middle-income households making between $50,000 and $150,000 per year. While this leads to a lower median income in downtown, as seen below, the income per capita in downtown is well above the citywide and regional per capita income. This is driven by the smaller household sizes, which indicates that downtown households may have lower incomes relative to the city and region, but they also have fewer household members. This is likely a factor of the age distribution of downtown households, which tend to be young professionals and empty nestors, leading to higher disposal income relative to larger households.

Table 2: Household Income, 2022

	Downtown Vancouver		City of Vancouver		Portland-Vancouver-Hillsboro MSA	
Income Category	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Less than $15,000	453	14.4%	5,795	7.5%	64,226	6.5%
$15,000-$24,999	479	15.2%	4,551	5.9%	50,435	5.1%
$25,000-$34,999	179	5.7%	5,109	6.6%	55,561	5.6%
$35,000-$49,999	392	12.5%	8,112	10.5%	89,834	9.1%
$50,000-$74,999	385	12.3%	15,938	20.6%	149,803	15.2%
$75,000-$99,999	224	7.1%	11,777	15.2%	130,785	13.3%
$100,000-$149,999	367	11.7%	13,988	18.1%	195,100	19.8%
$150,000-$199,999	261	8.3%	6,297	8.1%	111,483	11.3%
$200,000 or more	402	12.8%	5,851	7.6%	139,630	14.1%
Total (a)	**3,142**	**100.0%**	**77,418**	**100.0%**	**986,857**	**100.0%**
Median HH Income	**$57,010**		**$73,626**		**$90,451**	
Per Capita Income	**$56,485**		**$40,219**		**$47,649**	

Sources: 2022 ACS 5-Year Summary; BAE, 2024.

Figure 2: Household Income, 2022



Sources: Decennial Census 2010, ACS 5-Year summary 2022, BAE, 2024.

Projected Household and Population Growth

According to City staff, Downtown Vancouver is expected to accommodate roughly 10,000 new housing units, leading to roughly 20,000 new residents in downtown by the year 2045. This would roughly equal a 5.5 percent annual growth rate relative to the existing population, which is well beyond regional forecasts for the City and Portland MSA. Data from public forecasts indicate that the City of Vancouver is projected to grow at roughly 1.7 percent per year between 2022 and 2045, while the Portland region is only forecasted to grow at 1.0 percent per year over the same period. This indicates that downtown is projected to accommodate a significant amount of growth, which highlights the need to support new development and invest in City infrastructure and services.

Economic Characteristics

Employment by Industry

As seen in Table 3 below, jobs within downtown tend to be concentrated in a few key industries that are relatively different from the key industries of employment in the City of Vancouver as a whole. As seen below, the jobs within Downtown Vancouver are concentrated in Professional, Scientific, and Technical Services (1,959 jobs; 14.7 percent of total employment), Public Administration (1,897 jobs; 14.3 percent), and Real Estate Rental and Leasing (1,394 jobs; 10.5 percent), or nearly 40 percent of all jobs in downtown. Combined,

these industries only account for an estimated 15.2 percent of jobs in the City. Conversely, the jobs within the City of Vancouver are concentrated in Health Care and Social Assistance, Retail Trade, and Educational Services, representing a combined 38.5 percent of all jobs in the City. In downtown, these industries only account for 8.2 percent of all jobs, indicating a significant mismatch between citywide job types and those that are located in downtown. Other industries that are also highly concentrated in downtown include Finance and Insurance, Information, and Accommodation and Food Services. As evident from the industries that account for the large share of downtown employment, these jobs tend to be located in office uses, supporting the inventory of office space within downtown, discussed below.

Table 3: Employment by Industry, 2024

	Downtown Vancouver		City of Vancouver	
Industry	**Number**	**Percent**	**Number**	**Percent**
Agriculture, Forestry, Fishing and Hunting	6	0.0%	73	0.1%
Mining	0	0.0%	40	0.0%
Utilities	201	1.5%	362	0.4%
Construction	383	2.9%	5,277	5.2%
Manufacturing	157	1.2%	8,233	8.1%
Wholesale Trade	788	5.9%	4,776	4.7%
Retail Trade	451	3.4%	11,442	11.2%
Transportation and Warehousing	539	4.1%	2,758	2.7%
Information	856	6.4%	3,715	3.6%
Finance and Insurance	1,239	9.3%	3,540	3.5%
Real Estate Rental and Leasing	1,394	10.5%	4,458	4.4%
Professional, Scientific, and Technical Services	1,959	14.7%	6,503	6.4%
Management of Companies and Enterprises	54	0.4%	102	0.1%
Administrative, Support, Waste Mgmt & Remediation	506	3.8%	2,552	2.5%
Educational Services	36	0.3%	10,458	10.2%
Health Care and Social Assistance	597	4.5%	17,481	17.1%
Arts, Entertainment, and Recreation	200	1.5%	1,296	1.3%
Accommodation and Food Services	1,061	8.0%	8,328	8.1%
Other Services (except Public Administration)	867	6.5%	5,932	5.8%
Public Administration	1,897	14.3%	4,471	4.4%
Unclassified	115	0.9%	419	0.4%
Total	**13,306**	**100.0%**	**102,216**	**100.0%**

Sources: Data Axle; BAE, 2024.

Portland MSA Employment Trends

Table 4 below shows the employment trends within the Portland-Vancouver-Hillsboro MSA. As seen below, Trade, Transportation and Utilities accounts for the largest industry across the region, which includes retail and wholesale trade, transportation and warehousing, and utilities. However, between 2010 and 2022, these industries grew at a slower rate than the growth in all jobs throughout the region, indicating the percent of jobs in these industries decreased over that period. Regionally, industries with the largest growth in employment between 2010 and 2022 include Professional and Business Services, Education and Health Services, and Construction, which accounted for the only three industries that outpaced total employment growth in the region. In terms of industries particularly concentrated in

Downtown Vancouver, Professional and Business services grew significantly throughout the region, indicating likely demand for space in downtown. Similarly, Leisure and Hospitality jobs grew by a significant amount, driving need for more restaurants and hotel spaces. Other industries, such as Information and Financial Activities, that are concentrated in downtown only experienced modest growth over the 2010 and 2022 time period.

Table 4: Employment by Industry in Portland-Vancouver-Hillsboro MSA, 2010 to 2022

	2010		2022		Total Change	Total % Change	Average Annual % Change
Industry	**Number**	**Percent**	**Number**	**Percent**	**2010-2022**	**2010-2022**	**2010-2022**
Natural resources and mining	12,735	1.3%	14,533	1.2%	1,798	14.1%	1.1%
Construction	43,617	4.5%	79,124	6.6%	35,507	81.4%	5.1%
Manufacturing	106,424	11.1%	126,263	10.5%	19,839	18.6%	1.4%
Trade, transportation, and utilities	185,627	19.3%	221,921	18.4%	36,294	19.6%	1.5%
Information	22,428	2.3%	26,411	2.2%	3,983	17.8%	1.4%
Financial activities	55,241	5.7%	60,478	5.0%	5,237	9.5%	0.8%
Professional and business services	126,602	13.2%	194,593	16.2%	67,991	53.7%	3.6%
Education and health services	133,571	13.9%	178,821	14.8%	45,250	33.9%	2.5%
Leisure and hospitality	94,243	9.8%	113,512	9.4%	19,269	20.4%	1.6%
Other services	39,033	4.1%	41,943	3.5%	2,910	7.5%	0.6%
Public Administration	141,531	14.7%	144,610	12.0%	3,079	2.2%	0.2%
Unclassified	289	0.0%	2,575	0.2%	2,286	791.0%	20.0%
Total (a)	**961,366**	**100.0%**	**1,204,785**	**100.0%**	**243,419**	**25.3%**	**1.9%**
Unemployment Rate	**10.1%**		**3.7%**				

Sources: BLS QCEW 2010 and 2022 Annual Average; FRED; BAE, 2024.
Notes: (a) Total Employment count may not sum due to confidentiality requirements associated with the limited employment in Skamania County.

Major Employers

As mentioned above, Health Care and Education Services account for the largest industry of employment within the City of Vancouver. According to Table 5, PeaceHealth and Vancouver Public Schools are the two largest employers in the city. PeaceHealth has five locations within the City of Vancouver and a major medical center located on East Mill Plain Boulevard and NE 87th Avenue. The second and third largest employers in the city are Vancouver Public Schools and Evergreen Public Schools, followed by other medical and education providers.

Table 5: Principal Employers, City of Vancouver, 2022

Employer	Number of Employees
PeaceHealth	16,500
Vancouver Public Schools	2,957
Evergreen Public Schools	2,203
Vancouver Clinic	1,452
Battle Ground Public Schools	1,380
SEH America Inc.	867
Tapani Inc.	659
Clark Co. Public Transportation Benefit	535
Southwest Washington Medical Center	500
Evergreen School District	431

Source: City of Vancouver 2022 Annual Comprehensive Financial Report, BAE, 2024

Projected Employment Growth

According to the City of Vancouver planning team, the ongoing Comprehensive Plan estimates that Downtown Vancouver will accommodate between 5,000 and 10,000 new jobs. At an average annual growth rate of roughly 1.4 percent, this is a more modest amount of job growth relative to the projected growth in residential units and population.

As shown in Table 6 on the following page, employment throughout the Portland region is expected to grow by 152,100 jobs by 2032. Education and health services are expected to continue the recent growth and have the largest total job growth over that time period, estimated at 31,900 new jobs across the region. Professional and business services are also projected to grow by significant margins, with nearly 28,700 new jobs by the year 2032, as well as Leisure and Hospitality with 23,600 new jobs. Driven by innovations in technology, the Information industry is projected to have the highest rate of growth across all industries, at 2.0 percent per year, though this only results in an estimated 6,100 new jobs regionally.

Table 6: Employment Projections by Industry in Portland-Vancouver-Hillsboro MSA, 2022 to 2032

Industry	2022 Number	2032 Number	Total Change 2022-2032	Average Annual % Change 2022-2032
Natural resources and mining	11,100	11,500	400	0.4%
Construction	80,500	92,100	11,600	1.4%
Manufacturing	122,900	132,200	9,300	0.7%
Trade, transportation, and utilities	223,000	240,200	17,200	0.7%
Information	27,500	33,600	6,100	2.0%
Financial activities	72,100	75,800	3,700	0.5%
Professional and business services	194,500	223,200	28,700	1.4%
Education and health services	180,500	212,400	31,900	1.6%
Leisure and hospitality	111,300	134,900	23,600	1.9%
Other services	45,800	52,000	6,200	1.3%
Public administration	146,900	160,300	13,400	0.9%
Total	**1,216,100**	**1,368,200**	**152,100**	**1.2%**

Sources: Oregon Employment Department Workforce and Economic Research Division; State of Washington Employment Security Department; BAE, 2024.
Notes: Data for the Counties in the State of Washington within the Portland-Vancouver-Hillsboro MSA are calculated based on the region of Southwest Washington.

REAL ESTATE MARKET CONDITIONS

Residential Market Overview

Units in Structure

Downtown Vancouver hosts a fairly different inventory of housing types relative to the city and region, with a notably larger concentration of high-density developments. As seen in Table 7 below, housing units in multifamily buildings, or those with five or more units, account for 71.1 percent of all units in Downtown Vancouver, compared to just 27.8 percent in the city and 22.6 percent in the region. It is worth noting that Downtown Vancouver only accommodates roughly four percent of the total household units in the City yet has nearly 11 percent of the high density units. Also of note is that the downtown area contains a fairly limited inventory of townhomes or duplex, triplex, quadplex units. Together, these middle housing types only account for roughly nine percent of all units, compared to 17.3 percent in the City and almost 13 percent in the region.

Table 7: Housing Unit by Type of Building, 2022

Downtown Vancouver	Total	% of Total
Single Family Detached	672	20.1%
Single Family Attached	115	3.4%
Multi-Family 2-4 Units	176	5.3%
Multi-Family 5+ Units	2,374	71.1%
Mobile Homes & Other	0	0.0%
Total	**3,337**	**100.0%**

City of Vancouver	Total	% of Total
Single Family Detached	42,207	52.3%
Single Family Attached	5,630	7.0%
Multi-Family 2-4 Units	8,305	10.3%
Multi-Family 5+ Units	22,443	27.8%
Mobile Homes & Other	2,169	2.7%
Total	**80,754**	**100.0%**

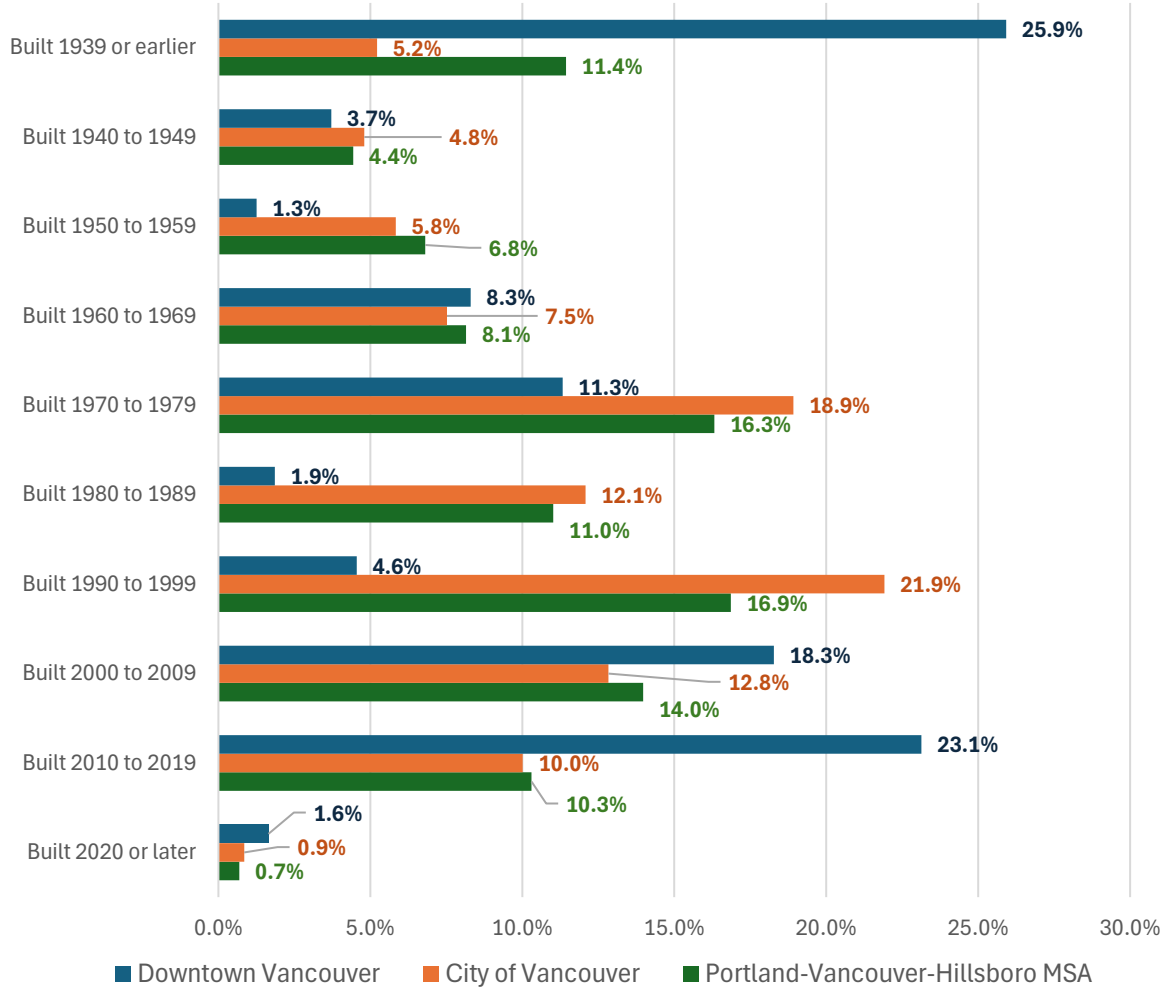
Portland-Vancouver-Hillsboro MSA	Total	% of Total
Single Family Detached	633,331	61.1%
Single Family Attached	59,971	5.8%
Multi-Family 2-4 Units	70,747	6.8%
Multi-Family 5+ Units	234,729	22.6%
Mobile Homes & Other	37,591	3.6%
Total	**1,036,369**	**100.0%**

Sources: 2022 ACS 5-Year Summary Data; BAE, 2024.

Units by Year Built

According to Figure 3, the inventory of units in downtown tends to be much older or much newer than the city and regional inventory of units. As seen below, approximately 25 percent of all units in downtown were originally built before 1939, while approximately 40 percent of units have been built since 2000. By comparison, only five percent of the Citywide housing inventory was built prior to 1939, and only 22 percent of the inventory was built since 2000. In years where the City housing inventory expanded rapidly, particularly between 1970 and 1999, it is evident that little of this development was located in downtown.

Figure 3: Housing Units by Year Built, 2022



Sources: U.S. Census Bureau, American Community Survey 2022 5-Year Summary Data; BAE, 2024.

Housing Tenure

Downtown has a significantly higher share of renter households relative to the city and region, a trend that was further strengthened over the past decade. As of 2022, more than 75 percent of downtown residents are renters, compared to 49.1 percent of all Vancouver residents, and only 37.8 percent of all households in the Portland metropolitan region. Since 2010, the number of renter households in downtown increased significantly, with a growth of nearly 50 percent. Over the same time horizon, the percentage of renters in the city and region remained fairly consistent, with between 10 and 20 percent growth.

Table 8: Occupied Housing Units by Tenure, 2010 to 2022

	2010		2022		% Change
Downtown Vancouver	**Number**	**Percent**	**Number**	**Percent**	**2010-2022**
Owner-Occupied	704	30.1%	736	23.4%	4.5%
Renter-Occupied	1,637	69.9%	2,406	76.6%	47.0%
Total	**2,341**	**100.0%**	**3,142**	**100.0%**	**34.2%**

	2010		2022		% Change
City of Vancouver	**Number**	**Percent**	**Number**	**Percent**	**2010-2022**
Owner-Occupied	33,433	50.9%	39,393	50.9%	17.8%
Renter-Occupied	32,258	49.1%	38,025	49.1%	17.9%
Total	**65,691**	**100.0%**	**77,418**	**100.0%**	**17.9%**

	2010		2022		% Change
Portland-Vancouver-Hillsboro MSA	**Number**	**Percent**	**Number**	**Percent**	**2010-2022**
Owner-Occupied	535,433	61.7%	613,831	62.2%	14.6%
Renter-Occupied	332,361	38.3%	373,026	37.8%	12.2%
Total	**867,794**	**100.0%**	**986,857**	**100.0%**	**13.7%**

Source: 2010 Decennial U.S. Census; 2022 ACS 5-Year Summary; BAE, 2024.

Occupancy Status

Table 9 below shows the vacancy status of units by vacancy type for all three geographies between the years of 2018 and 2022. As reported below all three regions have fairly low vacancy rates, at between four and six percent. Across all geographies, units currently for rent accounted for the largest concentration of vacant units, followed by units categorized as "other vacant" which includes a range of other vacancy reasons. Unlike the region, both the City of Vancouver and Downtown Vancouver have fairly limited units that are vacant for seasonal, recreational, or occasional use, indicating that the bulk of vacant units in downtown and the City of Vancouver are simply seeking new tenants, rather than owned but not occupied.

Table 9: Housing Vacancy by Type of Vacancy, 2022

Downtown Vancouver	Number	Percent
For rent	84	43.1%
Rented, not occupied	19	9.7%
For sale only	0	0.0%
Sold, not occupied	0	0.0%
For seasonal, recreational, or occasional use	6	3.1%
For migrant workers	0	0.0%
Other vacant (a)	86	44.1%
Total Vacant Housing Units	**195**	**100.0%**
Vacancy Rate	**5.8%**	

City of Vancouver	Number	Percent
For rent	1,183	35.5%
Rented, not occupied	183	5.5%
For sale only	167	5.0%
Sold, not occupied	197	5.9%
For seasonal, recreational, or occasional use	286	8.6%
For migrant workers	0	0.0%
Other vacant (a)	1,320	39.6%
Total Vacant Housing Units	**3,336**	**100.0%**
Vacancy rate	**4.1%**	

Portland-Vancouver-Hillsboro MSA	Number	Percent
For rent	15,173	30.6%
Rented, not occupied	2,707	5.5%
For sale only	4,551	9.2%
Sold, not occupied	3,269	6.6%
For seasonal, recreational, or occasional use	8,601	17.4%
For migrant workers	28	0.1%
Other vacant (a)	15,183	30.7%
Total Vacant Housing Units	**49,512**	**100.0%**
vacancy rate	**4.8%**	

Notes:
(a) Includes units vacant for other reasons, such as personal reasons of the owner, use by a caretaker or janitor, and boarded-up units not available for occupancy.
Sources: 2022 American Community Survey 5 Year Summary, U.S. Census Bureau; BAE, 2024.

Sale Price Trends

Between July 2022 and July 2024, there were roughly 65 condominium unit sales and 12 townhome sales in Downtown Vancouver. As shown below in Table 10, all condo sales were one- or two-bedroom units, with a median sale price of $440,000 or $506 per square foot. Conversely, townhome sales tended to be larger units, with a fairly equal distribution of two- and four-bedroom units. The 12 townhome sales had a median sale price of $517,875 which is more expensive than the condominium units. However due to the larger unit sizes, townhome sales had a lower median sale price per square foot, at nearly $410 per square foot.

Table 10: Home Sale Price Distribution, Downtown Vancouver, 2022 to 2024

Condo/Co-op

Sale Price Range	1 BR	2 BR	3 BR	4+ BR	Total	Percent of Total
Less than $250,000	2	0	0	0	**2**	**3.1%**
$250,000-$399,999	18	9	0	0	**27**	**41.5%**
$400,000-$599,999	3	9	0	0	**12**	**18.5%**
$600,000-$999,999	1	8	0	0	**9**	**13.8%**
$1,000,000 or more	5	10	0	0	**15**	**23.1%**
Total Units Sold	**29**	**36**	**0**	**0**	**65**	**100%**
Percent of Total	**44.6%**	**55.4%**	**0.0%**	**0.0%**	**100.0%**	
Average Year Built	**1990**	**2006**			**1999**	
Median Sale Price	**$302,000**	**$636,000**	**n.a.**	**n.a.**	**$440,000**	
Average Sale Price	**$495,579**	**$998,064**	**n.a.**	**n.a.**	**$773,878**	
Average Unit Size (SF)	**730**	**1,373**	**n.a.**	**n.a.**	**1,086**	
Median Price per SF	**$512**	**$486**	**n.a.**	**n.a.**	**$506**	
Average Price per SF	**$617**	**$623**	**n.a.**	**n.a.**	**$620**	

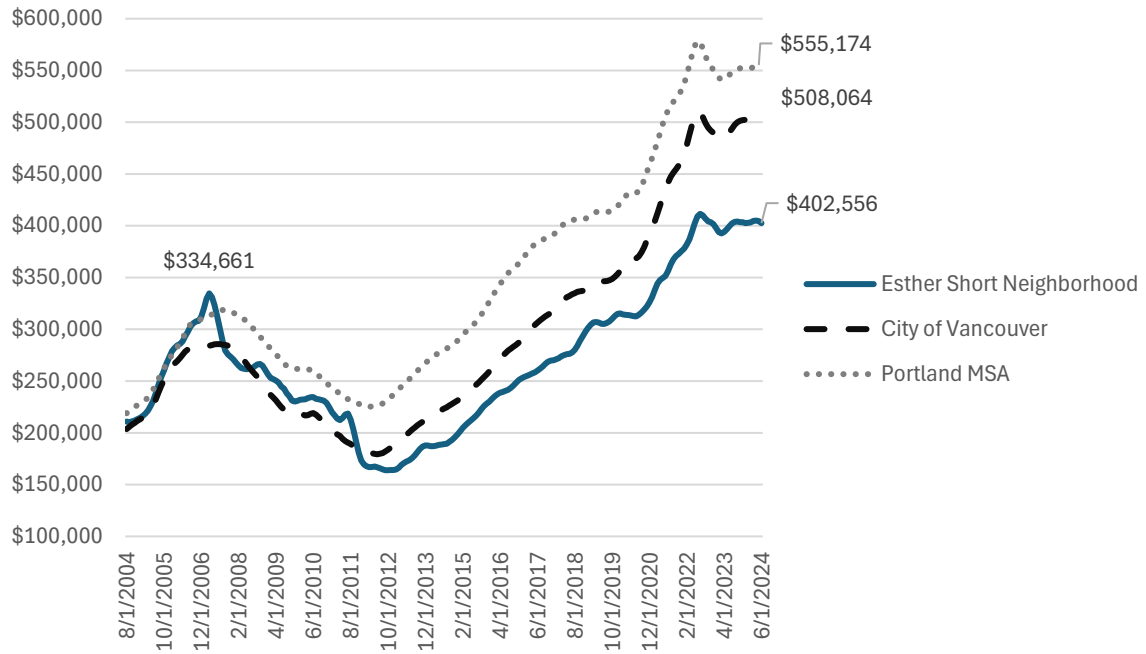
Single Family Detached and Attached

Sale Price Range	Studio/1 BR	2 BR	3 BR	4+ BR	Total	Percent of Total
Less than $250,000	0	0	0	0	**0**	**0.0%**
$250,000-$399,999	0	1	1	0	**2**	**16.7%**
$400,000-$599,999	0	4	1	1	**6**	**50.0%**
$600,000-$999,999	0	0	3	1	**4**	**33.3%**
$1,000,000 or more	0	0	0	0	**0**	**0.0%**
Total Units Sold	**0**	**5**	**5**	**2**	**12**	**100%**
Percent of Total	**0.0%**	**41.7%**	**41.7%**	**16.7%**	**100.0%**	
Average Year Built	**n.a.**	**1984**	**1948**	**1931**	**1960**	
Median Sale Price	**n.a.**	**$509,900**	**$600,000**	**$600,000**	**$517,875**	
Average Sale Price	**n.a.**	**$492,460**	**$566,400**	**$566,400**	**$559,942**	
Average Unit Size (SF)	**n.a.**	**1,069**	**1,646**	**1,646**	**1,498**	
Median Price per SF	**n.a.**	**$453**	**$347**	**$347**	**$406**	
Average Price per SF	**n.a.**	**$477**	**$347**	**$347**	**$397**	

Notes: Data reflect full and verified sales between July 24, 2022 to July 24, 2024.
Sources: Redfin; BAE, 2024.

As shown in Figure 4 below, median sale prices for all residential units spiked prior to the Great Recession in 2008 across all geographies with sale prices around $335,000 per unit. Although sales prices continued to increase following the Great Recession, downtown sale prices did not increase as quickly as the Citywide or regional sale price increase. The most recent data from Redfin indicates that Downtown Vancouver now has the lowest median sale price of the three geographies at $402,556, though this may be associated with the prevalence of smaller units in downtown. By comparison, the median sales price in the City of Vancouver is nearly $510,000 per unit, while the regional median is approximately $555,000 per unit.

Figure 4: Median Sales Price – All Residential, Downtown Vancouver, City of Vancouver and Portland-Vancouver-Hillsboro MSA, 2004 to 2024



Sources: Redfin; BAE, 2024.
Notes: Data reflect full and verified sales between July 24, 2022 to July 24, 2024.

Multifamily Rental Characteristics

As seen in Table 11 on the following page, nearly one-third of recent multifamily construction in the City of Vancouver was located in downtown, and nearly half of the units currently under construction are also located in downtown. Despite accounting for a large share of the recent apartment construction, downtown still only accounts for roughly 11.5 percent of the Vancouver multifamily inventory. Likely driven by recent completions and the absorption of new units, downtown has a slightly higher multifamily vacancy rate compared to the comparison geographies, at 7.7 percent compared to approximately 6.5 percent in the city and region. Rental rates in Downtown Vancouver have historically been higher than the City and

region, although rents did not increase as significantly in downtown as they did in the comparison geographies between 2014 and 2024. Despite the slightly slower increase in rents downtown, monthly rental rates for multifamily units in downtown average roughly $1,808 per month, which is roughly $100 to $200 more expensive relative to the citywide and regional average rents. Downtown has also experienced significant growth in high-end apartment projects over the past decade, which have average monthly rental rates well above the remainder of downtown. Typically, rent for new properties in downtown average roughly $2,300 per month, or nearly 30 percent above the downtown-wide average rent. According to the City of Vancouver, as of June 2024 there are seven residential buildings under construction, with three located in the Vancouver Waterfront area.

Table 11: Multifamily Market Summary, Q1 2024

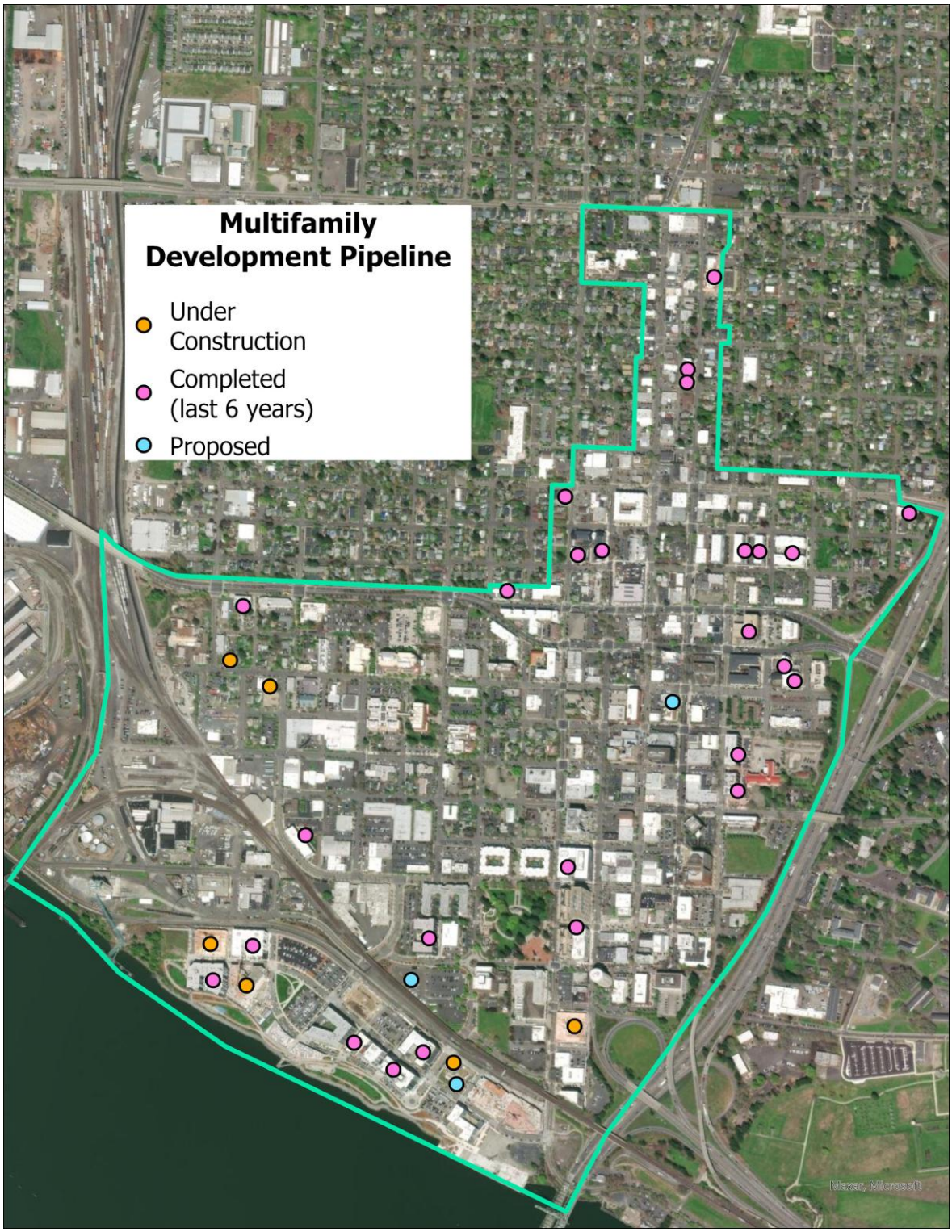
Description	Downtown Vancouver	City of Vancouver	Portland-Vancouver-Hilsboro MSA
Inventory (Units) Q1 2024	**3,757**	**32,555**	**294,992**
Inventory (% of City)	*11.5%*		
Inventory (% of MSA)	*1.3%*		
Occupied Stock (units)	3,468	30,367	275,594
Vacant Stock (Units	257	2,138	19,126
Vacancy Rate	7.7%	6.6%	6.5%
Avg. Asking Rents			
Avg. Asking Rent (per unit), Q1 2014	$1,390	$1,153	$1,134
Avg. Asking Rent (per unit), Q1 2024	$1,808	$1,706	$1,594
% Change Q1 2014 - Q1 2024	*23.1%*	*32.4%*	*28.9%*
Net Absorption			
Net Absorption (unit), Q2 2014 - Q1 2024	2,348	6,852	61,252
Net Absorption (unit), Q2 2023 - Q1 2024	386	669	5,510
New Deliveries (units) Q2 2014 - Q1 2024	2,462	7,816	70,496
Under Construction (units), Q1 2024	666	1,494	10,659

Source: CoStar; BAE 2024.

Residential Development Pipeline

Figure 5 on the following page represents the pipeline of residential projects that were proposed or under construction as of Q1 of 2024. The orange circles represent the projects that were under construction and the light blue circles indicate the projects were proposed and in the permitting or review process. There were three buildings under construction in the Waterfront area, all of which have finished as of the conclusion of this report, and two more multifamily projects in the pipeline. The other area in Downtown that has a concentration of development is the Jefferson Street and W. 13th Street area. Another notable project that is proposed is the Waterfront Gateway Project located on w. 6th Street and Esther Short Street.

Figure 5: Residential Development Pipeline, Q1 2024



Sources: City of Vancouver; BAE, 2024.

Retail Market Overview

Downtown Vancouver, like the multifamily market, has only 10 percent of the Citywide retail square footage (Table 12). Despite the urban setting, retail rents in downtown are lower than the citywide and regional average rental rates. More specifically, average retail rental rates in downtown are estimated at $1.79 per square foot, lower than the citywide average of $2.06 per square foot. However, since 2014 retail rents have increased more significantly outside of downtown. Despite broader challenges in retail demand, the overall retail vacancy rate in Downtown Vancouver is almost zero, compared to nearly four percent in the city and region.

Table 12: Retail Market Summary, Q1 2024

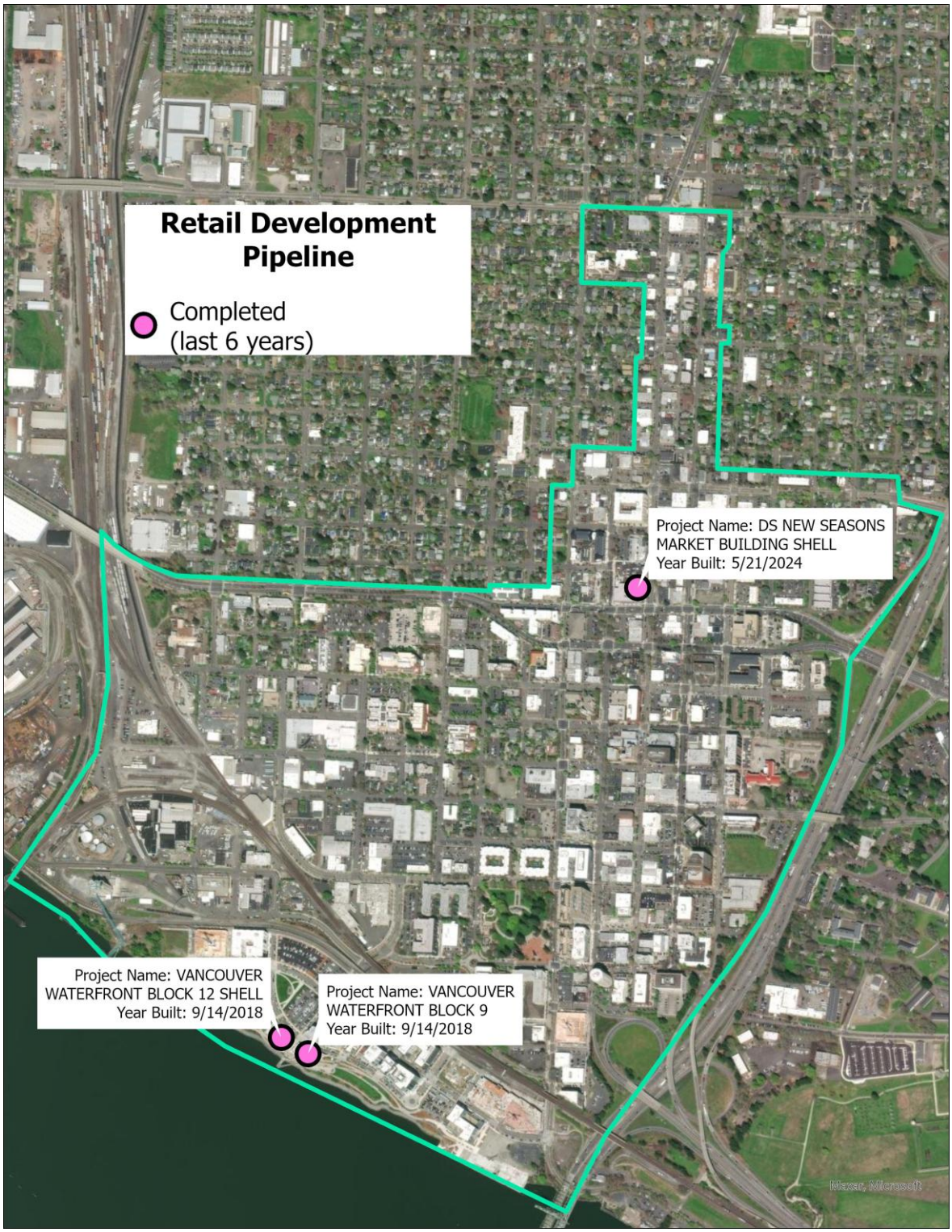
Description	Downtown Vancouver	City of Vancouver	Portland-Vancouver-Hilsboro MSA
Inventory (SF) Q1 2024	**1,112,832**	**11,179,120**	**126,196,822**
Inventory (% of City)	*10.0%*		
Inventory (% of MSA)	*0.9%*		
Occupied Stock (sf)	1,107,799	10,751,113	121,076,895
Vacant Stock (sf)	5,033	379,389	4,437,800
Vacancy Rate	0.5%	3.4%	3.5%
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.46	$1.45	$1.38
Avg. Asking Rent (psf), Q1 2024	$1.79	$2.06	$1.86
% Change Q1 2014 - Q1 2024	*22.6%*	*42.1%*	*34.8%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	122,535	511,357	4,109,949
Net Absorption (sf), Q2 2023 - Q1 2024	(1,823)	44,871	63,274
New Deliveries (sf) Q2 2014 - Q1 2024	101,902	295,518	5,903,333
Under Construction (sf), Q1 2024	0	55,235	293,332

Source: CoStar; BAE 2024.

Retail Development Pipeline

While there are no retail specific developments under construction in downtown, Figure 6 below shows retail developments that have been completed in the last six years. All three projects represent the growth of downtown in the recent years. Two of the projects were located in the Waterfront area, while the other represents a new grocery store in Uptown.

Figure 6: Retail Development Pipeline, Q1 2024



Sources: City of Vancouver; BAE, 2024.

Office Market Overview

As seen below in Table 13, approximately 30 percent of the Vancouver office space is located in downtown. While downtown only accounts for three percent of the citywide population, downtown clearly contains a disproportionate share of the office inventory, highlighting the area as a critical jobs center in the city. As seen below, downtown has a lower office vacancy than both the city and the MSA. More specifically, the office vacancy rate in downtown was roughly 5.3 percent, compared to 6.3 in the City and 12.6 percent in the region. Rents for office space have increased in all three geographies over the past decade, reaching nearly $2.50 per square foot in Downtown Vancouver. This rental rate is above both the citywide and regional average rent, indicating office space in downtown may come at a premium relative to other spaces throughout the region. In recent years, all three geographies experienced negative absorption of space, leading to increases in vacancy rates. However, the negative absorption in downtown is fairly limited, indicating fairly stable demand trends in downtown.

Table 13: Office Market Summary, Q1 2024

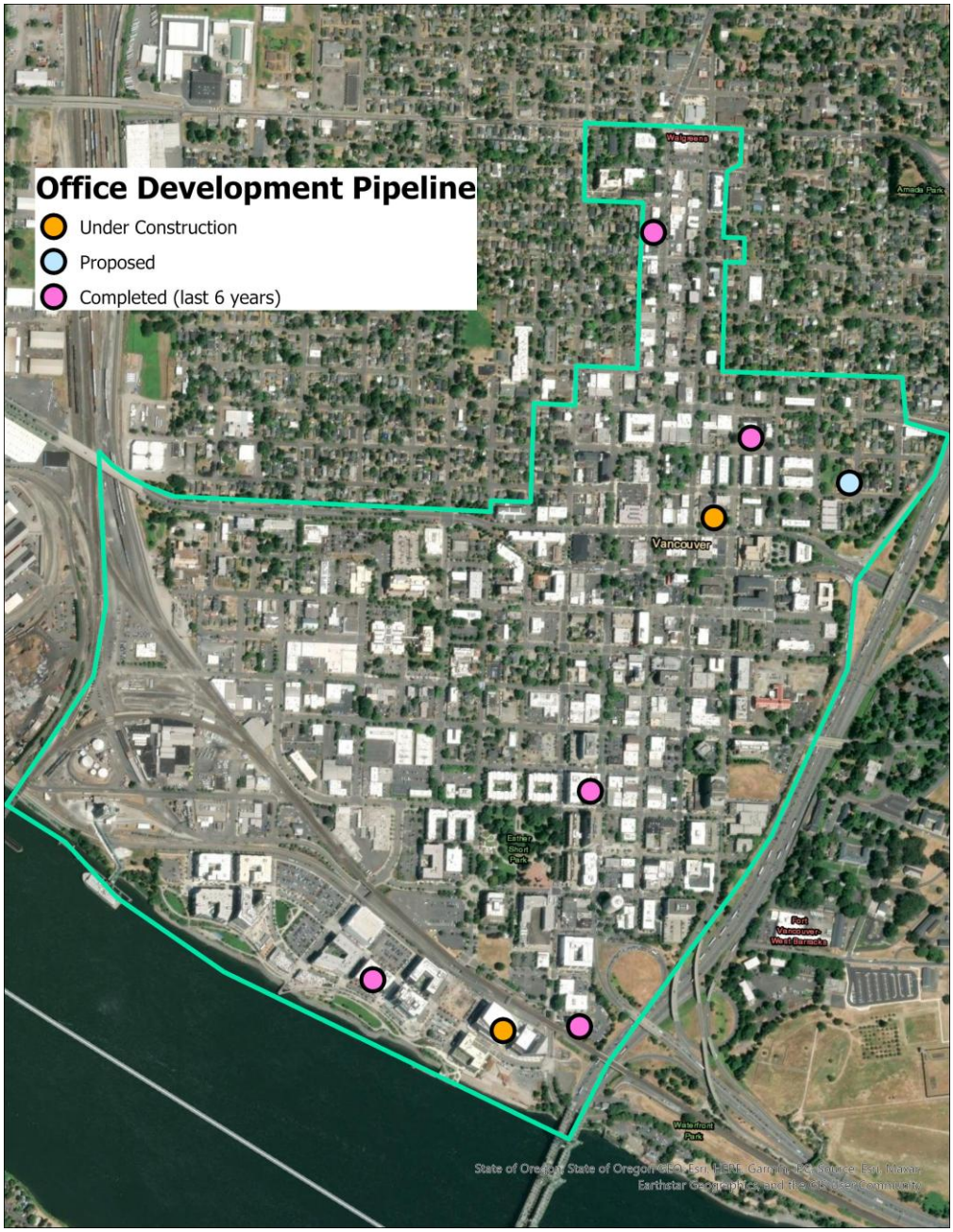
Description	Downtown Vancouver	City of Vancouver	Portland-Vancouver-Hilsboro MSA
Inventory (SF) Q1 2024	**3,025,593**	**9,909,637**	**118,143,351**
Inventory (% of City)	*30.5%*		
Inventory (% of MSA)	*2.6%*		
Occupied Stock (sf)	2,859,490	9,267,844	102,647,898
Vacant Stock (sf)	160,377	623,629	14,928,813
Vacancy Rate	5.3%	6.3%	12.6%
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.65	$1.50	$1.68
Avg. Asking Rent (psf), Q1 2024	$2.46	$2.19	$2.38
% Change Q1 2014 - Q1 2024	*49.1%*	*46.0%*	*41.7%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	437,982	910,966	3,500,611
Net Absorption (sf), Q2 2023 - Q1 2024	(324)	(20,871)	(1,402,838)
New Deliveries (sf) Q2 2014 - Q1 2024	357,182	877,159	11,358,802
Under Construction (sf), Q1 2024 (a)	531,000	531,000	543,714

Notes:
(a) This number reflects the proposed office square feet for block 1 which is currently considering a conversion to Residential.
Source: CoStar; BAE 2024.

Office Development Pipeline

The Office development pipeline consists of about 300,000 square feet currently under construction. Most of the square feet that is considered under construction is the Terminal One office building at the Vancouver Waterfront, completed at the end of 2024. Aside from the completion of the Terminal One building, there have been five office developments that have been completed in the last five years and one office development that is proposed.

Figure 7: Office Development Pipeline, Q1 2024



Sources: City of Vancouver; BAE, 2024.

Industrial Market Overview

Since 2014 the downtown industrial market has experienced negative absorption from the redevelopment of new multifamily and commercial buildings along the Waterfront and through other redevelopment efforts in downtown. However, regionally, the last decade represented an era of rapid industrial expansion, indicating that Downtown Vancouver may not present an attractive setting for industrial development. Despite the loss in industrial space in downtown, which would generally indicate softening demand, the downtown vacancy rate is almost zero.

Table 14: Industrial Market Summary, Q1 2024

Description	Downtown Vancouver	City of Vancouver	Portland-Vancouver-Hilsboro MSA
Inventory (SF) Q1 2024	**595,292**	**15,273,580**	**256,594,369**
Inventory (% of City)	*3.9%*		
Inventory (% of MSA)	*0.2%*		
Occupied Stock (sf)	590,552	14,674,781	244,253,448
Vacant Stock (sf)	4,740	495,742	11,592,246
Vacancy Rate	0.8%	3.2%	4.5%
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	n.a.	$0.65	$0.51
Avg. Asking Rent (psf), Q1 2024	n.a.	$0.94	$1.00
% Change Q1 2014 - Q1 2024	*n.a.*	*44.6%*	*96.1%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	(16,031)	1,549,328	30,903,518
Net Absorption (sf), Q2 2023 - Q1 2024	1,859	(74,378)	(1,443,748)
New Deliveries (sf) Q2 2014 - Q1 2024	5,695	1,587,084	33,248,064
Under Construction (sf), Q1 2024	0	0	2,815,049

Source: CoStar; BAE 2024.

Current Development Feasibility Challenges

The pace of new construction in Downtown Vancouver and the broader region has slowed significantly due to mounting development feasibility challenges. While individual project feasibility varies by site, several overarching factors contribute to this slowdown:

Rising Construction Costs Outpacing Rent Growth

Since 2014, construction costs for new multifamily projects in the Portland MSA have increased by 44 percent, according to RS Means, a private vendor of construction cost data. In contrast, Downtown Vancouver rents have risen by approximately 23 percent over the same period. With construction costs nearly doubling relative to rent growth, many market-rate projects struggle to achieve financial viability. Future uncertainty surrounding foreign policy and tariffs may provide further challenges to the feasibility of new real estate development.

Higher Interest Rates Increasing Financing Costs and Required Returns

Interest rates for multifamily development loans have risen significantly over the past five years, leading to higher construction and permanent financing costs. Additionally, the rise in interest rates has been accompanied by higher cap rates and yield-on-cost requirements, making it more difficult for projects to attract capital. As a result, fewer projects are moving forward.

Modest Rent Growth Limiting New Development

While slower rent growth keeps existing housing more affordable, it also reduces the financial feasibility of new construction, given the sharp rise in development costs. Preliminary estimates by BAE suggest that downtown rents would need to increase by at least 50 percent for new development to be viable under current conditions—potentially pricing out many existing residents. While the feasibility of future development will improve as the commercial real estate sector moves through its natural business cycle, the City can provide support and incentives to deliver projects that align with current incomes and provide housing access for a broader range of income levels within Downtown Vancouver.

Limited Availability of Easily Developable Sites

Future growth in Downtown Vancouver will depend on redevelopment rather than vacant land, as most easily developable sites are already built out. Redevelopment will require overcoming several challenges including:

- Multiple parcel ownership – assemblage challenges
- Potential displacement of existing residents and businesses
- Environmental/pre-existing hazardous materials challenges

City-led actions can help facilitate redevelopment by addressing these barriers as discussed at the end of the report in the “Strategies and Recommendations” section.

Lengthy Approval and Entitlement Processes Contribute to Higher Project Costs

Prolonged approval and entitlement processes increase project costs and risk, further discouraging development or requiring higher rental rates in order to support project feasibility. Streamlining permit approvals and improving entitlement navigation would reduce development costs and signal that Vancouver is committed to supporting projects aligned with its goals. The City has already implemented a project ombudsman/manager to help expedite permitting for public-private partnership developments where the City is involved in the development process, which could be further expanded to private development proposals.

While the following sections outline the potential redevelopment opportunities within Downtown Vancouver, the final section proposes strategies and recommendations to help support future redevelopment efforts throughout the subarea. This includes recommendations to support near-term projects that likely face feasibility challenges given the current market conditions, as well as longer-term strategies for the City to support and benefit from redevelopment efforts as market conditions improve.

REDEVELOPMENT OPPORTUNITIES AREAS

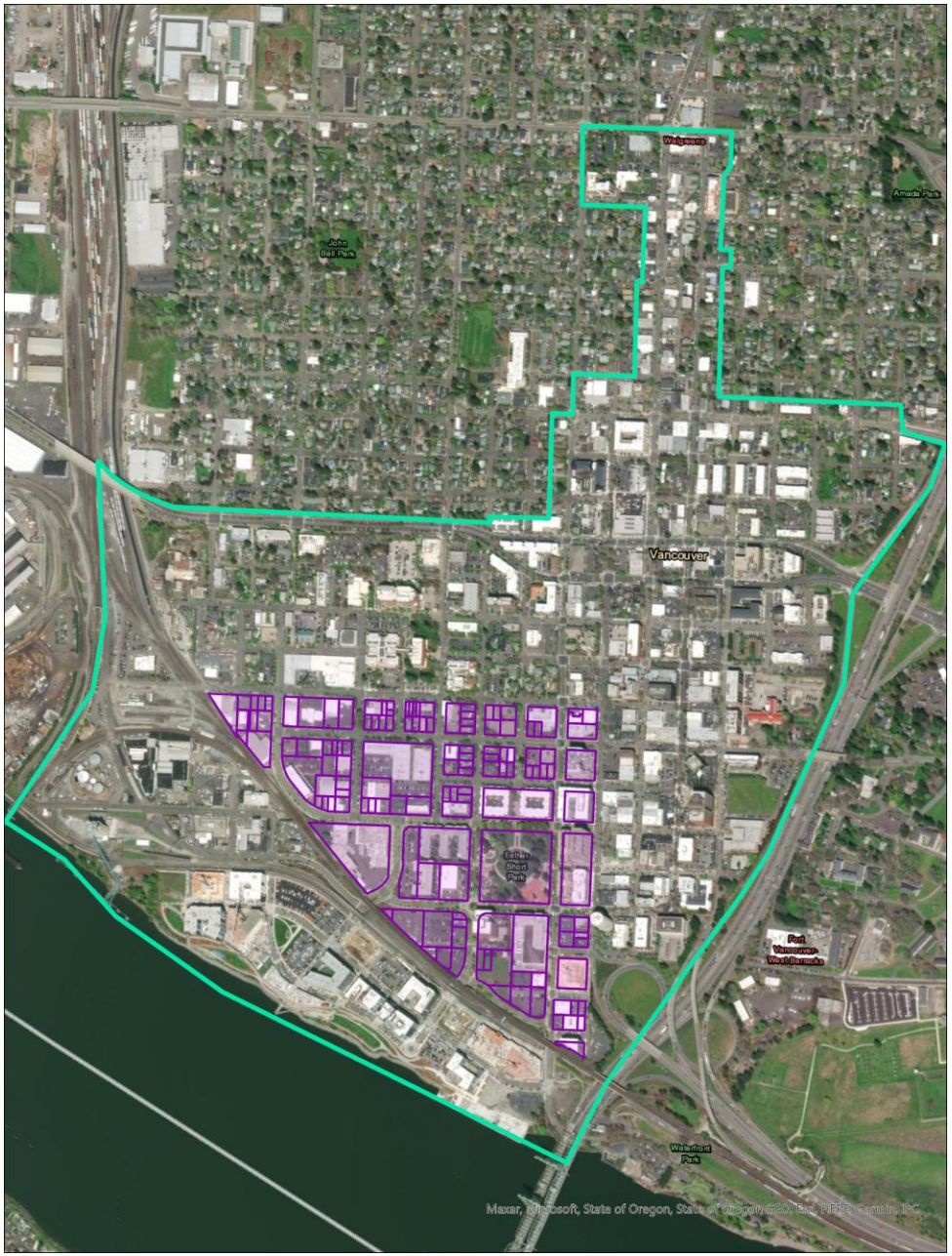
Methodology

Based on the above market analysis, and more detailed analysis of the location of typical land uses, development intensities, and development typologies, the following analysis breaks the Downtown Vancouver area into six distinct Redevelopment Opportunity Areas (ROAs). BAE reviewed the market conditions within each ROA to determine the potential land uses that would be most suitable for each ROA. Using a parcel database, BAE also compiled a list of vacant and underutilized parcels within each ROA. Using this database, BAE estimates the potential capacity of each ROA to support future development assuming a range of development intensities, from medium-density to high-density development.

While the study analyzes conditions in six ROAs, the future development capacity excludes the Waterfront ROA and the West Industrial ROA. The Waterfront ROA has some remaining development capacity, but these sites are part of the broader Waterfront Master Plan and will be developed when market conditions support development. Conversely, the West Industrial ROA likely represents a longer-term redevelopment area which needs significant infrastructure and remediation investment in order to unlock future development. As such, this analysis does not estimate the buildout capacity within this area.

Esther Short Park

Redevelopment Opportunity Area



Description

- Primarily a residential area centered around Esther Short Park with a mix of complementary retail, industrial and office uses

Market Overview

- 862 Residential Units
  - *186 Units Under Construction*
- 188,233 Sq. Ft. of Retail
- 991,798 Sq. Ft. of Office

Yield Capacity

- Total ROA Acres: 49.2
- Vacant/Underutilized Acres: 30.5 Acres (62% of total area)
- Residential Potential
  - Medium Density Buildout: 1,800 Units
  - High Density Buildout: 4,900 Units



Esther Short Park Opportunity Area

Esther Short Park Multifamily Market Overview

Multifamily vacancy rates in the Esther Short Park subarea are lower than both the entire Downtown Vancouver area and the city as a whole, with a vacancy rate of 4.4 percent. Downtown Vancouver, as shown below in Table 15, has a vacancy rate of 6.6 percent while the Citywide vacancy rate is 7.7 percent. Since 2014, rent growth in the Esther Short Park subarea outpaced Downtown, while the Citywide rent growth was just slightly above the growth in the Esther Short Park subarea. While the City has had more growth in rent, the Esther Short Park subarea has the highest rent of the three regions at $1,915 per unit. With low vacancies and high rents, the Esther Short Park area represents an area in high demand and is potentially likely to support continued development potential. In fact, as of the beginning of 2024, the subarea had 186 units under construction, represented by the Adera apartments at 411 Columbia Street, located to the east of the convention center, which has completed since the completion of this report. This project accounts for nearly 30 percent of all multifamily projects currently under construction, showing a slight overconcentration of new units in the Esther Short area, given this area only accounts for 23 percent of existing downtown units. With significant redevelopment opportunity sites, as discussed below, this area seems well positioned to support continued development of multifamily units to accommodate growth in downtown.

Table 15: Esther Short Park Multifamily Summary, Q1 2024

Description	Esther Short Park	Downtown Vancouver	City of Vancouver
Inventory (Units) Q1 2024	**862**	**3,757**	**32,555**
Inventory (% of Downtown)	*22.9%*		
Inventory (% of City)	*2.6%*	*11.5%*	
Occupied Stock (units)	824	3,468	30,367
Vacant Stock (Units)	38	289	2,138
Vacancy Rate	4.4%	7.7%	6.6%
Avg. Asking Rents			
Avg. Asking Rent (per unit), Q1 2014	$1,311	$1,390	$1,153
Avg. Asking Rent (per unit), Q1 2024	$1,915	$1,808	$1,706
% Change Q1 2014 - Q1 2024	*31.5%*	*23.1%*	*32.4%*
Net Absorption			
Net Absorption (unit), Q2 2014 - Q1 2024	486	2,348	6,852
Net Absorption (unit), Q2 2023 - Q1 2024	(9)	386	669
New Deliveries (units) Q2 2014 - Q1 2024	508	2,462	7,816
Under Construction (units), Q1 2024	186	666	1,494

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

Esther Short Park Retail Market Overview

In the last 10 years the Esther Short Park subarea has not received any new retail space, but retail rents have increased fairly significantly, by nearly 50 percent, which is more than double the general rental rate growth in downtown. Both the Esther Short subarea and the remainder of downtown have similarly low vacancy rates at 0.5 percent and 1.0 percent respectively, indicating that any new retail businesses seeking to locate in Downtown Vancouver may face challenges locating spaces.

Table 16: Esther Short Park Retail Market Summary, Q1 2024

Description	Esther Short Park	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**188,233**	**1,112,832**	**11,179,120**
Inventory (% of Downtown)	*16.9%*		
Inventory (% of City)	*1.7%*	*10.0%*	
Occupied Stock (sf)	186,410	1,107,799	10,751,113
Vacant Stock (sf)	1,823	5,033	379,389
Vacancy Rate	1.0%	0.5%	3.4%
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.42	$1.46	$1.45
Avg. Asking Rent (psf), Q1 2024	$2.08	$1.79	$2.06
% Change Q1 2014 - Q1 2024	*46.5%*	*22.6%*	*42.1%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	14,523	122,535	511,357
Net Absorption (sf), Q2 2023 - Q1 2024	(1,823)	(1,823)	44,871
New Deliveries (sf) Q2 2014 - Q1 2024	0	101,902	295,518
Under Construction (sf), Q1 2024	0	0	55,235

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Multifamily apartments with ground floor retail may not be included in this table
Source: CoStar; BAE 2024.

Esther Short Park Office Market Overview

With a third of the total Downtown office inventory, office rents in the Esther Short Park subarea have historically been higher than the broader downtown area and City as a whole. As seen below in Table 17, office rents in the Esther Short Park subarea have experienced more growth (48.9 percent) than downtown (40.5 percent) and the city (46.0 percent). Office rents in the Esther Short Park subarea are at $2.62 per square foot. Downtown is the next highest at $2.29 per square foot and the City is slightly lower at $2.19 per square foot. Like the waterfront subarea, the Esther Short Park subarea has also experienced positive absorption from Q2 2023 to Q1 2024 with 21,000 square feet of newly leased office space.

Table 17: Esther Short Park Office Market Summary, Q1 2024

Description	Esther Short Park	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**991,798**	**3,025,593**	**9,909,637**
Inventory (% of Downtown)	*32.8%*		
Inventory (% of City)	*10.0%*	*30.5%*	
Occupied Stock (sf)	933,005	2,859,490	9,267,844
Vacant Stock (sf)	58,793	160,377	623,629
Vacancy Rate	5.9%	5.3%	6.3%
# of buildings	35	202	640
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.76	$1.63	$1.50
Avg. Asking Rent (psf), Q1 2024	$2.62	$2.29	$2.19
% Change Q1 2014 - Q1 2024	*48.9%*	*40.5%*	*46.0%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	174,737	437,982	910,966
Net Absorption (sf), Q2 2023 - Q1 2024	21,523	(324)	(20,871)
New Deliveries (sf) Q2 2014 - Q1 2024	181,407	357,182	877,159
Under Construction (sf), Q1 2024 (a)	0	531,000	531,000

Notes:
Inventory, Occupied Stock and Vacant Stock in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
(a) 360,000 square feet is Terminal one, and the remaining has turned to residential.
Source: CoStar; BAE 2024.

Esther Short Park Industrial Market Overview

As shown in Table 18, the Esther Short Park subarea contains a significant share of the downtown industrial inventory, at nearly 44 percent. However, the total square footage is still relatively limited, at just 260,000 square feet. All the industrial space in Esther Short Park is occupied, yielding a zero vacancy rate. There have been no new deliveries Q2 2014, and no industrial buildings are currently under construction. Although the Esther Short Park subarea has a large percentage of industrial square feet of Downtown, as a percentage of the city, industrial space only occupies 1.7 percent of the total industrial square feet. As seen below, a significant number of the existing industrial buildings in the Esther Short Park area are considered underutilized. However, the City should be sensitive about displacing industrial businesses and associated jobs, given broader economic development goals within downtown.

Table 18: Esther Short Park Industrial Market Summary, Q1 2024

Description	Esther Short Park	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**260,095**	**595,292**	**15,273,580**
Inventory (% of Downtown)	*43.7%*		
Inventory (% of City)	*1.7%*	*3.9%*	
Occupied Stock (sf)	260,095	590,552	14,674,781
Vacant Stock (sf)	0	4,740	495,742
Vacancy Rate	0	0.8%	3.2%
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	(8,100)	(16,031)	1,549,328
Net Absorption (sf), Q2 2023 - Q1 2024	0	1,859	(74,378)
New Deliveries (sf) Q2 2014 - Q1 2024	0	5,695	1,587,084
Under Construction (sf), Q1 2024	0	0	0

Notes:
Inventory, Occupied Stock, Vacant Stock, and New Deliveries in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

Esther Short Park Yield Capacity

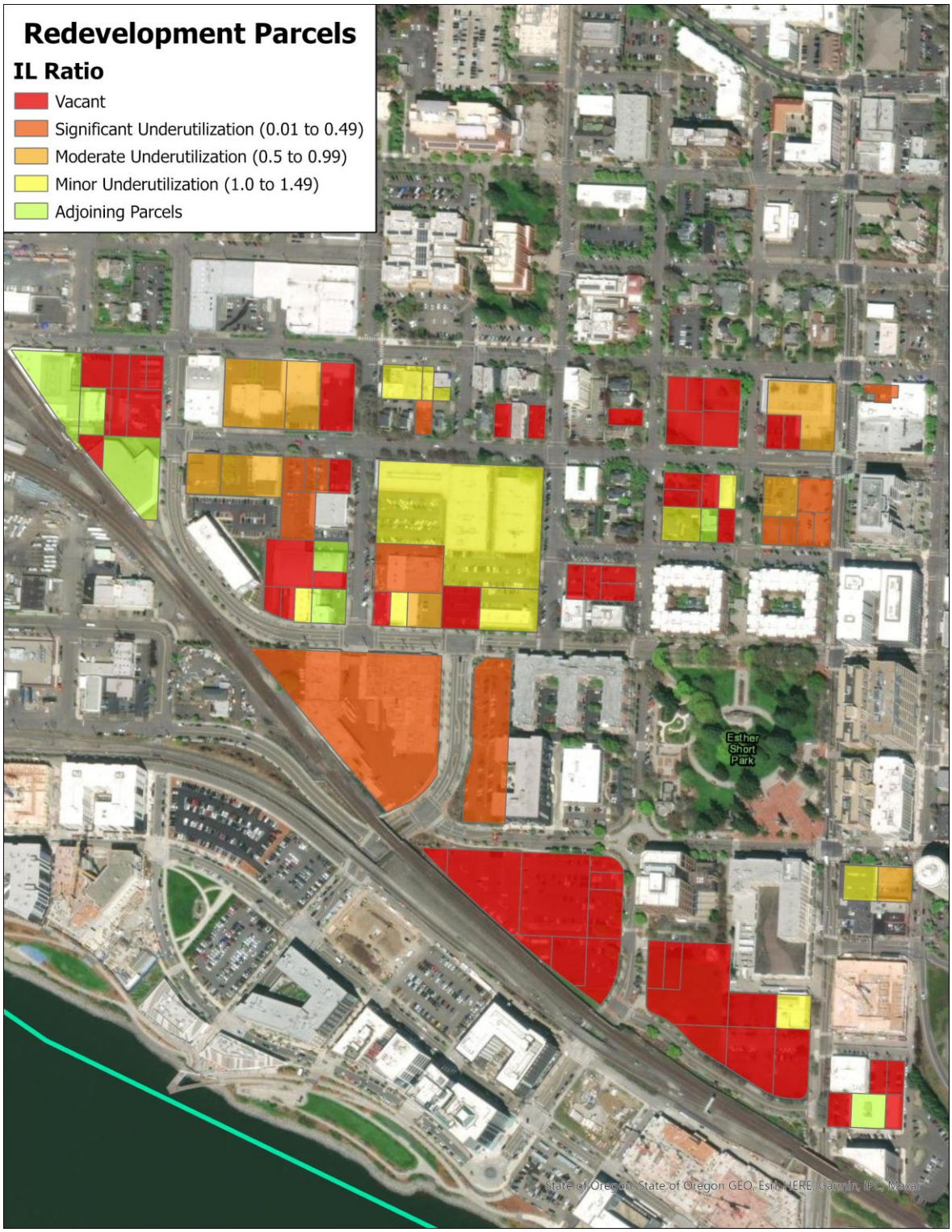
As seen below in Table 19 and Figure 8, the Esther Short Park subarea has a total of 30.5 acres of parcels with redevelopment potential. The bulk of these sites are larger than a traditional City block, with nearly 79 percent of the sites with redevelopment potential amounting to more than an acre. In terms of buildout potential, this area has the capacity to accommodate between 1,800 and 4,900 units, depending on the density of buildout. Included in the residential development, it is expected that most projects would provide ground floor retail in both scenarios. Should the future redevelopment in the Esther Short Park area occur at medium densities (i.e., surface parking, three- to four-stories, etc.) the development capacity is roughly 1,800 units. These types of densities are often cheaper to deliver, though also face some challenges in attracting investment capital due to the reduced project size. If the downtown sites deliver at higher densities, similar to some of the newer high-density buildings in downtown, the sites can be expected to accommodate closer to 5,000 housing units, indicating how important density will be in achieving housing growth targets in downtown. In addition to residential development, this area also has the capacity to accommodate future job growth, including office and light industrial developments. This includes an expected 530,000 square feet of office space, and nearly 70,000 square feet of light industrial space.

Table 19: Esther Short Park Yield Capacity

	Medium Density Scenario			High Density Scenario		
Site Size	**# of Sites**	**Total SF**	**Acres**	**# of Sites**	**Total SF**	**Acres**
Less than 7,500 (1/8 Block)	10	46,912	1.1	10	46,912	1.1
7,500 to 11,000 (1/4 Block)	2	20,180	0.5	2	20,180	0.5
11,000 to 21,000 (1/2 Block)	2	32,000	0.7	2	32,000	0.7
21,000 to 43,500 (Full Block)	5	188,938	4.3	5	188,938	4.3
Greater than 43,500	8	1,040,576	23.9	8	1,040,576	23.9
Total, All Sites	**27**	**1,328,606**	**30.5**	**27**	**1,328,606**	**30.5**
Development Potential						
Residential	70%			70%		
Office	20%			20%		
Light Industrial	10%			10%		
Total	**100%**			**100%**		
Residential Yield Capacity						
Site Size	**Acres**	**DU/Acre**	**Total Units**	**Acres**	**DU/Acre**	**Total Units**
1/8 Block	0.8	58	44	0.8	174	131
1/4 Block	0.3	58	19	0.3	131	42
1/2 Block	0.5	131	67	0.5	305	157
Full Block	3.0	131	397	3.0	267	810
Bigger than 1 Acre	16.7	76	1,271	16.7	227	3,792
Total, All Sites	**21.4**	**84**	**1,797**	**21.4**	**231**	**4,933**
Office Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	6.1	2.0	531,442	6.1	2.0	531,442
Light Industrial Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	3.1	0.5	66,430	3.1	0.5	66,430

Sources: City of Vancouver; SERA Architects; BAE, 2025.

Figure 8: Esther Short Park Parcels with Redevelopment Potential



Sources: City of Vancouver; Data Axle; BAE, 2024.

Esther Short Park Redevelopment Recommendations

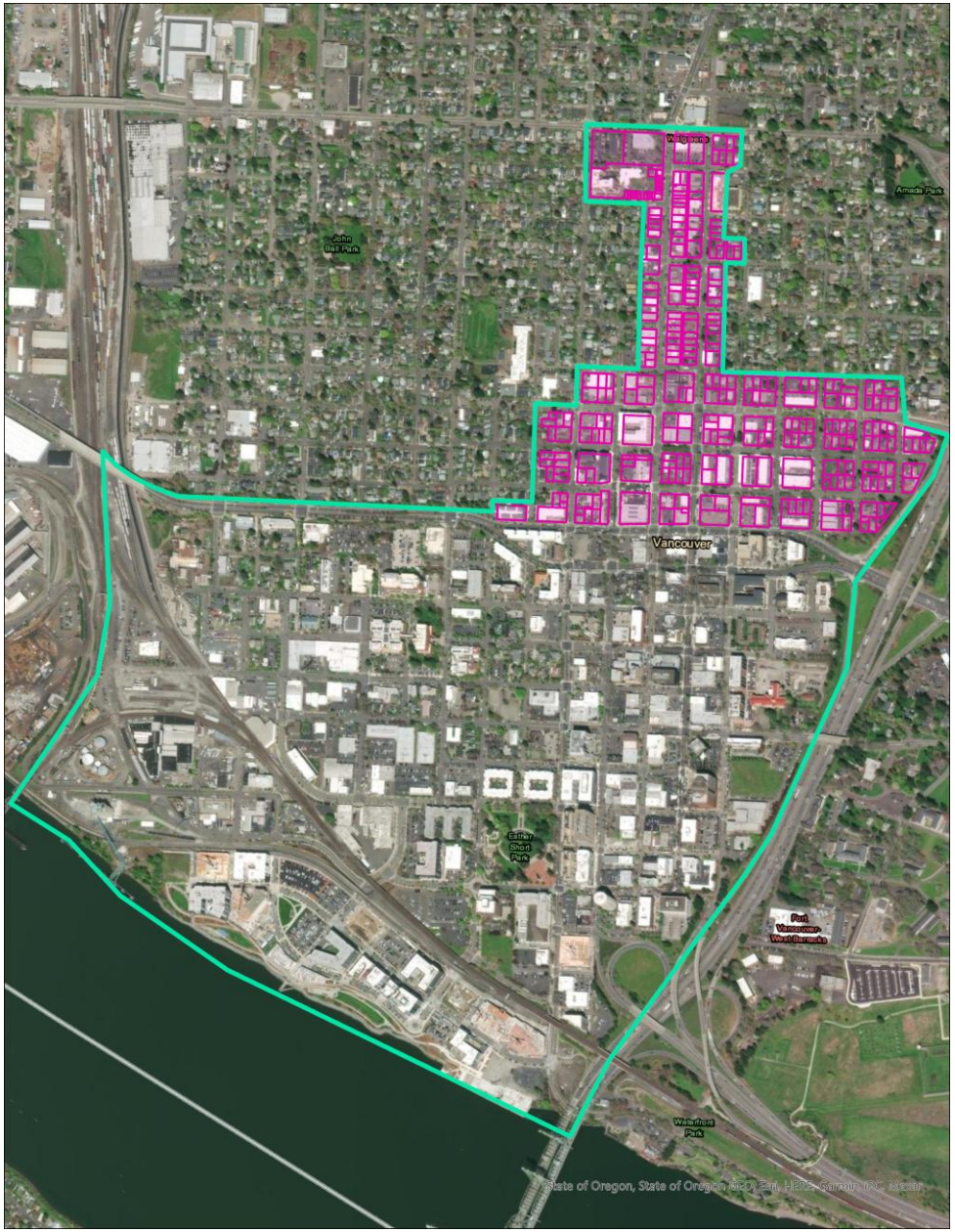
As discussed above, the Esther Short Park ROA has a significant inventory of sites with redevelopment potential, however the large majority of sites are larger than a traditional city block and will require unique building configurations to maximize the potential of the sites. For these sites, especially those with multiple parcel owners, the City can spur development by collaborating with existing parcel owners to identify a redevelopment plan and the types of investment that may be needed to support future redevelopment (i.e., new transportation infrastructure, etc.). While not highlighted above, a significant share of the sites with redevelopment potential are owned by the City or other public sector agencies. This opens up an opportunity to spur development through public-private partnerships. Lastly, the City should invest in various forms of infrastructure that will spur redevelopment of underutilized sites. Of particular note are W. 11th Street and Daniels Street. Located on the northern boundary of the ROA, W. 11th Street connects downtown to the Amtrak Station to the west and generally contains a significant amount of development capacity. Improvements to this street, similar to those along other major corridors in downtown, would spur redevelopment of parcels along W. 11th by improving access to the sites, reducing the required infrastructure costs of the developer, and generally signaling to the development community that the City is investing in this corridor. Secondly, Daniels Street cuts through multiple full-block redevelopment sites, including more sites to the north of the Esther Short ROA. This street currently dead-ends into a pedestrian-only path one block north of Esther Short Park. Improvements to this street could be done in conjunction with development as to reduce overall development costs on future development, or prior to any development projects break ground as to signal that area is ready for new development projects.

In summary, the unique opportunities for the City to support redevelopment in the Esther Short ROA include:

- Leveraging City-owned sites for redevelopment
- Collaborating with other public agencies to unlock development on publicly-owned sites
- Collaborating with owners of multi-parcel development sites on cohesive redevelopment potential
- Investing in Bike/Pedestrian/Streetscape Improvements
    - W. 11th Street
    - Daniels Street
- Investing in wayfinding to connect waterfront to core downtown

Uptown

Redevelopment Opportunity Area



Description

- The northern end of downtown and Main Street. Uptown is a mix of retail and dining. Besides the waterfront, Uptown has experienced the most significant concentration of new multifamily and mixed-use development projects.

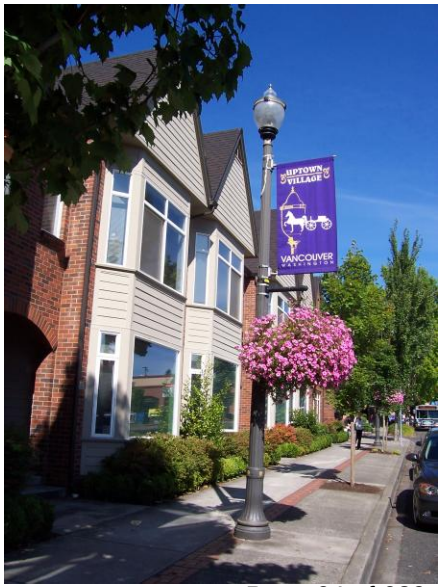
Market Overview

- 909 Residential Units
- 280,305 Sq. Ft. of Retail
- 415,320 Sq. Ft. of Office

Yield Capacity

- Total Acres: 52.4
- Vacant/Underutilized Acres: 27.2
- Residential Potential
  - Medium Density Buildout: 2,480 Units
  - High Density Buildout: 5,340 Units





Uptown Opportunity Area

Uptown Multifamily Market Overview

Uptown has a similar total number of multifamily units as the Esther Short Park subarea, and the waterfront subarea with 909 units. From Q2 2014, 66.0 percent of the multifamily units were developed in the uptown subarea. Despite the new development in the Uptown subarea, rental rates are lower at $1,626 per unit than the average asking rates in Downtown and the City. A reason for the rental rates being lower in the Uptown subarea may be because of the higher vacancy rate of 8.0 percent. Which is slightly higher than the Downtown multifamily vacancy rate of 7.7 percent and much higher than the City at 6.6 percent. The 50 units under construction in Q1 2024 are at The Hudson West, located at 2409 Broadway Street, east of Main Street.

Table 20: Uptown Multifamily Market Summary, Q1 2024

Description	Uptown	Downtown Vancouver	City of Vancouver
Inventory (Units) Q1 2024	**909**	**3,757**	**32,555**
Inventory (% of Downtown)	*24.2%*		
Inventory (% of City)	*2.8%*	*11.5%*	
Occupied Stock (units)	836	3,468	30,367
Vacant Stock (Units)	73	289	2,138
Vacancy Rate	8.0%	7.7%	6.6%
Avg. Asking Rents			
Avg. Asking Rent (per unit), Q1 2014	$1,307	$1,390	$1,153
Avg. Asking Rent (per unit), Q1 2024	$1,626	$1,808	$1,706
% Change Q1 2014 - Q1 2024	*19.6%*	*23.1%*	*32.4%*
Net Absorption			
Net Absorption (unit), Q2 2014 - Q1 2024	547	2,348	6,852
Net Absorption (unit), Q2 2023 - Q1 2024	23	386	669
New Deliveries (units) Q2 2014 - Q1 2024	609	2,462	7,816
Under Construction (units), Q1 2024	50	666	1,494

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

Uptown Retail Market Overview

According to Table 21, the 280,305 square feet of retail in Uptown is 100 percent occupied with no changes to absorption from Q2 2023 to Q1 2024. The retail inventory in Uptown is 25.2 percent of all the retail in Downtown. There are also no new deliveries or units under construction as shown below in Table 21.

Table 21: Uptown Retail Market Summary, Q1 2024

Description	Uptown	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**280,305**	**1,112,832**	**11,179,120**
Inventory (% of Downtown)	*25.2%*		
Inventory (% of City)	*2.5%*	*10.0%*	
Occupied Stock (sf)	280,305	1,107,799	10,751,113
Vacant Stock (sf)	0	5,033	379,389
Vacancy Rate	0.0%	0.5%	3.4%
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	(12,421)	122,535	511,357
Net Absorption (sf), Q2 2023 - Q1 2024	0	(1,823)	44,871
New Deliveries (sf) Q2 2014 - Q1 2024	0	101,902	295,518
Under Construction (sf), Q1 2024	0	0	55,235

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar. Multifamily apartments with ground floor retail may not be included in this table.
Source: CoStar; BAE 2024.

Uptown Office Market Overview

Thirteen percent of office space in Downtown is located in the Uptown subarea. The office market in Uptown is much smaller compared to other subareas in Downtown. Office space in Uptown consists of old single-family homes turned into office space and a few new office buildings. Shown below in Table 22, rents in Uptown are only $1.67 per square foot which Is about 60 cents less than Downtown at $2.29 per square foot, which has the highest compared to the three areas.

Table 22: Uptown Office Market Summary, Q1 2024

Description	Uptown	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**415,320**	**3,025,593**	**9,909,637**
Inventory (% of Downtown)	*13.7%*		
Inventory (% of City)	*4.2%*	*30.5%*	
Occupied Stock (sf)	407,918	2,859,490	9,267,844
Vacant Stock (sf)	7,402	160,377	623,629
Vacancy Rate	1.8%	5.3%	6.3%
# of buildings	90	202	640
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.26	$1.63	$1.50
Avg. Asking Rent (psf), Q1 2024	$1.67	$2.29	$2.19
% Change Q1 2014 - Q1 2024	*32.5%*	*40.5%*	*46.0%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	(450)	437,982	910,966
Net Absorption (sf), Q2 2023 - Q1 2024	(13,413)	(324)	(20,871)
New Deliveries (sf) Q2 2014 - Q1 2024	0	357,182	877,159
Under Construction (sf), Q1 2024 (a)	0	531,000	531,000

Notes:
Inventory, Occupied Stock and Vacant Stock in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
(a) 360,000 square feet is Terminal one, and the remaining has turned to residential.
Source: CoStar; BAE 2024.

Uptown Industrial Market Overview

Table 23 shows that the only industrial building in the Uptown subarea is a 2,400 square foot building. The small geography of Uptown and residential focus does not allow for industrial space in the subarea.

Table 23: Uptown Industrial Market Summary, Q1 2024

Description	Uptown	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**2,400**	**595,292**	**15,273,580**
Inventory (% of Downtown)	*0.4%*		
Inventory (% of City)	*0.0%*	*3.9%*	
Occupied Stock (sf)	2,400	590,552	14,674,781
Vacant Stock (sf)	0	4,740	495,742
Vacancy Rate	0	0.8%	3.2%
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	0	(16,031)	1,549,328
Net Absorption (sf), Q2 2023 - Q1 2024	0	1,859	(74,378)
New Deliveries (sf) Q2 2014 - Q1 2024	0	5,695	1,587,084
Under Construction (sf), Q1 2024	0	0	0

Notes:
Inventory, Occupied Stock, Vacant Stock, and New Deliveries in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

Uptown Yield Capacity

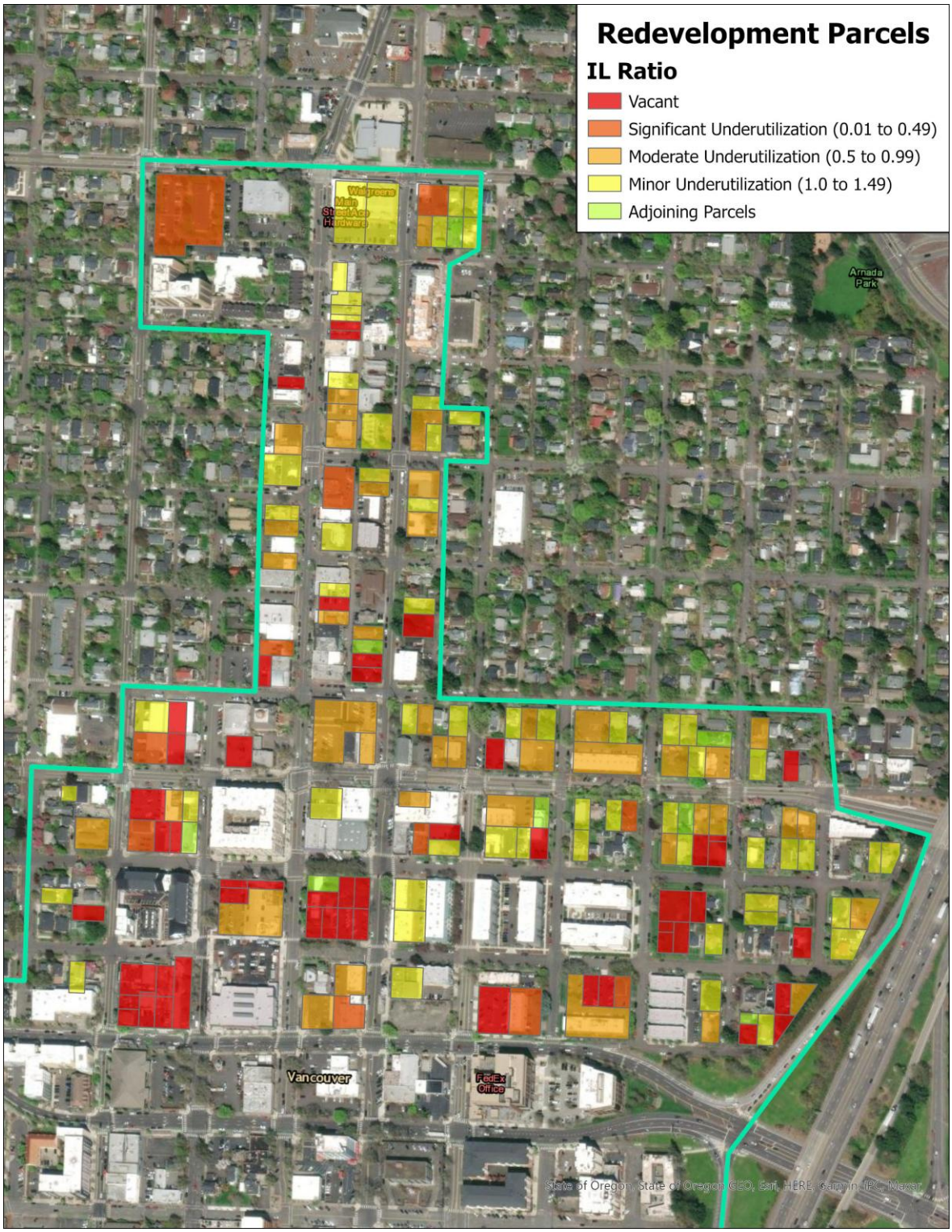
As seen below in Table 24, the Uptown Subarea has a total of 27.2 acres of land with potential for redevelopment. Contrary to the Esther Short Park subarea, full block parcels account for a large share of the development potential, with roughly 39 percent of the potential development area. In the medium density scenario, the Uptown subarea would be able to accommodate roughly 2,479 units, primarily in four-story buildings with surface parking. In the high-density scenario, the Uptown subarea could accommodate nearly 5,340 new housing units. Based on market conditions and the site characteristics in Uptown, BAE assumes 90 percent of future development will be multifamily residential, with the remaining 10 percent reserved for office uses. At a floor-area-ratio of 2.0, the acreage targeted for office development could accommodate roughly 230,000 square feet of total office space.

Table 24: Uptown Yield Capacity

	Medium Density Scenario			High Density Scenario		
Site Size	**# of Sites**	**Total SF**	**Acres**	**# of Sites**	**Total SF**	**Acres**
Less than 7,500 (1/8 Block)	42	209,141	4.8	42	209,141	4.8
7,500 to 11,000 (1/4 Block)	13	122,858	2.8	13	122,858	2.8
11,000 to 21,000 (1/2 Block)	12	188,634	4.3	12	188,634	4.3
21,000 to 43,500 (Full Block)	14	465,040	10.7	14	465,040	10.7
Greater than 43,500	4	201,222	4.6	4	201,222	4.6
Total, All Sites	**85**	**1,186,895**	**27.2**	**85**	**1,186,895**	**27.2**
Development Potential						
Residential	90%			90%		
Office	10%			10%		
Light Industrial	0%			0%		
Total	**100%**			**100%**		
Residential Yield Capacity						
Site Size	**Acres**	**DU/Acre**	**Total Units**	**Acres**	**DU/Acre**	**Total Units**
1/8 Block	4.3	58	251	4.3	105	452
1/4 Block	2.5	58	147	2.5	75	191
1/2 Block	3.9	131	509	3.9	305	1,188
Full Block	9.6	131	1,256	9.6	267	2,564
Bigger than 1 Acre	4.2	76	316	4.2	227	943
Total, All Sites	**24.5**	**101**	**2,479**	**24.5**	**218**	**5,338**
Office Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	2.7	2.0	237,379	2.7	2.0	237,379
Light Industrial Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	0.0	0.5	0	0.0	0.5	0

Sources: City of Vancouver; SERA Architects; BAE, 2024.

Figure 9: Uptown Parcels with Redevelopment Potential



Sources: City of Vancouver; Data Axle; BAE, 2024.

Uptown Redevelopment Recommendations

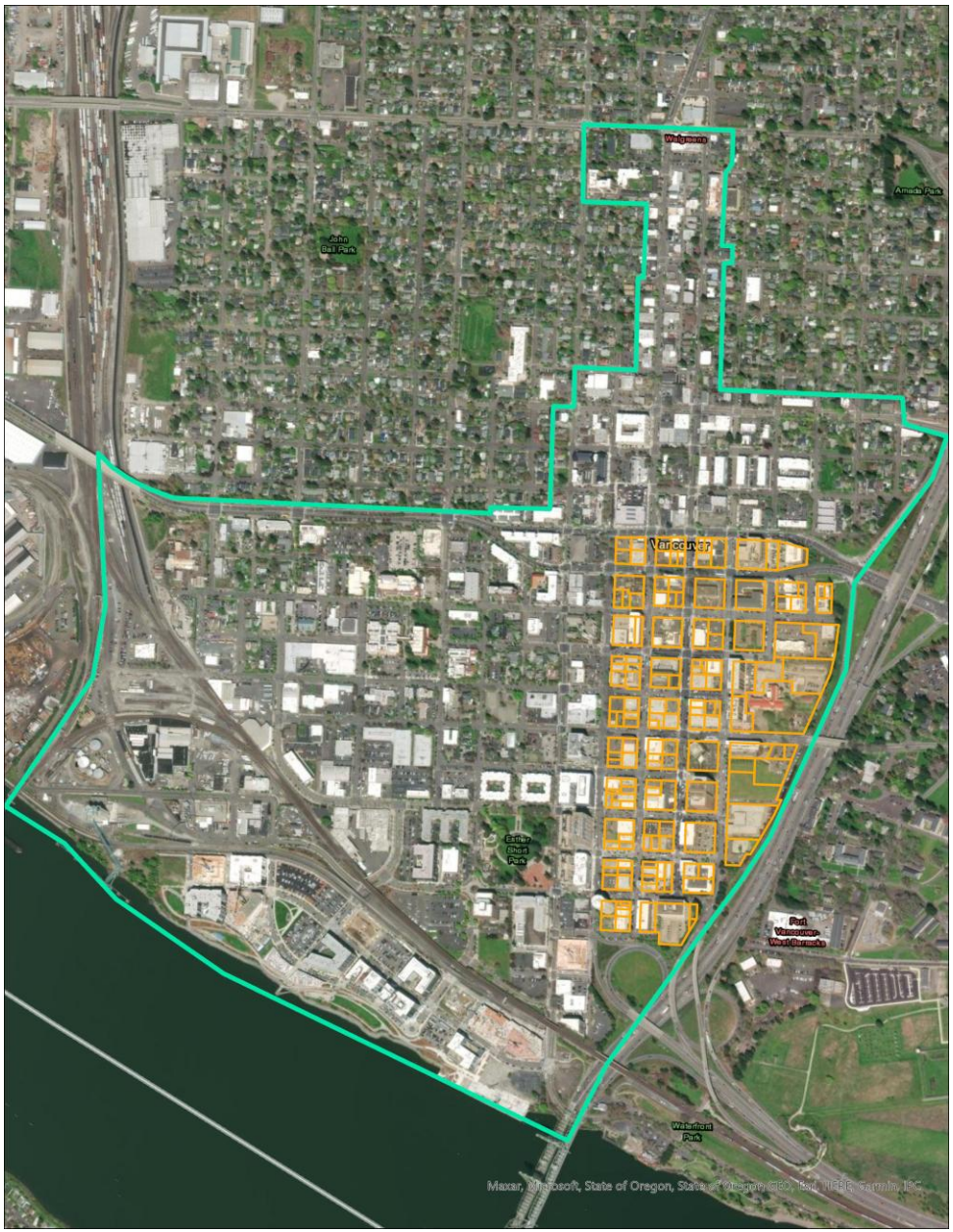
With a significant amount of the Uptown development capacity located on full block development opportunities, the City has an opportunity to capture significant density given the ideal layout of these sites. However, many of the full-block opportunities include multiple parcel owners which may require some City support to facilitate a cohesive and efficient full-block or half-block redevelopment buildout. The City may also opt to acquire certain parcels or full sites in order to create more optimal development opportunities. Lastly, the Uptown area has a particular lack of access to open space, especially the sites between E. 15th Street and E. McLoughlin Boulevard. With a number of redevelopment opportunities in this area, the City can support future redevelopment by investing in a new park that would increase demand for residential and non-residential users to the Uptown neighborhood.

In summary, the unique opportunities for the City to support redevelopment in the Uptown ROA include:

- Strategic Parcel Acquisition and Aggregation
- Collaborating with owners of multi-parcel development sites on cohesive redevelopment potential
- Investing in a New City Park

Main Street

Redevelopment Opportunity Area



Description

- Historic retail street with a strip of office buildings east of Main Street.
- Limited residential units and green space
- Recent upgrades to Main Street
- Future transportation investments

Market Overview

- 665 Residential Units
- 447,859 Sq. Ft. of Retail
- 1,224,056 Sq. Ft. of Office
  - 40% of Total Downtown Office and Retail Inventory

Yield Capacity

- Total acres: 48.7
- Underutilized Acres: 22.3
- Residential Potential
  - Medium Density Buildout: 1,800 Units
  - High Density Buildout: 4,260 Units



Main Street Opportunity Area

Main Street Multifamily Market Overview

In comparison to other subareas in Downtown, the multifamily market is not as strong in the Main Street subarea. As shown in Table 25 below, multifamily rents in the Main Street subarea are lower than both Downtown and the City. Main Street has an average asking rent of $1,433 in Q1 of 2024, compared to the average rent in downtown of $1,808. Growth in multifamily rents was more modest over the last decade relative to other subareas, with 22.1 percent rent growth from 2014 to 2024. The Main Street subarea has a higher vacancy rate at 9.4 percent than both Downtown and the City. Downtown has the second highest vacancy rate at 7.7 percent. The City has the lowest multifamily vacancy rate than the other two regions at 6.6 percent.

Table 25: Main Street Multifamily Market Summary, Q1 2024

Description	Main Street	Downtown Vancouver	City of Vancouver
Inventory (Units) Q1 2024	**665**	**3,757**	**32,555**
Inventory (% of Downtown)	*17.7%*		
Inventory (% of City)	*2.0%*	*11.5%*	
Occupied Stock (units)	602	3,468	30,367
Vacant Stock (Units)	63	289	2,138
Vacancy Rate	9.4%	7.7%	6.6%
Avg. Asking Rents			
Avg. Asking Rent (per unit), Q1 2014	$1,117	$1,390	$1,153
Avg. Asking Rent (per unit), Q1 2024	$1,433	$1,808	$1,706
% Change Q1 2014 - Q1 2024	*22.1%*	*23.1%*	*32.4%*
Net Absorption			
Net Absorption (unit), Q2 2014 - Q1 2024	272	2,348	6,852
Net Absorption (unit), Q2 2023 - Q1 2024	98	386	669
New Deliveries (units) Q2 2014 - Q1 2024	191	2,462	7,816
Under Construction (units), Q1 2024	0	666	1,494

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.

Source: CoStar; BAE 2024.

Main Street Retail Market Overview

Even though Main Street has 40.2 percent of the Downtown retail inventory, retail rents as of Q1 2024 are lower than Downtown and the City as a whole, as seen in Table 26. Main Street has an average retail rent of $1.67 per square foot and Downtown has a higher average rent of $1.79 per square foot. Lower rents may be the reason for the low vacancy in Main Street leading to more tenant lease renewals and less turnover.

Table 26: Main Street Retail Market Summary, Q1 2024

Description	Main Street	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**447,859**	**1,112,832**	**11,179,120**
Inventory (% of Downtown)	*40.2%*		
Inventory (% of City)	*4.0%*	*10.0%*	
Occupied Stock (sf)	445,470	1,107,799	10,751,113
Vacant Stock (sf)	2,389	5,033	379,389
Vacancy Rate	0.5%	0.5%	3.4%
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.49	$1.46	$1.45
Avg. Asking Rent (psf), Q1 2024	$1.67	$1.79	$2.06
% Change Q1 2014 - Q1 2024	*12.1%*	*22.6%*	*42.1%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	41,112	122,535	511,357
Net Absorption (sf), Q2 2023 - Q1 2024	0	(1,823)	44,871
New Deliveries (sf) Q2 2014 - Q1 2024	18,097	101,902	295,518
Under Construction (sf), Q1 2024	0	0	55,235

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar. Multifamily apartments with ground floor retail may not be included in this table.
Source: CoStar; BAE 2024.

Main Street Office Market Overview

Main Street and the City have similar average asking office rental rates of $2.13 and $2.19 respectively, but Downtown has a higher average asking rent of $2.29 per square foot. Despite the low office rents in Main Street, the area consists of 40.5 percent of the office inventory in Downtown Vancouver. The absorption for Downtown was negative 324 square feet, but Main Street experienced 16,185 square feet of net negative absorption from Q2 2023 to Q1 2024. The Main Street subarea experienced a large amount of negative absorption, but other subareas in Downtown had positive absorption that mostly outweighed the loss of occupied space in Main Street, leading to relatively stable absorption in Downtown as a whole over the past year.

Table 27: Main Street Office Market Summary, Q1 2024

Description	Main Street	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**1,224,056**	**3,025,593**	**9,909,637**
Inventory (% of Downtown)	*40.5%*		
Inventory (% of City)	*12.4%*	*30.5%*	
Occupied Stock (sf)	1,127,396	2,859,490	9,267,844
Vacant Stock (sf)	90,934	160,377	623,629
Vacancy Rate	7.4%	5.3%	6.3%
# of buildings	48	202	640
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.65	$1.63	$1.50
Avg. Asking Rent (psf), Q1 2024	$2.13	$2.29	$2.19
% Change Q1 2014 - Q1 2024	*29.1%*	*40.5%*	*46.0%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	181,760	437,982	910,966
Net Absorption (sf), Q2 2023 - Q1 2024	(16,185)	(324)	(20,871)
New Deliveries (sf) Q2 2014 - Q1 2024	100,800	357,182	877,159
Under Construction (sf), Q1 2024 (a)	0	531,000	531,000

Notes:
Inventory, Occupied Stock and Vacant Stock in the subareas may not sum to Downtown Vancouver due to the date of information pulled from Costar.
(a) 360,000 square feet is Terminal one, and the remaining has turned to residential.
Source: CoStar; BAE 2024.

Main Street Industrial Market Overview

There is no industrial in the Main Street subarea.

Main Street Yield Capacity

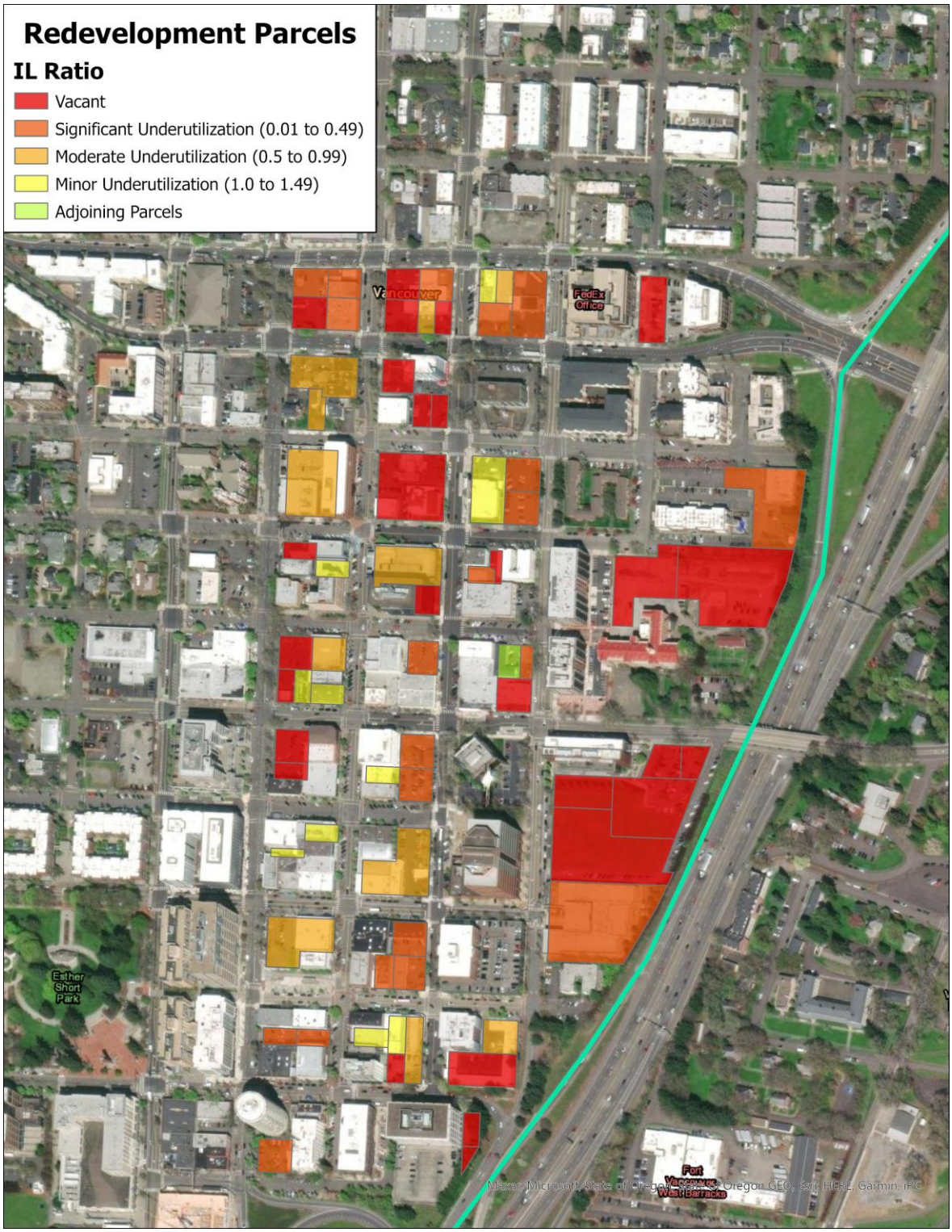
As represented below in Table 28, the Main Street subarea is primarily characterized by smaller, privately owned parcels along Main Street. However, the eastern portion of the subarea contains larger underutilized parcels that account for 42 percent of the total acreage with redevelopment potential. The largest site in the subarea is the city-owned Library Square parcels south of the City library, adjacent to the planned transit node. Residential yield in the subarea ranges from 1,700 units in the medium-density scenario to 4,300 units in the high-density scenario. Due the existing presence of office space, this part of Downtown may support additional Downtown office demand. Assuming roughly 20 percent of the sites accommodate office development, the subarea can accommodate roughly 390,000 square feet of office space.

Table 28: Main Street Yield Capacity

	Medium Density Scenario			High Density Scenario		
Site Size	**# of Sites**	**Total SF**	**Acres**	**# of Sites**	**Total SF**	**Acres**
Less than 7,500 (1/8 Block)	17	84,115	1.9	17	84,115	1.9
7,500 to 11,000 (1/4 Block)	6	59,376	1.4	6	59,376	1.4
11,000 to 21,000 (1/2 Block)	4	71,117	1.6	4	71,117	1.6
21,000 to 43,500 (Full Block)	13	406,843	9.3	13	406,843	9.3
Greater than 43,500	3	350,159	8.0	3	350,159	8.0
Total, All Sites	**43**	**971,610**	**22.3**	**43**	**971,610**	**22.3**
Development Potential						
Residential	80%			80%		
Office	20%			20%		
Light Industrial	0%			0%		
Total	**100%**			**100%**		
Residential Yield Capacity						
Site Size	**Acres**	**DU/Acre**	**Total Units**	**Acres**	**DU/Acre**	**Total Units**
1/8 Block	1.5	58	90	1.5	174	269
1/4 Block	1.1	58	63	1.1	131	143
1/2 Block	1.3	131	171	1.3	305	398
Full Block	7.5	131	976	7.5	267	1,994
Bigger than 1 Acre	6.4	76	489	6.4	227	1,458
Total, All Sites	**17.8**	**100**	**1,789**	**17.8**	**239**	**4,262**
Office Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	4.5	2.0	388,644	4.5	2.0	388,644
Light Industrial Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	0.0	0.5	0	0.0	0.5	0

Sources: City of Vancouver; SERA Architects; BAE, 2024.

Figure 10: Main Street ROA Parcels with Redevelopment Potential



Sources: City of Vancouver; SERA Architects; BAE, 2024.

Main Street Redevelopment Recommendations

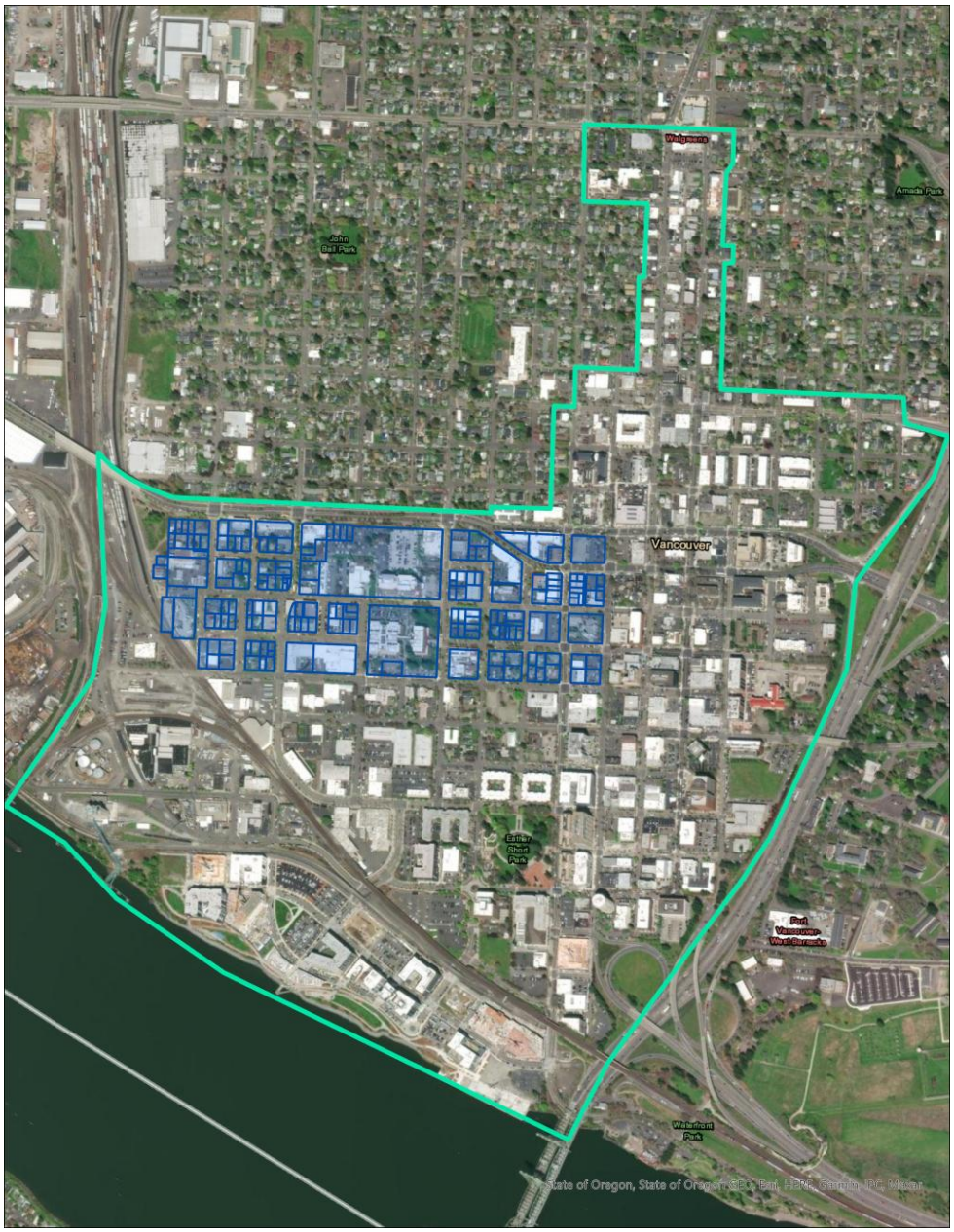
While the southern portion of the Main Street subarea contains limited redevelopment potential, the north and east portion of the subarea contains larger underutilized sites. Given the City owns the large development site south of the library, this represents a unique opportunity to leverage existing City-owned land to facilitate development and catalyze growth in this subarea. The subarea also contains several full-block redevelopment sites that could represent potential sites for City strategic acquisition, especially given the ongoing improvements along Main Street. While some of these large parcels have one single owner with limited required demolition, others present more complicated development scenarios with multiple owners and a range of existing improvements. To unlock these development opportunities, the City should consider facilitating communication between property owners to identify a potential cohesive redevelopment effort.

In summary, the unique opportunities for the City to support redevelopment in the Main Street ROA include:

- Leveraging City-Owned Land
- Acquire and Aggregate Strategic Parcels
- Collaborating with owners of multi-parcel development sites on cohesive redevelopment potential

County Center

Redevelopment Opportunity Area



Description

- Clark County office focused area with light industrial, nonprofit groups and subsidized housing. Lingering single family homes ready for redevelopment.

Market Overview

- 427 Residential Units
- 53,801 Sq. Ft. of Retail
- 347,748 Sq. Ft. of Office
- 126,262 Sq. Ft. of Industrial

Yield Capacity

- Total Acres: 47.9
- Vacant/Underutilized Acres: 23.2
- Residential Capacity
  - Medium Density Buildout: 1,800 Units
  - High Density Buildout: 4,260 Units



County Center Opportunity Area

County Center Multifamily Market Overview

The County Center multifamily market has seen 233 deliveries from Q2 2014, and a large portion of those units have been affordable subsidized housing. The multifamily rents in Table 29 for the County Center are low compared to both Downtown and the City because of the concentration of public and subsidized housing in the County Center subarea. As seen in Table 29, the average asking multifamily rental rate for the County Center subarea is $1,008 per unit. The vacancy rate in the County Center is 2.0 percent, which is considerably lower than the rest of Downtown (7.7 percent) and the City (6.6 percent).

Table 29: County Center Multifamily Market Summary, Q1 2024

Description	County Center	Downtown Vancouver	City of Vancouver
Inventory (Units) Q1 2024	**427**	**3,757**	**32,555**
Inventory (% of Downtown)	*11.4%*		
Inventory (% of City)	*1.3%*	*11.5%*	
Occupied Stock (units)	418	3,468	30,367
Vacant Stock (Units)	9	289	2,138
Vacancy Rate	2.0%	7.7%	6.6%
Avg. Asking Rents			
Avg. Asking Rent (per unit), Q1 2014	$724	$1,390	$1,153
Avg. Asking Rent (per unit), Q1 2024	$1,008	$1,808	$1,706
% Change Q1 2014 - Q1 2024	*28.2%*	*23.1%*	*32.4%*
Net Absorption			
Net Absorption (unit), Q2 2014 - Q1 2024	233	2,348	6,852
Net Absorption (unit), Q2 2023 - Q1 2024	(2)	386	669
New Deliveries (units) Q2 2014 - Q1 2024	233	2,462	7,816
Under Construction (units), Q1 2024	0	666	1,494

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

County Center Retail Market Overview

Retail in the County Center only makes up 4.8 percent of the retail in Downtown Vancouver. Because of the small amount of inventory in the County Center, retail space is 100 percent occupied.

Table 30: County Center Retail Market Summary, Q1 2024

Description	County Center	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**53,801**	**1,112,832**	**11,179,120**
Inventory (% of Downtown)	*4.8%*		
Inventory (% of City)	*0.5%*	*10.0%*	
Occupied Stock (sf)	53,801	1,107,799	10,751,113
Vacant Stock (sf)	0	5,033	379,389
Vacancy Rate	0.0%	0.5%	3.4%
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	n.a.	$1.46	$1.45
Avg. Asking Rent (psf), Q1 2024	n.a.	$1.79	$2.06
% Change Q1 2014 - Q1 2024	*n.a.*	*22.6%*	*42.1%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	2,337	122,535	511,357
Net Absorption (sf), Q2 2023 - Q1 2024	0	(1,823)	44,871
New Deliveries (sf) Q2 2014 - Q1 2024	0	101,902	295,518
Under Construction (sf), Q1 2024	0	0	55,235

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Multifamily apartments with ground floor retail may not be included in this table
Source: CoStar; BAE 2024.

County Center Office Market Overview

There are no new units under construction in the County Center subarea. Q2 of 2014 was the most recent office delivery. Rental rates show that an older stock in the County Center subarea has lower office rent than Downtown and the City of Vancouver. The County Center on average has an asking rent of $1.86 per square foot, while both the City and Downtown have significantly higher rents at $2.19 and $2.29 per square foot, respectively. Despite limited recent deliveries, the County Center vacancy rate is low at 0.9 percent and has experienced 7,751 square feet of positive absorption over the last year. By contrast, both the City and Downtown have higher vacancy rates and negative absorption.

Table 31: County Center Office Market Summary, Q1 2024

Description	County Center	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**347,748**	**3,025,593**	**9,909,637**
Inventory (% of Downtown)	*11.5%*		
Inventory (% of City)	*3.5%*	*30.5%*	
Occupied Stock (sf)	344,500	2,859,490	9,267,844
Vacant Stock (sf)	3,248	160,377	623,629
Vacancy Rate	0.9%	5.3%	6.3%
# of buildings	33	202	640
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$1.40	$1.63	$1.50
Avg. Asking Rent (psf), Q1 2024	$1.86	$2.29	$2.19
% Change Q1 2014 - Q1 2024	*32.9%*	*40.5%*	*46.0%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	6,756	437,982	910,966
Net Absorption (sf), Q2 2023 - Q1 2024	7,751	(324)	(20,871)
New Deliveries (sf) Q2 2014 - Q1 2024	0	357,182	877,159
Under Construction (sf), Q1 2024 (a)	0	531,000	531,000

Notes:
Inventory, Occupied Stock and Vacant Stock in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
(a) 360,000 square feet is Terminal one, and the remaining has turned to residential.
Source: CoStar; BAE 2024.

County Center Industrial Market Overview

Besides the Esther Short Park subarea, the County Center has the largest square feet of Industrial stock in Downtown Vancouver. The industrial inventory in the County Center accounts for 21.2 percent of Downtown inventory at 126,262 square feet of industrial space. Since Q2 2014, there have been no new deliveries, or changes in absorption. According to Table 32, there are no vacancies in industrial space in the County Center.

Table 32: County Center Industrial Market Summary, Q1 2024

Description	County Center	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**126,262**	**595,292**	**15,273,580**
Inventory (% of Downtown)	*21.2%*		
Inventory (% of City)	*0.8%*	*3.9%*	
Occupied Stock (sf)	126,262	590,552	14,674,781
Vacant Stock (sf)	0	4,740	495,742
Vacancy Rate	0	0.8%	3.2%
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	0	(16,031)	1,549,328
Net Absorption (sf), Q2 2023 - Q1 2024	0	1,859	(74,378)
New Deliveries (sf) Q2 2014 - Q1 2024	0	5,695	1,587,084
Under Construction (sf), Q1 2024	0	0	0

Notes:
Inventory, Occupied Stock, Vacant Stock, and New Deliveries in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

County Center Yield Capacity

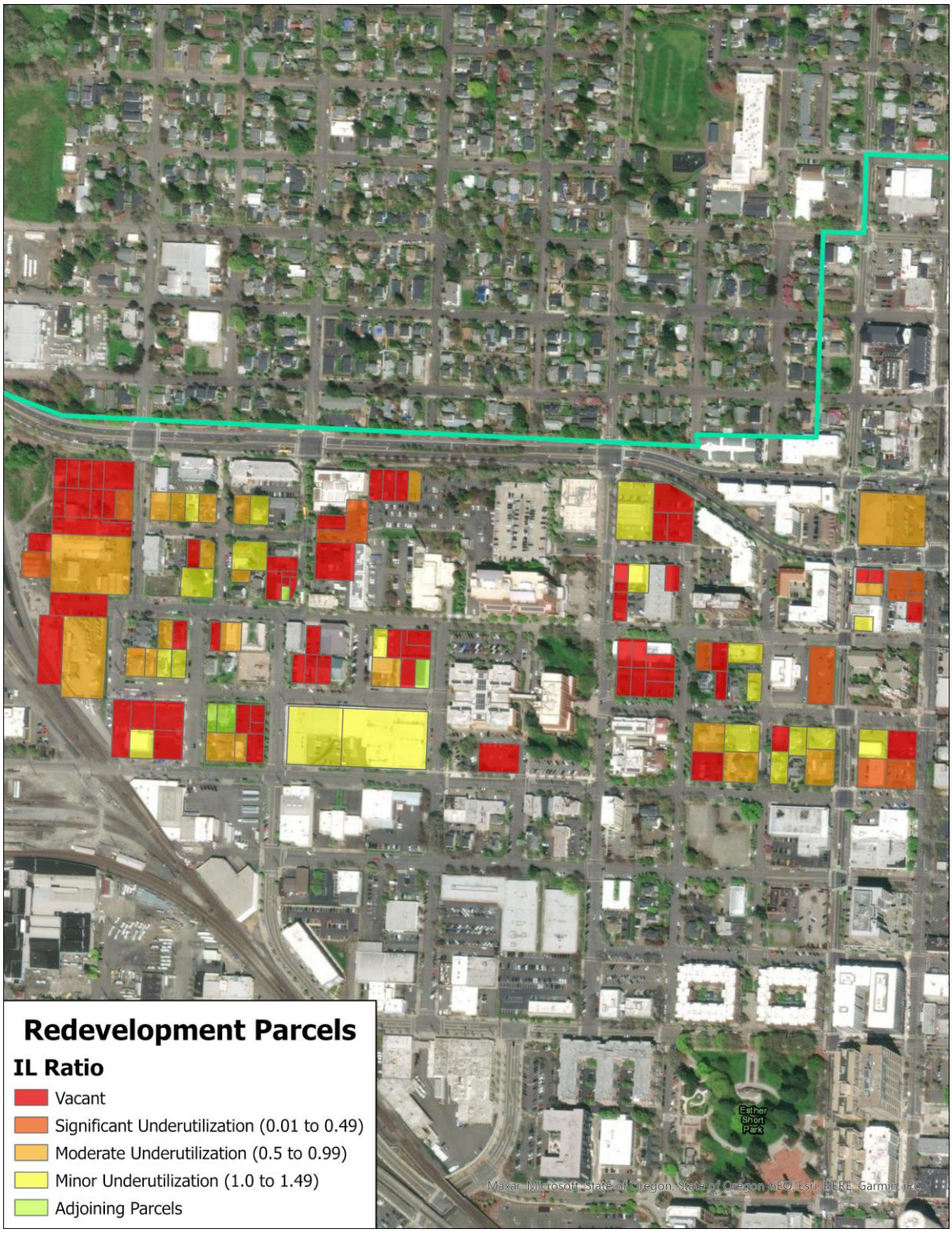
Table 33 below shows that the largest inventory of vacant and underutilized sites are large sites, at greater than an acre. Of the 23.2 acres with redevelopment potential, ten of those sites are larger than an acre. Collectively, these sites are expected to accommodate between 1,611 and 3,853 new residential units, depending on the density of the expected buildout. With an existing concentration of office space, largely to support Clark County, and light industrial uses, BAE assumes 20 percent of the sites with redevelopment potential will deliver office uses, which would support roughly 405,000 square feet of office space. In terms of new light industrial, BAE assumes ten percent of the land accommodates industrial uses at a relative low FAR, resulting in 50,500 square feet of industrial or maker space.

Table 33: County Center Yield Capacity

	Medium Density Scenario			High Density Scenario		
Site Size	**# of Sites**	**Total SF**	**Acres**	**# of Sites**	**Total SF**	**Acres**
Less than 7,500 (1/8 Block)	19	88,009	2.0	19	88,009	2.0
7,500 to 11,000 (1/4 Block)	2	20,247	0.5	2	20,247	0.5
11,000 to 21,000 (1/2 Block)	10	158,340	3.6	10	158,340	3.6
21,000 to 43,500 (Full Block)	10	308,502	7.1	10	308,502	7.1
Greater than 43,500	5	433,991	10.0	5	433,991	10.0
Total, All Sites	**46**	**1,009,089**	**23.2**	**46**	**1,009,089**	**23.2**
Development Potential						
Residential	70%			70%		
Office	20%			20%		
Light Industrial	10%			10%		
Total	**100%**			**100%**		
Residential Yield Capacity						
Site Size	**Acres**	**DU/Acre**	**Total Units**	**Acres**	**DU/Acre**	**Total Units**
1/8 Block	1.4	58	82	1.4	105	148
1/4 Block	0.3	58	19	0.3	75	24
1/2 Block	2.5	131	333	2.5	305	776
Full Block	5.0	131	648	5.0	267	1,323
Bigger than 1 Acre	7.0	76	530	7.0	227	1,582
Total, All Sites	**16.2**	**99**	**1,611**	**16.2**	**238**	**3,853**
Office Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	4.6	2.0	403,636	4.6	2.0	403,636
Light Industrial Yield Capacity						
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	2.3	0.5	50,454	2.3	0.5	50,454

Sources: City of Vancouver; SERA Architects; BAE, 2024.

Figure 11: County Center Parcels with Redevelopment Potential



Sources: City of Vancouver; Data Axle; BAE, 2024.

County Center Redevelopment Recommendations

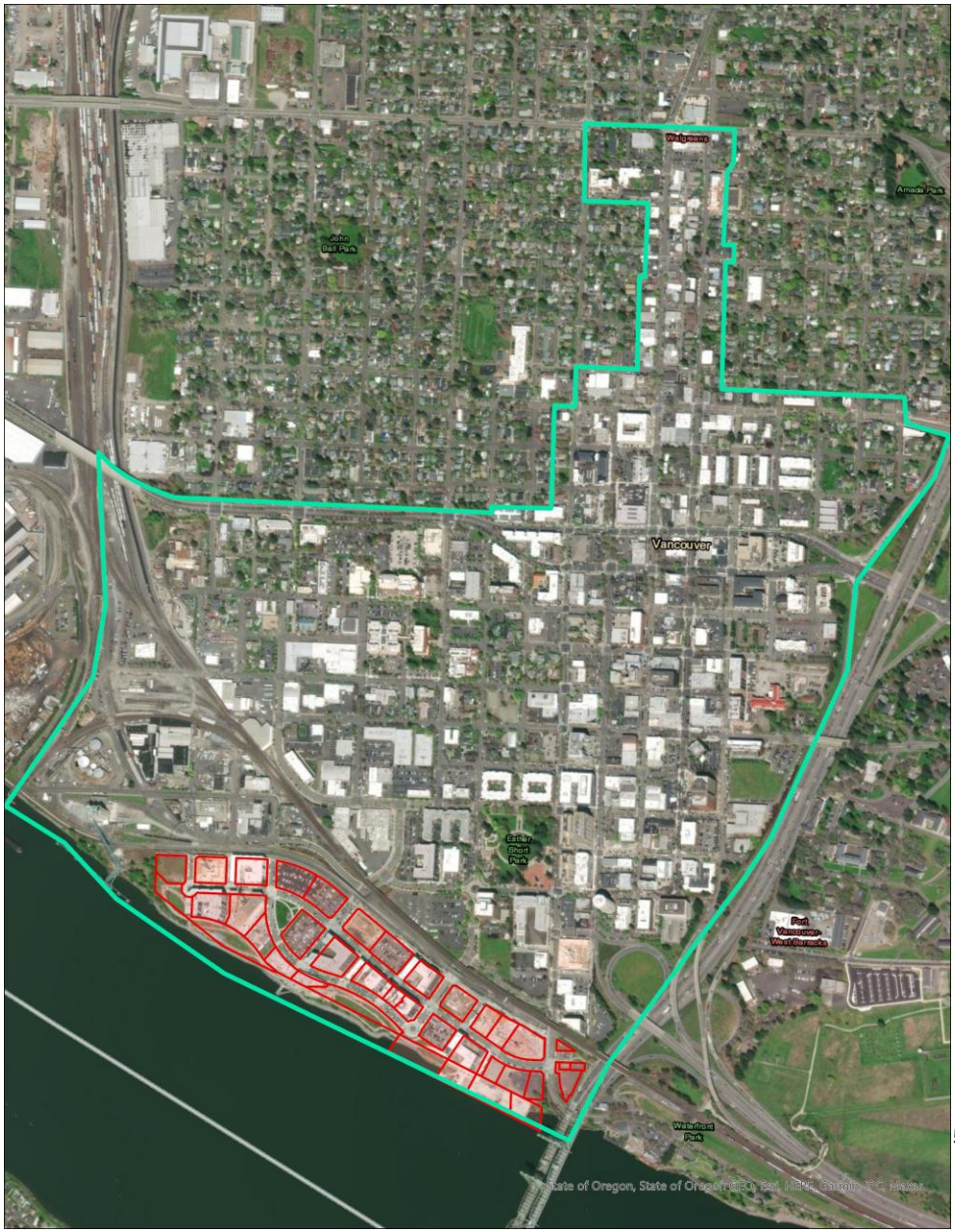
While the City has limited resources on the County Center subarea, the City should coordinate with the County and other governmental agencies to identify potential surplus sites that could support future growth. In addition, the County Center subarea contains a large number of complicated sites with multiple owners. Similar to other challenging redevelopment sites, the City should facilitate coordination between the property owners to determine a cohesive redevelopment plan. Lastly, intensification of development in this area will drive the need for improved infrastructure. At the southern border of the study area, the City should invest in upgrades to 11th Street to improve bike and pedestrian connectivity and streetscape improvements to improve the overall pedestrian connectivity to amenities in downtown.

In summary, the unique opportunities for the City to support redevelopment in the County Center ROA include:

- Leveraging publicly-owned sites for redevelopment
- Collaborating with owners of multi-parcel development sites on cohesive redevelopment potential
- Investing in Bike/Pedestrian/Streetscape Improvements
    - W. 11th Street

Vancouver Waterfront

Redevelopment Opportunity Area



Description

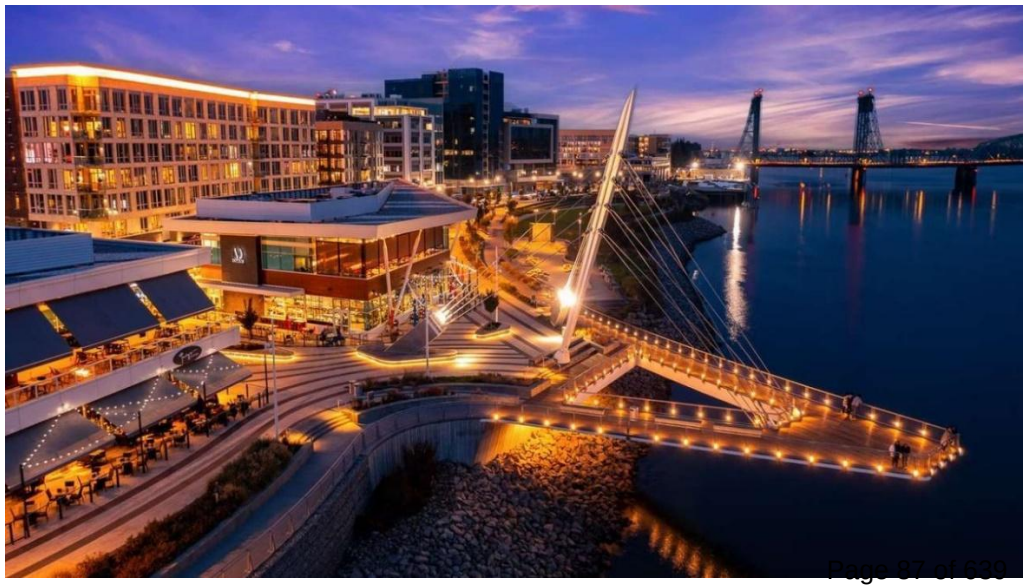
- A new master plan development with heavy focus on residential and dining. New office space recently completed for ZoomInfo.

Market Overview

- 921 Residential Units
  - 430 Units Under Construction
- 83,805 Sq. Ft. of Retail
- 80,000 Sq. Ft. of Office
  - 360,000 Sq. Ft. Under Construction

Yield Capacity

- Total Acres: 40
- Vacant/Underutilized Sites: 10 Acres
- Sites are planned for future development



Waterfront Opportunity Area

Waterfront Multifamily Market Overview

24.5 percent of Downtown Vancouver's multifamily inventory is in the Waterfront. All of the units in the Waterfront have been completed within the last 6 years, and 430 more units are currently under construction. As shown in Table 34, average rents in the Waterfront in comparison to the City of Vancouver and Downtown Vancouver are about $500 per unit more expensive.

Table 34: Waterfront Multifamily Market Summary, Q1 2024

Description	Waterfront	Downtown Vancouver	City of Vancouver
Inventory (Units) Q1 2024	**921**	**3,757**	**32,555**
Inventory (% of Downtown)	*24.5%*		
Inventory (% of City)	*2.8%*	*11.5%*	
Occupied Stock (units)	814	3,468	30,367
Vacant Stock (Units)	107	289	2,138
Vacancy Rate	11.6%	7.7%	6.6%
Avg. Asking Rents			
Avg. Asking Rent (per unit), Q1 2014	n.a.	$1,390	$1,153
Avg. Asking Rent (per unit), Q1 2024	$2,304	$1,808	$1,706
% Change Q1 2014 - Q1 2024	*n.a.*	*23.1%*	*32.4%*
Net Absorption			
Net Absorption (unit), Q2 2014 - Q1 2024	815	2,348	6,852
Net Absorption (unit), Q2 2023 - Q1 2024	278	386	669
New Deliveries (units) Q2 2014 - Q1 2024	921	2,462	7,816
Under Construction (units), Q1 2024	430	666	1,494

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

Waterfront Retail Market Overview

The recently developed Waterfront has only 7.5 percent of the retail of Downtown Vancouver. When considering the stock of retail that Downtown has, the Waterfront is considerably smaller. Similar to the residential units in the Waterfront, all of the retail was completed in the year 2018. Represented in Table 35, CoStar indicates there is currently no retail square footage under construction in Downtown, which may not capture ground-floor retail within mixed-use developments, but over 50,000 square feet is currently under construction in the City.

Table 35: Waterfront Retail Market Summary, Q1 2024

Description	Waterfront	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**83,805**	**1,112,832**	**11,179,120**
Inventory (% of Downtown)	*7.5%*		
Inventory (% of City)	*0.7%*	*10.0%*	
Occupied Stock (sf)	82,984	1,107,799	10,751,113
Vacant Stock (sf)	821	5,033	379,389
Vacancy Rate	1.0%	0.5%	3.4%
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	n.a.	$1.46	$1.45
Avg. Asking Rent (psf), Q1 2024	n.a.	$1.79	$2.06
% Change Q1 2014 - Q1 2024	*n.a.*	*22.6%*	*42.1%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	82,984	122,535	511,357
Net Absorption (sf), Q2 2023 - Q1 2024	0	(1,823)	44,871
New Deliveries (sf) Q2 2014 - Q1 2024	83,805	101,902	295,518
Under Construction (sf), Q1 2024	0	0	55,235

Notes:
Inventory, Occupied Stock, Vacant Stock and Net Absorption in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Multifamily apartments with ground floor retail may not be included in this table
Source: CoStar; BAE 2024.

Waterfront Office Market Overview

The office market has suffered since the global pandemic. However, the Waterfront is showing great occupancy with zero vacancies, according to CoStar data shown in Table 36. With the construction of ZoomInfo's new headquarters, the Waterfront will have a total of about 430,000 square feet of office space. The Waterfront continues the trend of flight to quality in the office market.

Table 36: Waterfront Office Market Summary, Q1 2024

Description	Waterfront	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**79,975**	**3,025,593**	**9,909,637**
Inventory (% of Downtown)	*2.6%*		
Inventory (% of City)	*0.8%*	*30.5%*	
Occupied Stock (sf)	79,975	2,859,490	9,267,844
Vacant Stock (sf)	0	160,377	623,629
Vacancy Rate	0.0%	5.3%	6.3%
# of buildings	2	202	640
Avg. Asking Rents			
Avg. Asking Rent (psf), Q1 2014	$2.75	$1.63	$1.50
Avg. Asking Rent (psf), Q1 2024	$3.25	$2.29	$2.19
% Change Q1 2014 - Q1 2024	*18.2%*	*40.5%*	*46.0%*
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	75,179	437,982	910,966
Net Absorption (sf), Q2 2023 - Q1 2024	0	(324)	(20,871)
New Deliveries (sf) Q2 2014 - Q1 2024	74,975	357,182	877,159
Under Construction (sf), Q1 2024 (a)	531,000	531,000	531,000

Notes:
Inventory, Occupied Stock and Vacant Stock in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
(a) 360,000 square feet is Terminal one, and the remaining has turned to residential.
Source: CoStar; BAE 2024.

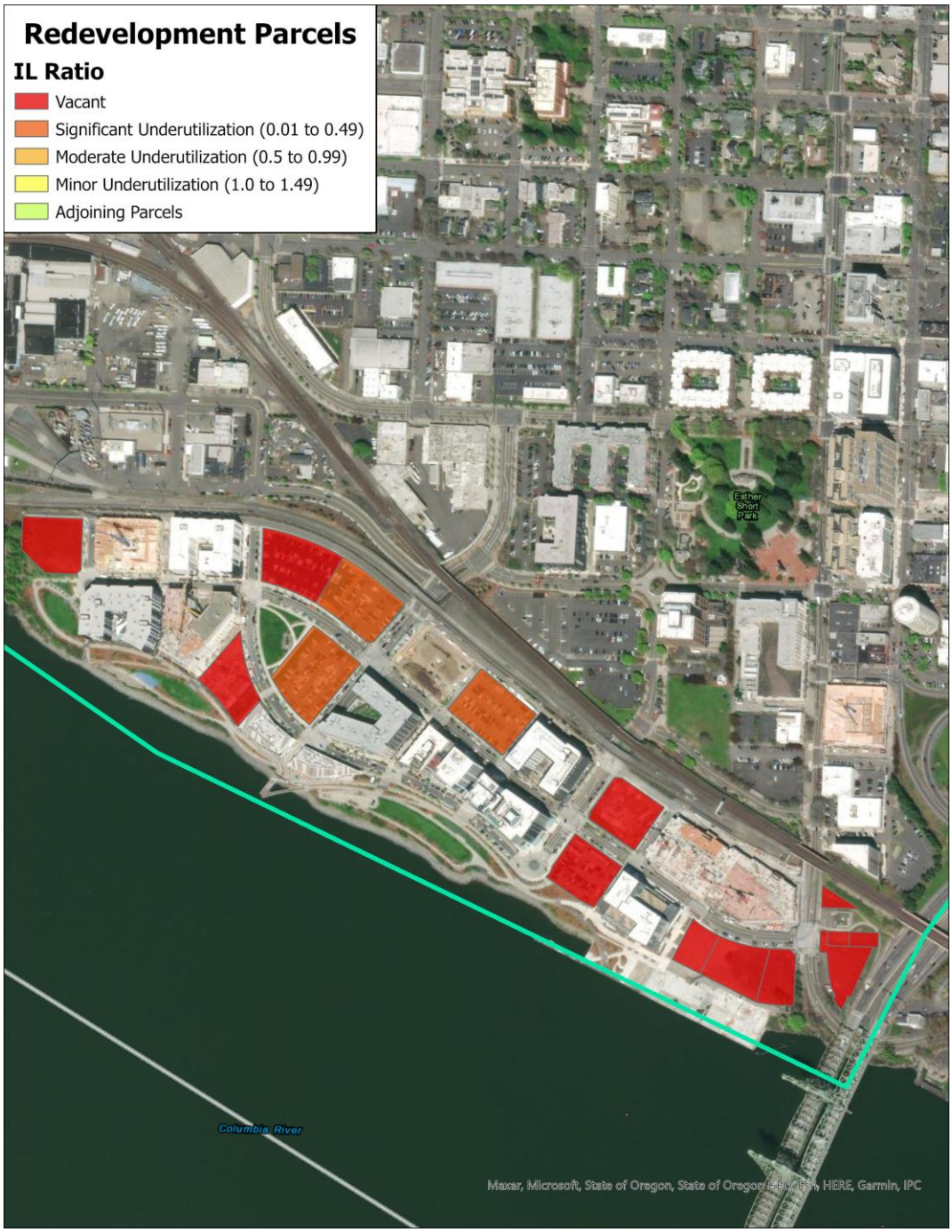
Waterfront Industrial Market Overview

There is no industrial in the Waterfront subarea.

Waterfront Redevelopment Summary

While the Waterfront area has vacant and underutilized sites, these sites are part of the planned buildout of the Waterfront area. As such, this analysis does not estimate the future buildout of these sites.

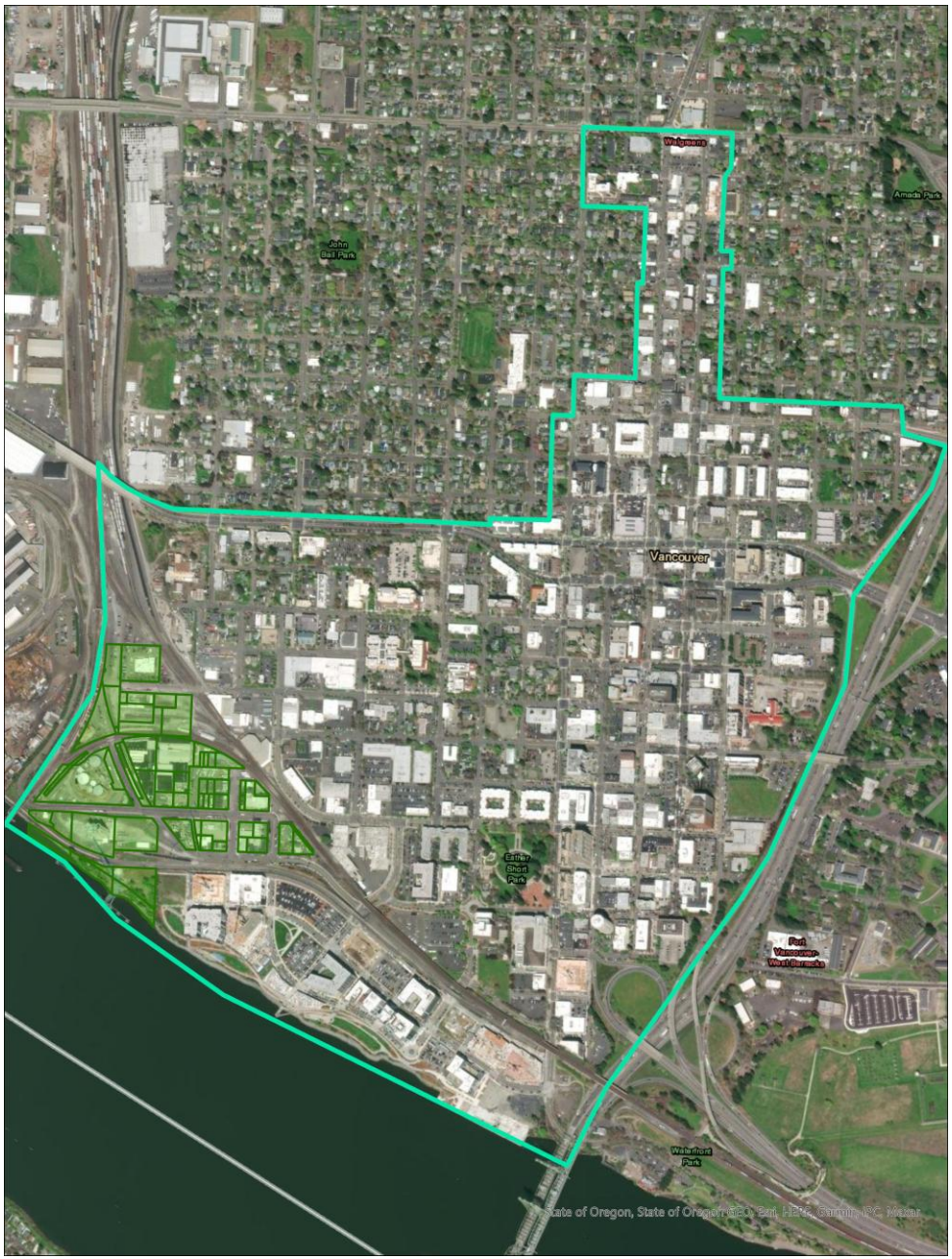
Figure 12: Waterfront Parcels with Redevelopment Potential



Sources: City of Vancouver; Data Axle; BAE, 2024.

West Industrial

Redevelopment Opportunity Area



Description

- Heavy industrial area in the southwestern corner of Downtown. The main stakeholders in this area are Albina Fuel Company, Lafarge North America and BNSF Railroad.

Market Overview

- 153,417 Sq. Ft. of Industrial
  - 25% of the Industrial in Downtown

Underutilized Sites

- Total Acres: 27.9
- Vacant/Underutilized Sites: 16.9 Acres
- Long-term development will require significant planning and infrastructure upgrades.



West Industrial Opportunity Area

The West Industrial subarea does not currently have any multifamily units, office space, or retail space. This subarea is documented in this report because of the proximity to Downtown and potential for long-term redevelopment of the area. These parcels are particularly challenging due to the intersection of railroads and the current industrial uses that occupy the subarea. No short-term development is expected, but similar to the Waterfront subarea, the West Industrial area may turn over eventually.

West Industrial Market Overview

The West Industrial market is occupied by three types of industry: cement, fuel, and railroad freight. These industries require long-term stability and Table 37 reflects this in that absorption, new deliveries, and square feet under construction have not changed. The West Industrial subarea makes up 1.0 percent of the industrial inventory in the City and a quarter of the inventory in Downtown.

Table 37: West Industrial, Industrial Market Summary, Q1 2024

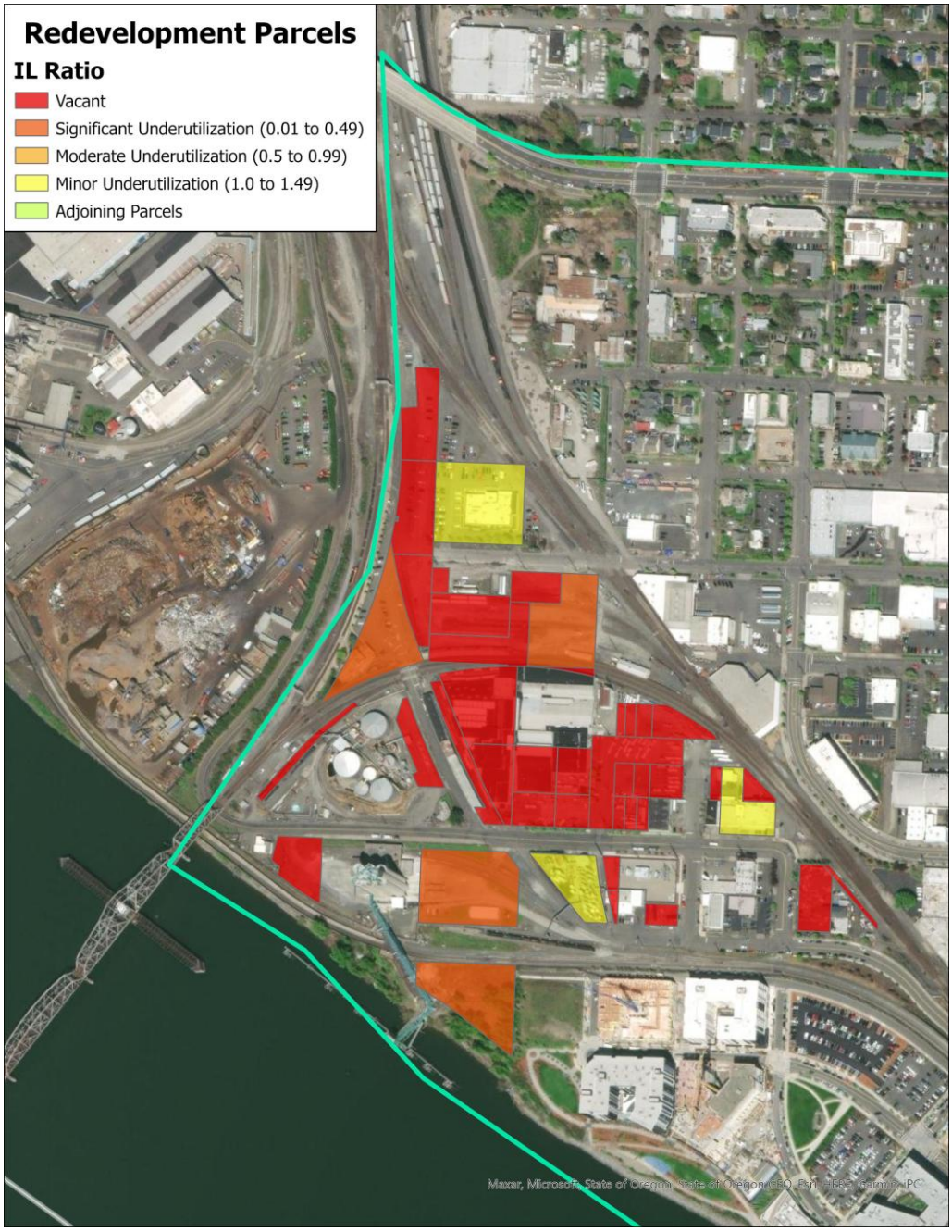
Description	West Industrial	Downtown Vancouver	City of Vancouver
Inventory (SF) Q1 2024	**153,417**	**595,292**	**15,273,580**
Inventory (% of Downtown)	*25.8%*		
Inventory (% of City)	*1.0%*	*3.9%*	
Occupied Stock (sf)	153,417	590,552	14,674,781
Vacant Stock (sf)	0	4,740	495,742
Vacancy Rate	0	0.8%	3.2%
Net Absorption			
Net Absorption (sf), Q2 2014 - Q1 2024	0	(16,031)	1,549,328
Net Absorption (sf), Q2 2023 - Q1 2024	0	1,859	(74,378)
New Deliveries (sf) Q2 2014 - Q1 2024	0	5,695	1,587,084
Under Construction (sf), Q1 2024	0	0	0

Notes:
Inventory, Occupied Stock, Vacant Stock, and New Deliveries in the subareas may not cumulate to Downtown Vancouver due to the date of information pulled from Costar.
Source: CoStar; BAE 2024.

West Industrial Redevelopment Site Summary

The West Industrial subarea of Downtown does have significant long-term redevelopment potential, with nearly 20 acres of vacant and underutilized land. However, the redevelopment of this area is not likely to support near-term demand given the need for significant demolition and infrastructure investment.

Figure 13: West Industrial Parcels with Redevelopment Potential



Sources: City of Vancouver; Data Axle; BAE, 2024.

Total Redevelopment Potential

In total, the analysis of vacant and underutilized sites indicates that Downtown can accommodate a significant amount of residential units and non-residential square footage. The total capacity depends largely on the density of future development. Recent development in the core Downtown Vancouver area opted to build at a fairly high density, typically with seven story projects using podium parking. However, current market economics are challenging for high-density development, which could lead some developers to opt for the cheaper medium-density project types. As seen below in Table 38, from a residential capacity perspective, the medium density scenario indicates that Downtown would only be able to accommodate roughly 7,680 new residential units on the current sites with redevelopment potential, at an average density of just under 100 dwelling units to the acre. However, if the City can promote policies, leverage existing resources, and target investments to encourage increased density in Downtown, the existing inventory of buildable sites indicate the City could accommodate nearly 18,400 units, at an average density of 230 units per acre. If the City intends to support 10,000 new housing units in Downtown, it will be critical to maximize density of new development projects in order to maximize the yield of sites in Downtown.

From a non-residential development perspective, assuming between 10 and 30 percent of each subarea accommodates office or industrial uses, Downtown has capacity for nearly 1.6 million square feet of office space and approximately 117,000 square feet of light industrial and maker space.

Table 38: Downtown Vancouver Yield Capacity

	Medium Density Scenario			High Density Scenario		
Site Size	**# of Sites**	**Total SF**	**Acres**	**# of Sites**	**Total SF**	**Acres**
Less than 7,500 (1/8 Block)	106	503,779	11.6	106	503,779	11.6
7,500 to 11,000 (1/4 Block)	27	263,172	6.0	27	263,172	6.0
11,000 to 21,000 (1/2 Block)	39	629,995	14.5	39	629,995	14.5
21,000 to 43,500 (Full Block)	57	1,836,342	42.2	57	1,836,342	42.2
Greater than 43,500	27	2,434,600	55.9	27	2,434,600	55.9
Total, All Sites	**256**	**5,667,888**	**130.1**	**256**	**5,667,888**	**130.1**

Residential Yield Capacity

Site Size	**Acres**	**DU/Acre**	**Total Units**	**Acres**	**DU/Acre**	**Total Units**
1/8 Block	8.0	58	467	8.0	124	1,000
1/4 Block	4.3	60	248	4.3	94	400
1/2 Block	8.3	131	1,080	8.3	305	2,519
Full Block	25.1	131	3,277	25.1	267	6,690
Bigger than 1 Acre	34.3	76	2,606	34.3	227	7,775
Total, All Sites	**79.9**	**96**	**7,677**	**79.9**	**230**	**18,385**

Office Yield Capacity

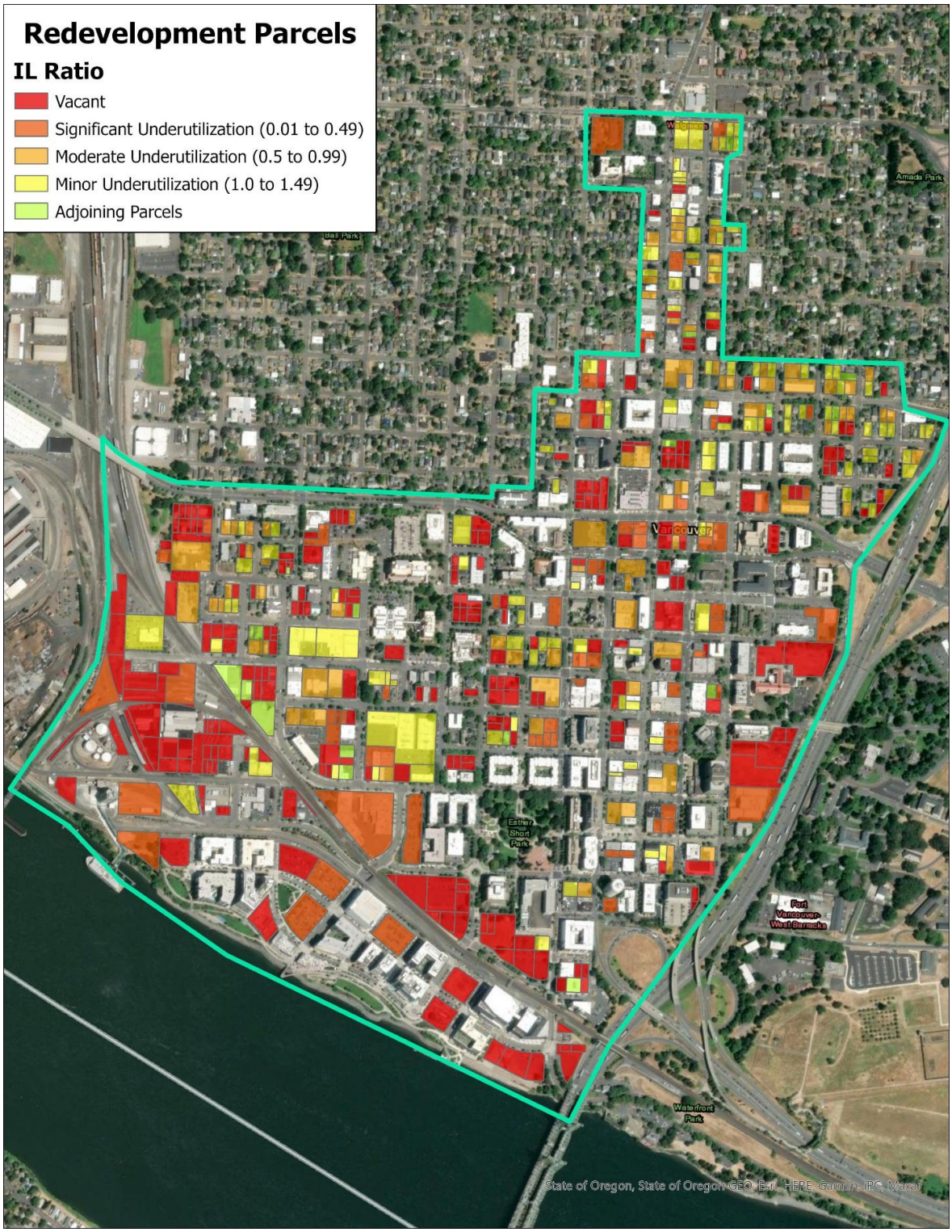
	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	17.9	2.0	1,561,101	17.9	2.0	1,561,101

Light Industrial Yield Capacity

	Acres	**FAR**	**Total SF**	**Acres**	**FAR**	**Total SF**
Total, All Sites	5.4	0.5	116,885	5.4	0.5	116,885

Sources: City of Vancouver; SERA Architects; BAE, 2024.

Figure 14: Downtown Vancouver Parcels with Redevelopment Potential



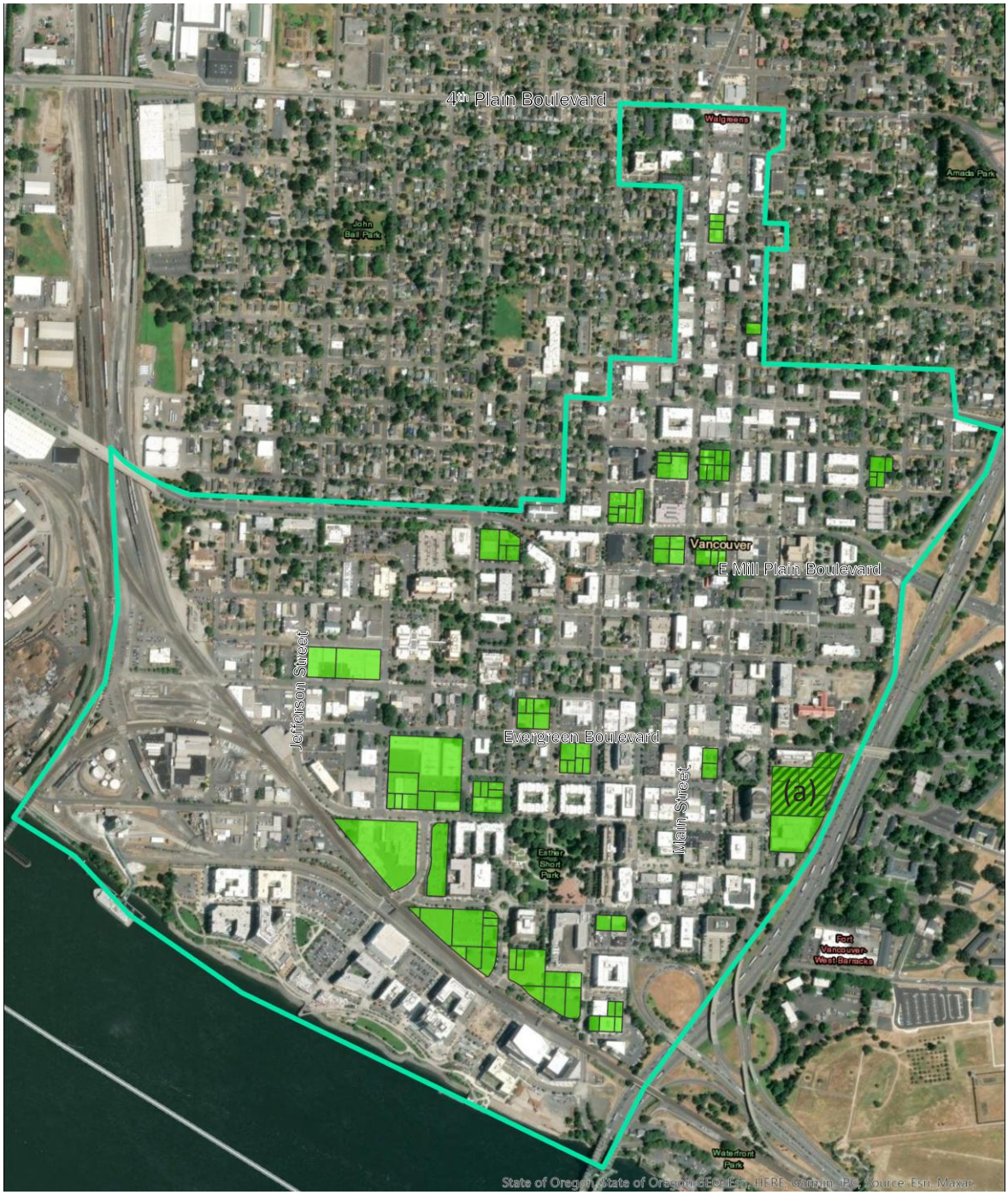
Sources: City of Vancouver; Data Axle; BAE, 2024.

STRATEGIC SITE ASSESSMENT

While the above analysis presented all sites with varying degrees of redevelopment potential, the following section identifies 20 strategic sites that serve as unique opportunities to support future development, capitalize on recent public and private investments, and catalyze additional development throughout Downtown. These sites include a range of publicly and privately-owned parcels, site acreages, and level of existing improvements. For each site, BAE analyzed the unique characteristics of the site and market conditions to identify the potential for redevelopment of the site. Supported by SERA Architects, the analysis then identifies the potential capacity for future development in terms of residential units or non-residential square footage. Given current market conditions and the uncertainty around office demand, the majority of these sites are oriented for residential uses, though these buildout estimates and projected land uses may change as market conditions adjust.

As seen in Figure 15 below, the strategic sites represent unique opportunities throughout Downtown, ranging from infill sites in Uptown to large publicly-owned sites near Esther Short Park and the Vancouver Waterfront. In total, these sites amount to nearly 32 acres of land or nearly one-quarter of the existing vacant and underutilized sites throughout Downtown. Similar to the above analysis, the capacity of each site includes a moderate-density buildout and a high-density buildout. Generally, the moderate-density buildout assumes a four-story building with surface parking, while the high-density buildout assumes a seven-story building with podium parking. For typical Downtown sites, SERA Architects presented standard density assumptions when projecting the buildout of each site. For unique sites, SERA conducted site-specific capacity testing to determine the range of buildout potential for each site. In total, these strategic sites could reasonably accommodate between 3,900 and 6,600 housing units if all sites are delivered as multifamily residential. With the inclusion of non-residential space on specific sites that present commercial development opportunities, these sites may accommodate between 3,400 and 5,600 housing units with 500,000 square feet of potential office space.

Figure 15: Strategic Sites Map



Note:
(a) The site to the south of the new Downtown Vancouver Library is not included in analysis but is considered a strategic parcel for the city that is currently being studied under a separate analysis.

Sources: City of Vancouver; SERA Architects; BAE, 2025.

Strategic Parcel #1

Main and 22nd Street

Description

- 3 parcels
- 0.43 Acres
- Address: 2201 – 2213 Main Street

Current Uses

- South Parcel: Gas Station and Convenience Store
- Middle Parcel: Small Retail - Vacant or Locksmith
- North Parcel: Small Retail - Kindred Home Goods

Opportunities

- Central Location in Uptown subarea
- Located Next to Thriving Restaurants
- Comparable Apartment Development Nearby

Challenges

- Gas Station Environmental Challenges
- Existing Building Character
- Small and Narrow Site Size

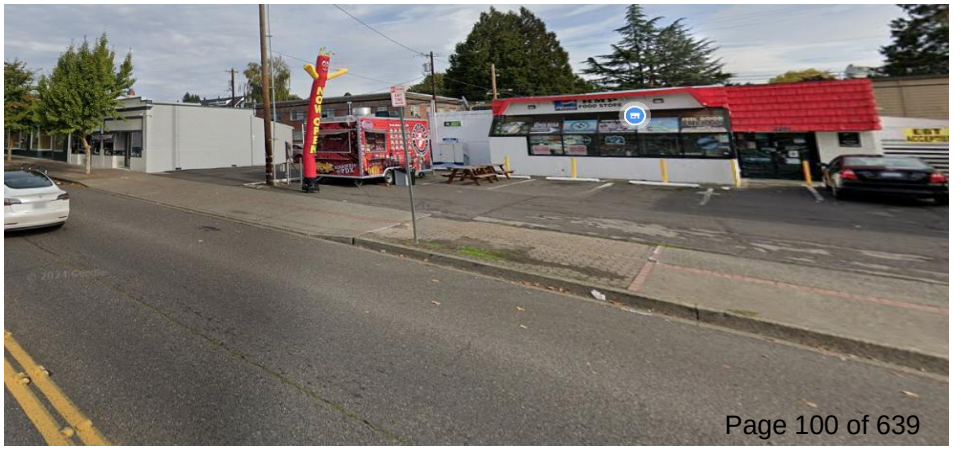
Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 65 Units
  - High Density: 120 Units

Catalytic Potential

Underutilized parcel in Uptown Subarea with opportunity to spur additional development along Main Street and prove the ability to redevelop sites in Uptown





Strategic Parcel #2

1911 Broadway Street

Description

- 1 parcel
- 0.17
- Address: 1911 Broadway Street

Current Uses

- Vacant Developable Land

Opportunities

- Quick Development with Vacant Parcel
- New Residential Development Type

Challenges

- Single Lot
- Between Single Family Homes

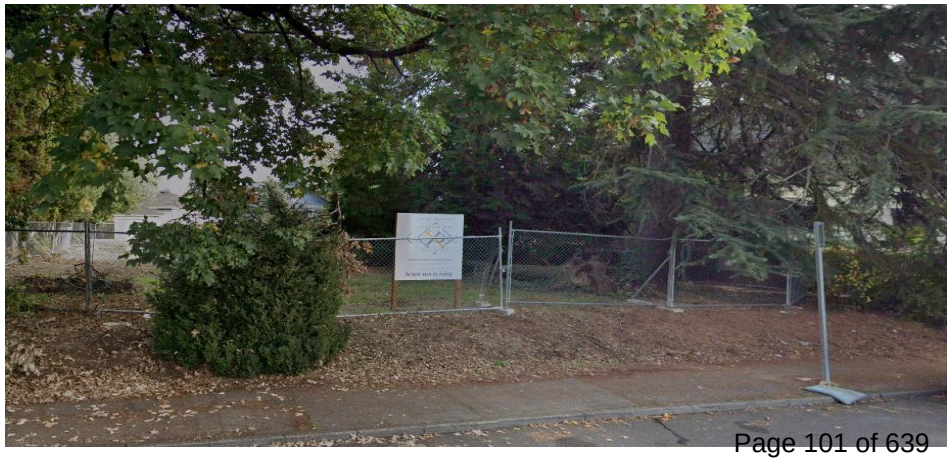
Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 18 Units
  - High Density: 30 Units

Catalytic Potential

Small-scale residential site with opportunity to catalyze additional higher-density development in traditional single-neighborhood





Strategic Parcel #3

Main and 16th Street

Description

- 4 parcels
- 0.86 Acres
- Address: 1604 Main Street

Current Uses

- Vacant Office
- Parking Lot
- Bike Clark County Store

Opportunities

- Across from New Seasons
- Introduce Green Space
- Under One Ownership

Challenges

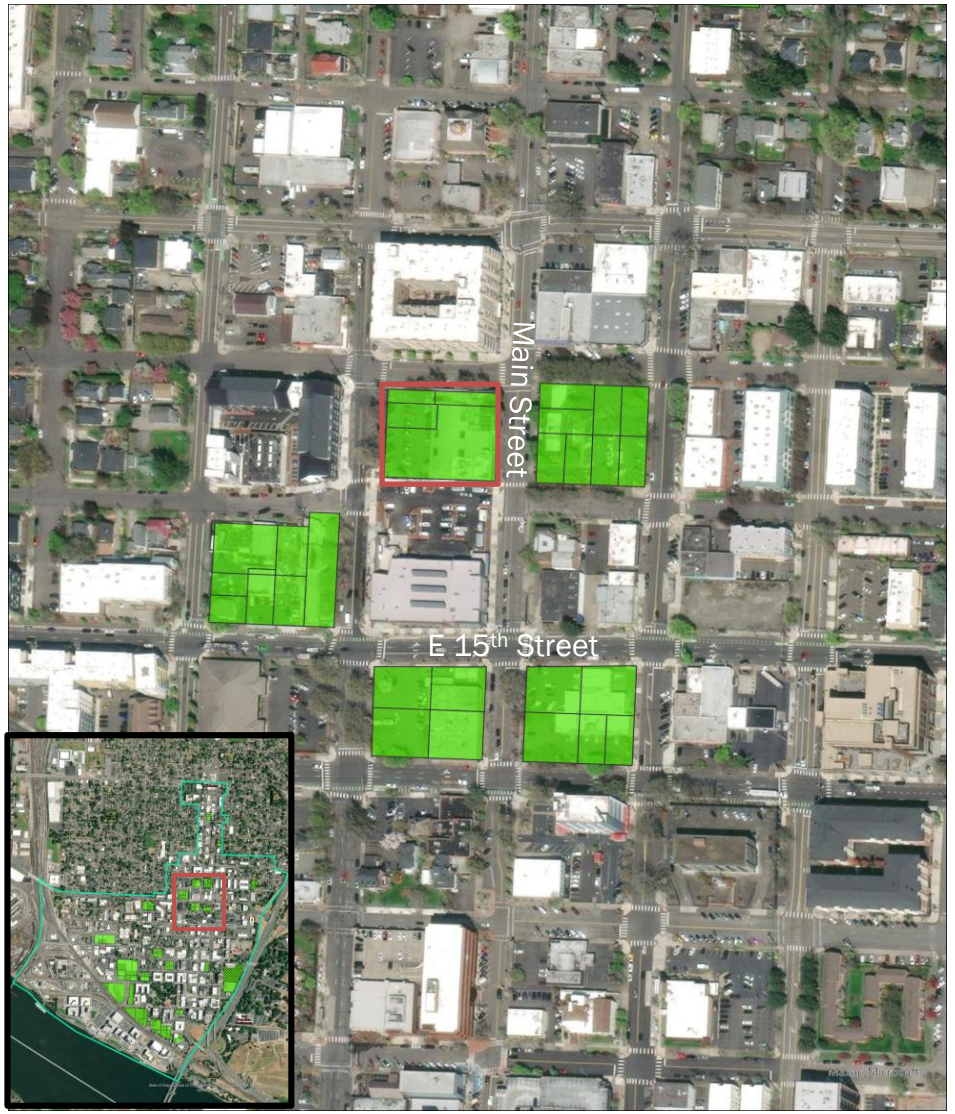
- Existing Building
- Displacement Possibilities

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 131 Units
  - High Density: 203 Units

Catalytic Potential

Large development surrounded by significant concentration of future development potential. Coupled with neighboring grocery store, this particular site could present an opportunity for a future park to support continued growth in the Uptown neighborhood. This would come at a loss of any development capacity on this site, but would serve as a neighborhood amenity that would increase demand for housing in surrounding sites and support future development feasibility.





Strategic Parcel #4

1607 Main Street

Description

- 8 parcels
- 0.92 Acres
- Address: 1607 Main Street

Current Uses

- US Bank Building and Parking

Opportunities

- Located next to Strategic Parcels
- Relocate US Bank to Better Location
- Similar Apartment Development Nearby

Challenges

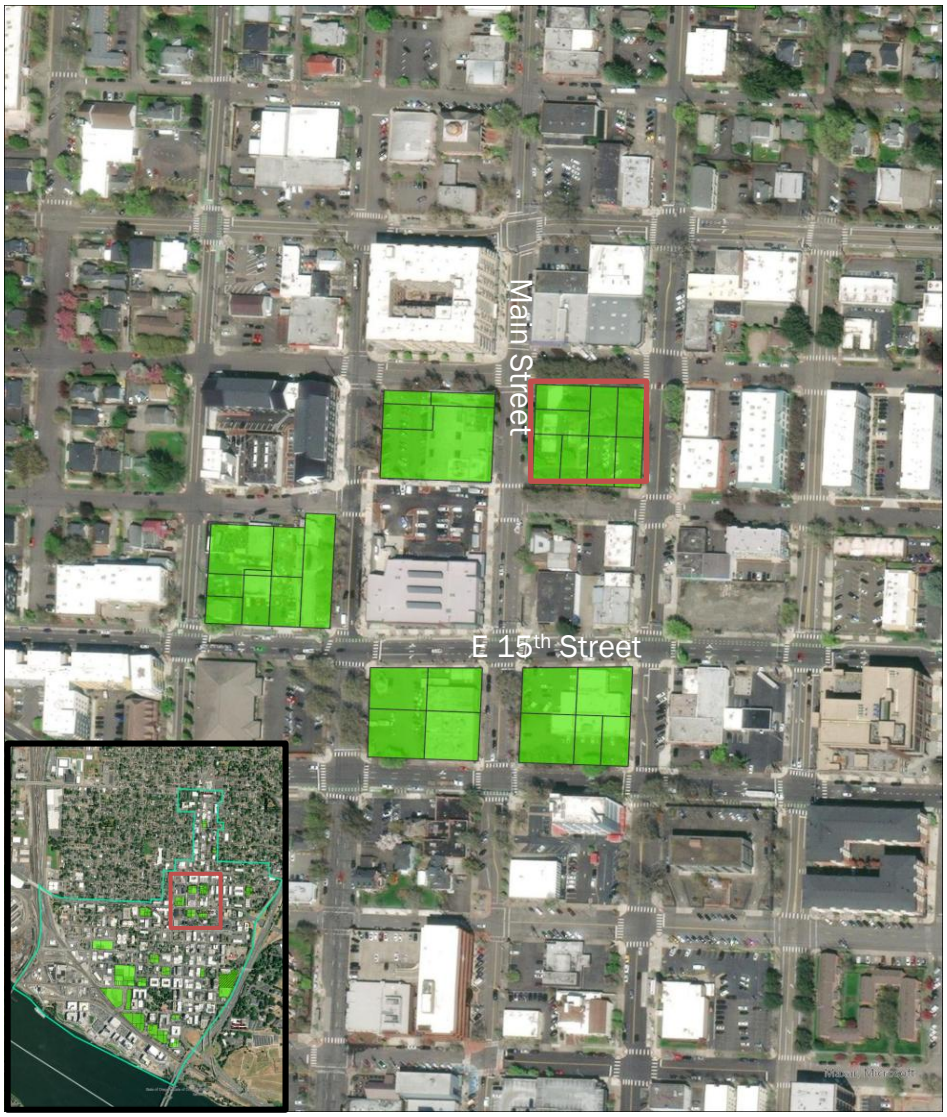
- Existing Structure
- Large National Owner

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 140 Units
  - High Density: 218 Units

Catalytic Potential

Large development site in concentration of future development potential. Owned by a bank that could relocate into ground floor of new development or other ground floor space. Development of this site would further catalyze development of surrounding full-block development sites.





Strategic Parcel #5

1500 Washington Street

Description

- 8 parcels
- 1.11 Acres
- Address: 1500 Washington Street

Current Uses

- General Repair and Service Garage
- SFR Converted to Office

Opportunities

- Single Owner
- Prime Location
- Full Block

Challenges

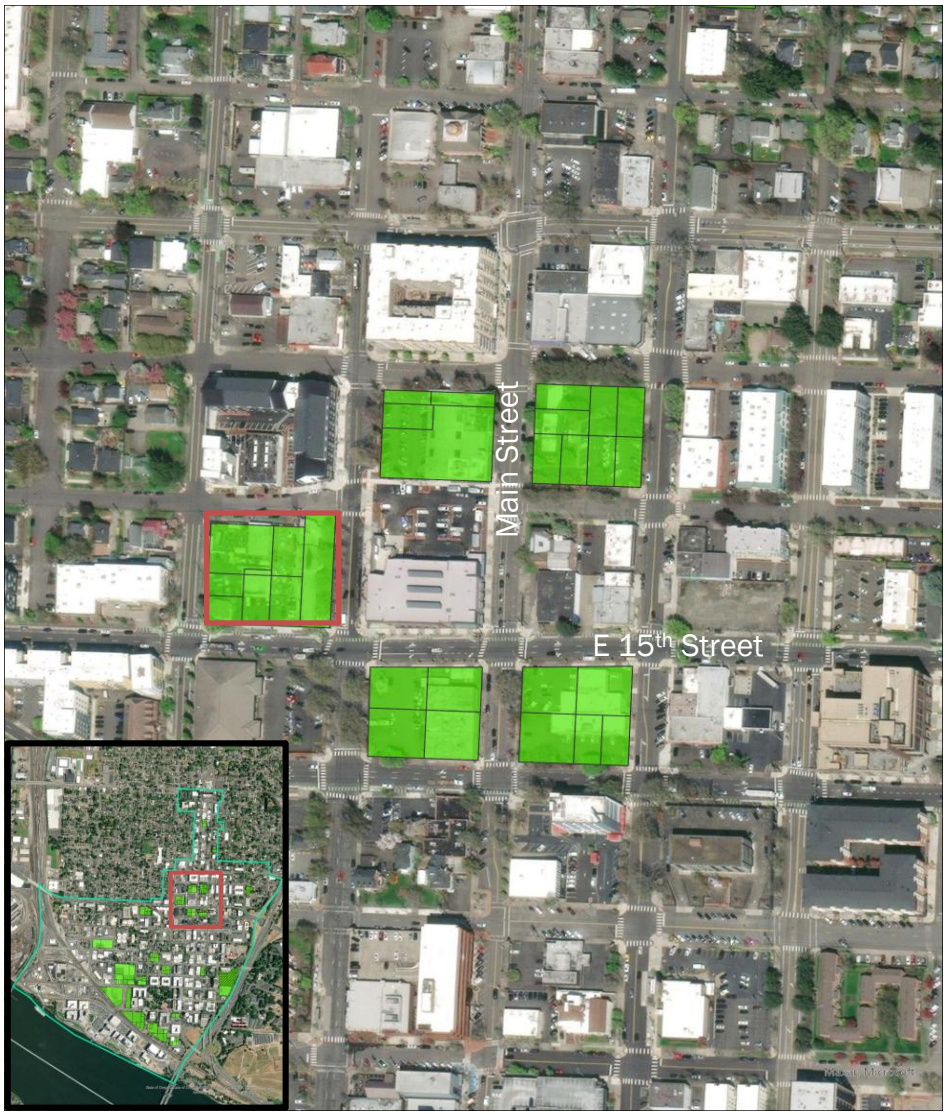
- Environmental Concerns with Existing Use
- Existing Structure Demolition

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 169 Units
  - High Density: 263 Units

Catalytic Potential

Large development site in concentration of future development potential. Single-owner. Development of this site would further catalyze development of surrounding full-block development sites in the Uptown neighborhood.





Strategic Parcel #6

E and 16th Street

Description

- 5 parcels
- 0.57 Acres
- Address: 508 E 16th Street

Current Uses

- Vacant Developable Land

Opportunities

- Half of Lot is Vacant
- Located Across Street from New Apartment
- No Existing Structures

Challenges

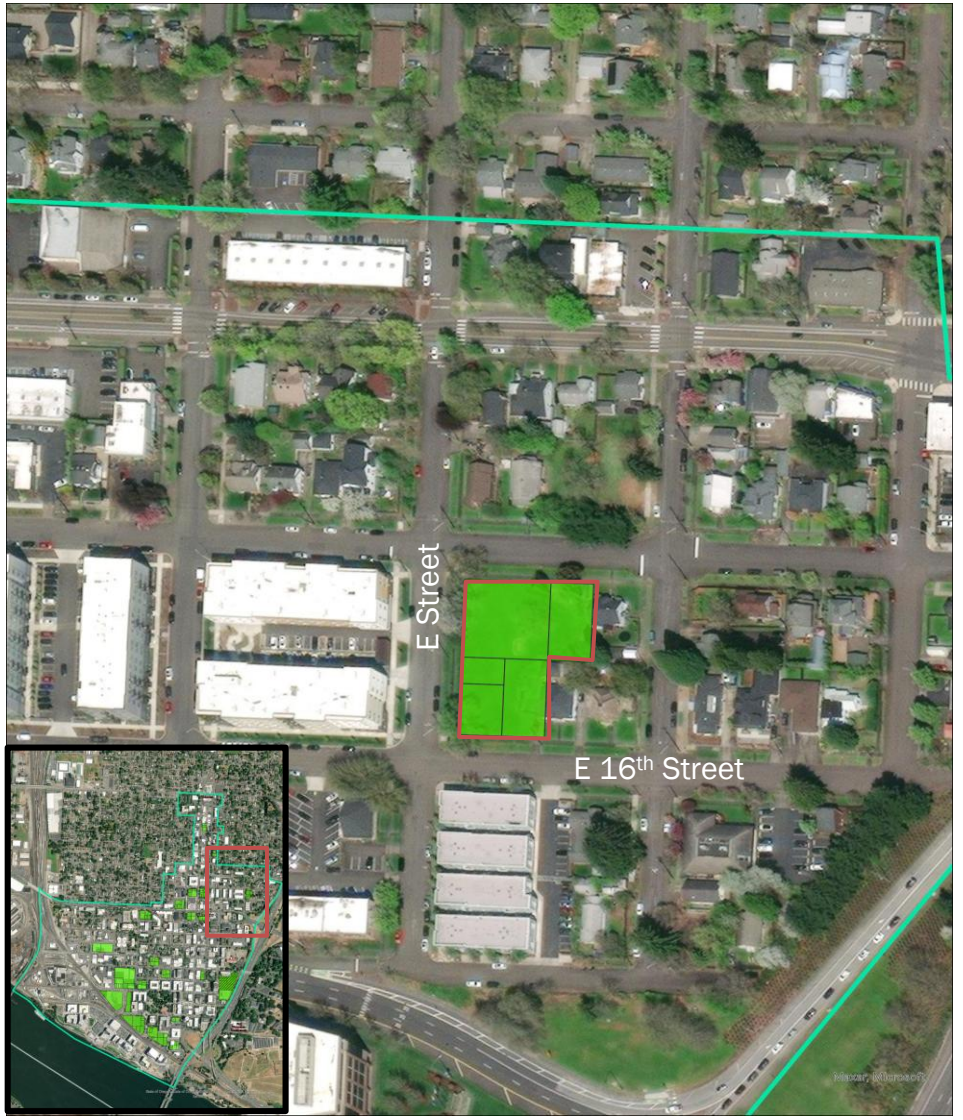
- Gas Station Environmental Challenges
- Existing Building Character
- Small and Narrow Site Size

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 88 Units
  - High Density: 163 Units

Catalytic Potential

Transition site between higher-density and traditional single-family zones. Vacant lot with opportunity to deliver medium density housing that provides proof of concept for development opportunities in proximity to single-family neighborhoods.





Strategic Parcel #7

Franklin and 14th Street

Description

- 4 parcels
- 0.91 Acres
- Address: 1409 Franklin Street

Current Uses

- Office Leasing Class C
- Residential Parking Lot

Opportunities

- Partially owned by Vancouver Housing Authority, opportunity for partnership
- Small Existing Structure Footprint
- Proximity to County Center

Challenges

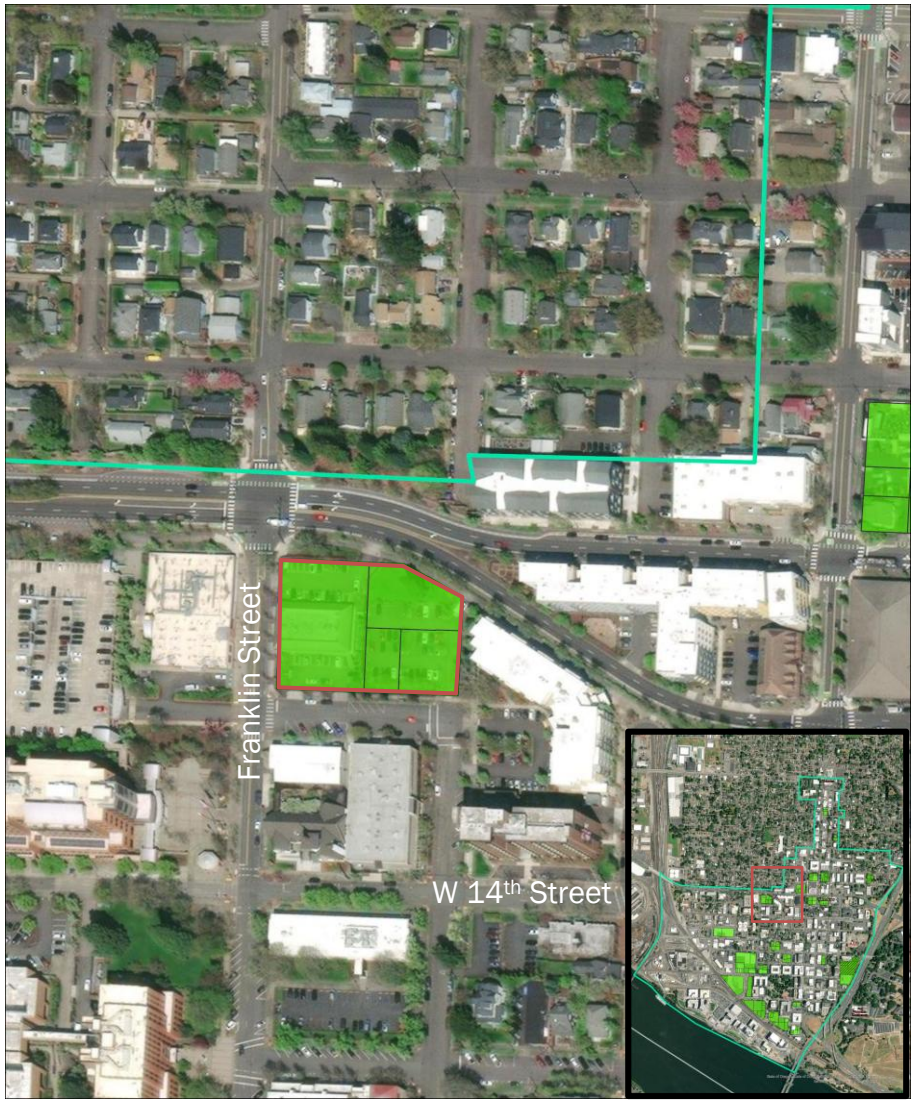
- Multiple Parcel Owners
- Displacing Existing Office Use
- Currently Parking for Apartment
- Minor Elevation and Grade Challenges

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 139 Units
  - High Density: 216 Units
- Office Potential:
  - 95,000 Square Feet

Catalytic Potential

Opportunity to capitalize on site that is partially publicly-owned and continue redevelopment of sites along Mill Plain Boulevard. Development would add density to the County Center subarea that would catalyze redevelopment of underutilized sites in the northwest portion of Downtown.





Strategic Parcel #8

Main and E Mill Plain Blvd

Description

- 4 parcels
- 0.79 Acres
- Address: 1414 Main Street

Current Uses

- Northeast Parcel: Brewery and Restaurant
- Southeast Parcel: Retail
- West Parcels: Adjoining Parking Lot

Opportunities

- Single Owner
- Proximity to Other Strategic Parcels
- Modest Existing Improvements (Half Block of Parking)

Challenges

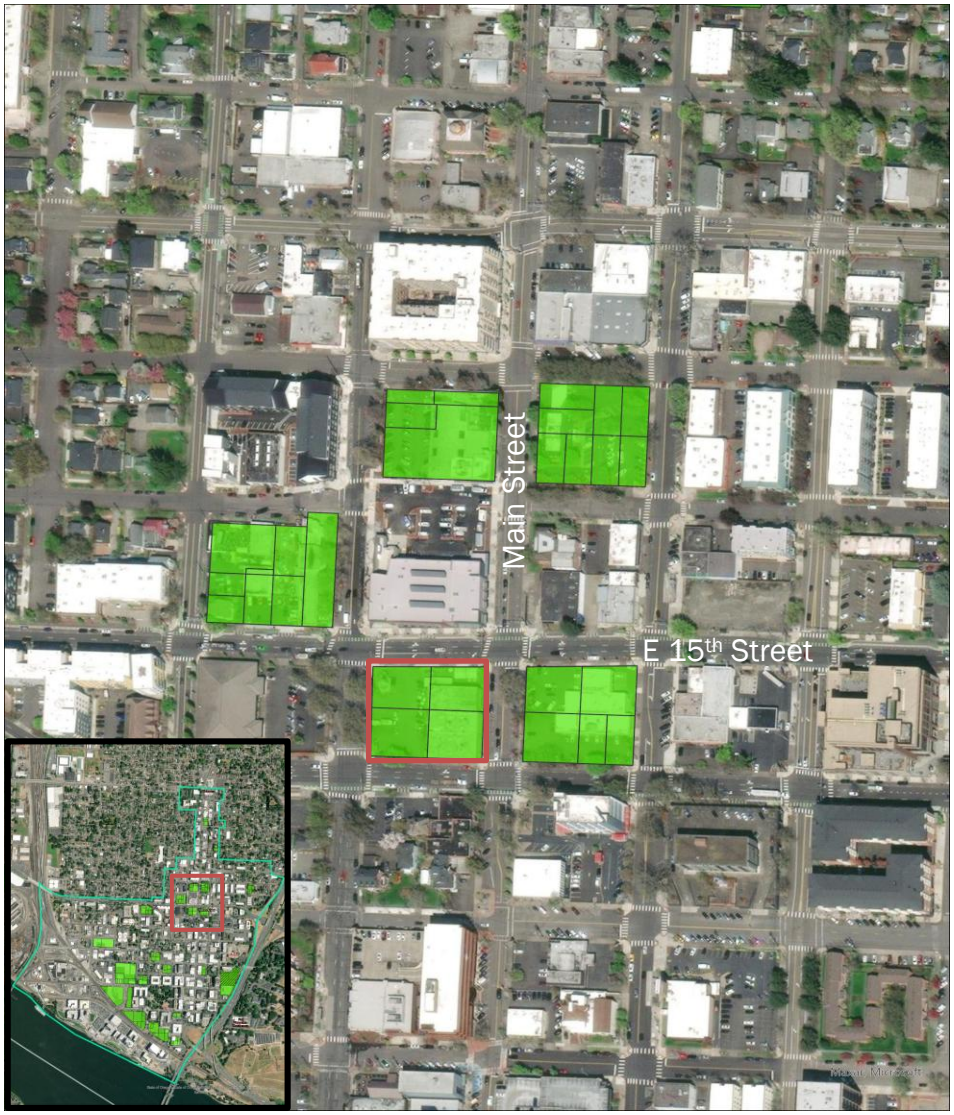
- Existing Structure Character
- Displacement Possibilities
- Located on high-traffic street

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 121 Units
  - High Density: 188 Units

Catalytic Potential

Large development site in concentration of future development potential. Single-owner. Centrally located and can act as the transition between Main Street Neighborhood and Uptown with unique opportunity to catalyze development in between E. Mill Plain and E. 15th Street.





Strategic Parcel #9

Main and E Mill Plain Boulevard

Description

- 5 parcels
- 0.90 Acres
- Address: 5524 E Mill Plain Boulevard

Current Uses

- North Parcels: Auto Repair Shop
- South Parcels: Office Space

Opportunities

- Proximity to Underutilized Parcels
- Located Near Amenities
- Comparable Apartment Developments Nearby

Challenges

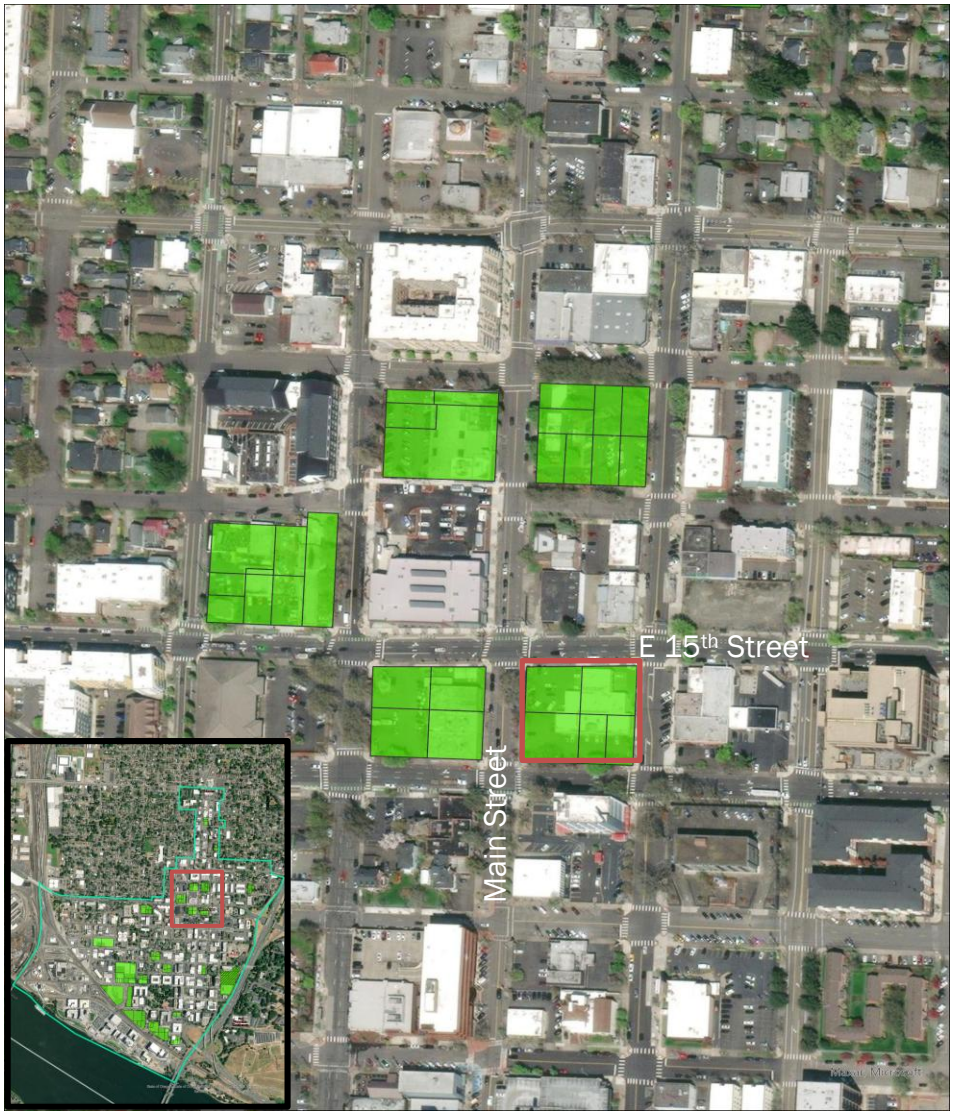
- Displacement Possibilities
- Located on high-traffic street
- Environmental Concerns with Existing Auto Repair Shop

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 137 Units
  - High Density: 213 Units

Catalytic Potential

Large development site in concentration of future development potential. Centrally located and can act as the transition between Main Street Neighborhood and Uptown with unique opportunity to catalyze development in between E. Mill Plain and E. 15th Street.





Strategic Parcel #10

Jefferson and 11th Street

Description

- 2 parcels
- 2.2 Acres
- Address: 910 W 11th Street

Current Uses

- Storage Warehouse

Opportunities

- West Parcel Owned by County
- Large Development Area

Challenges

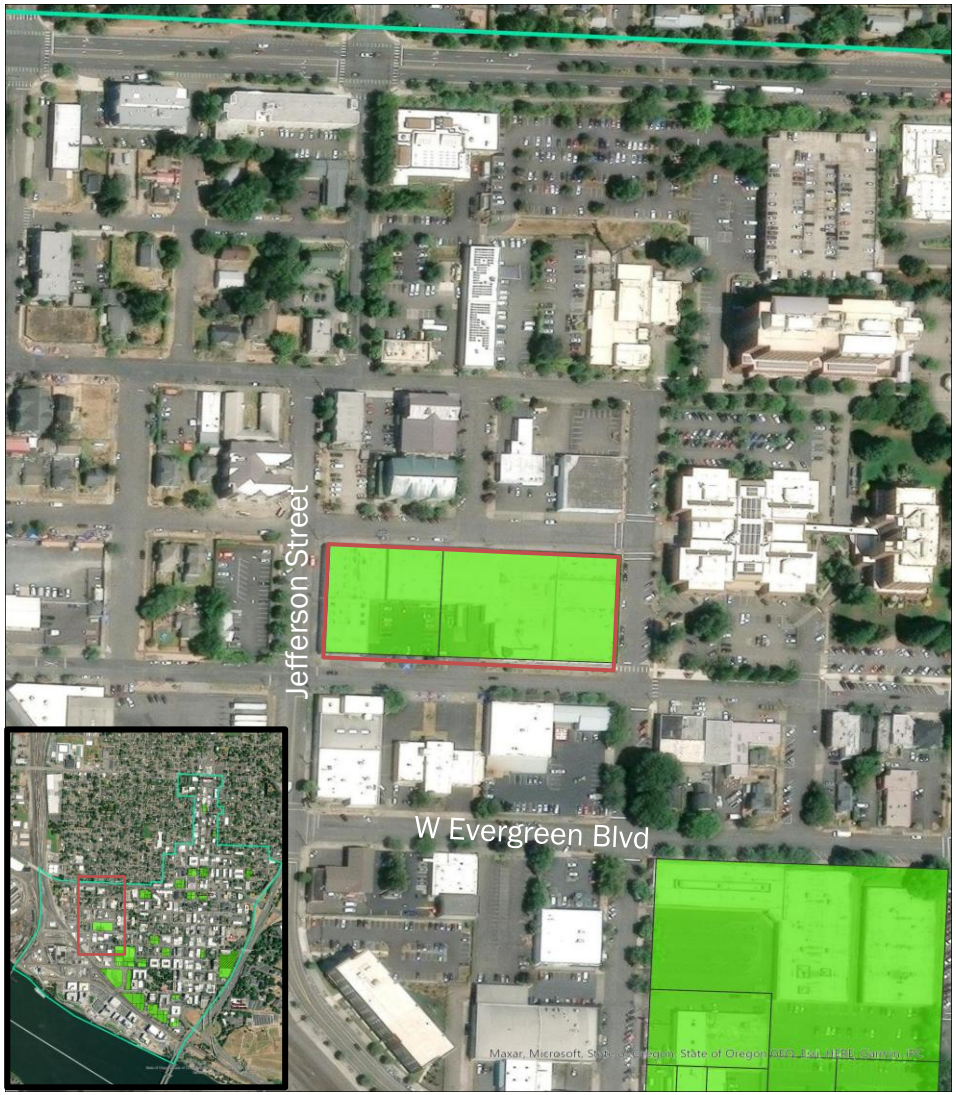
- Large Existing Structures
- Infrastructure Requirements

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 216 Units
  - High Density: 441 Units
- Development Capacity (Mixed Office/Residential):
  - Residential: 108-221 Units
  - Office Space: 115,000 Square Feet

Catalytic Potential

Large development site that could capture future residential or commercial demand in Downtown. Development of site could catalyze additional development projects in the County Center subarea while still capitalizing on proximity to Downtown amenities.





Strategic Parcel #11

Daniels and Evergreen Blvd

Description

- 5 Parcels
- 0.96 Acres
- Address: 400 W Evergreen Blvd

Current Uses

- Vacant
- Temporary Homeless Pod Shelter Site

Opportunities

- Single-Owner
- No Permanent Structures
- Proximity to Esther Short Park

Challenges

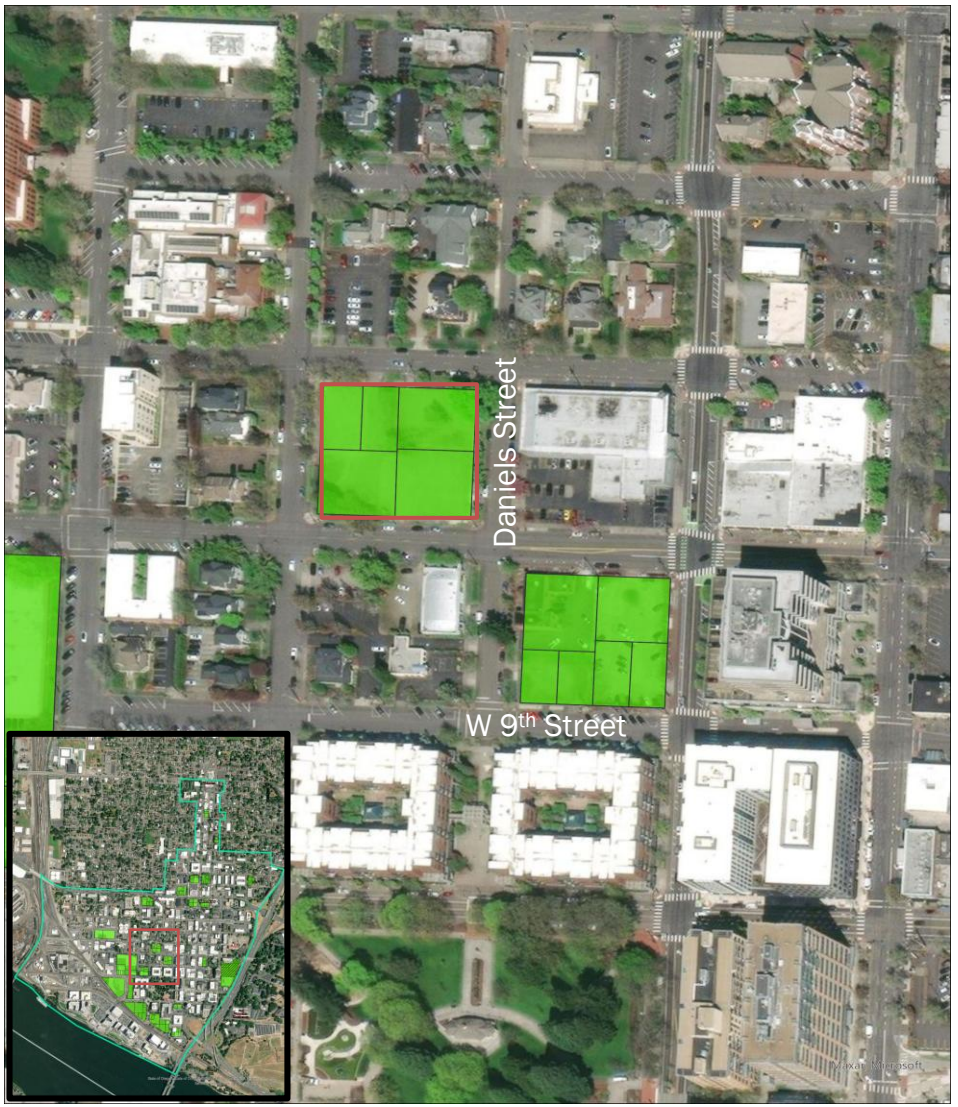
- Displacing current use
- Need to improve connectivity to downtown amenities (i.e., park, retail nodes, etc.)

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 147 Units
  - High Density: 228 Units

Catalytic Potential

Development would capitalize on proximity to Esther Short Park. Opportunity to catalyze development of adjacent underutilized sites and transition between development surrounding Esther Short Park and additional development potential to the north of the park. Potential to pair with infrastructure upgrades needed to further catalyze development north of Esther Short Park





Strategic Parcel #12

Daniels and 9th Street

Description

- 6 parcels
- 0.92 Acres
- Address: 310 W 9th Street

Current Uses

- Northeast Parcel: Office Leasing Class B
- Paid and Adjoining Parking

Opportunities

- Small Existing Structure Footprint
- Proximity to Esther Short Park
- Continuation of Esther Short Pedestrian Walkway

Challenges

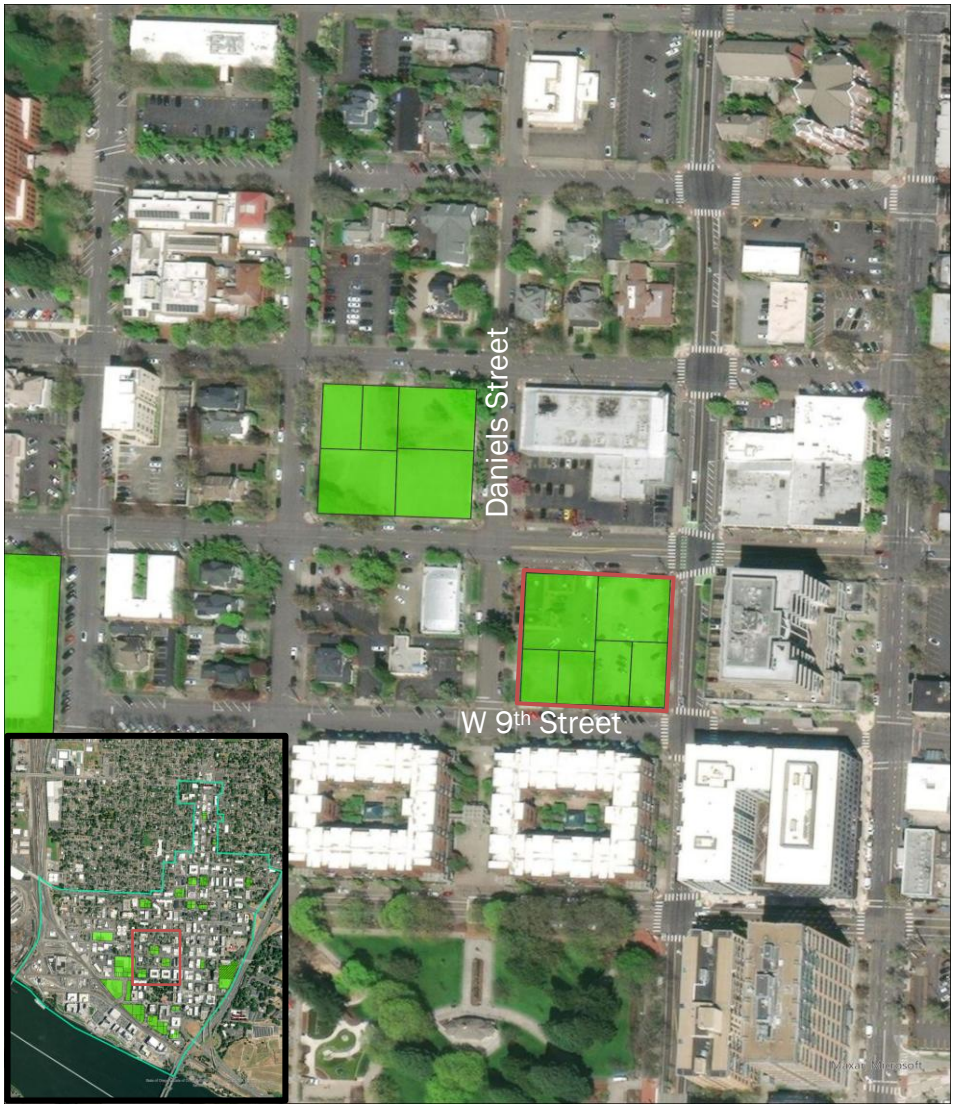
- Multiple Owners
- Existing building designated Historical by Clark County

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 140 Units
  - High Density: 218 Units

Catalytic Potential

Development would capitalize on proximity to Esther Short Park. Opportunity to catalyze development of adjacent underutilized sites and transition between development surrounding Esther Short Park and additional development potential to the north of the park. Potential to pair with infrastructure upgrades needed to further catalyze development north of Esther Short Park





Strategic Parcel #13

Evergreen and Broadway

Description

- 2 parcels
- 0.46 Acres
- Address: Evergreen and Broadway

Current Uses

- Paid Parking Lot

Opportunities

- City-Owned
- No Existing Structures

Challenges

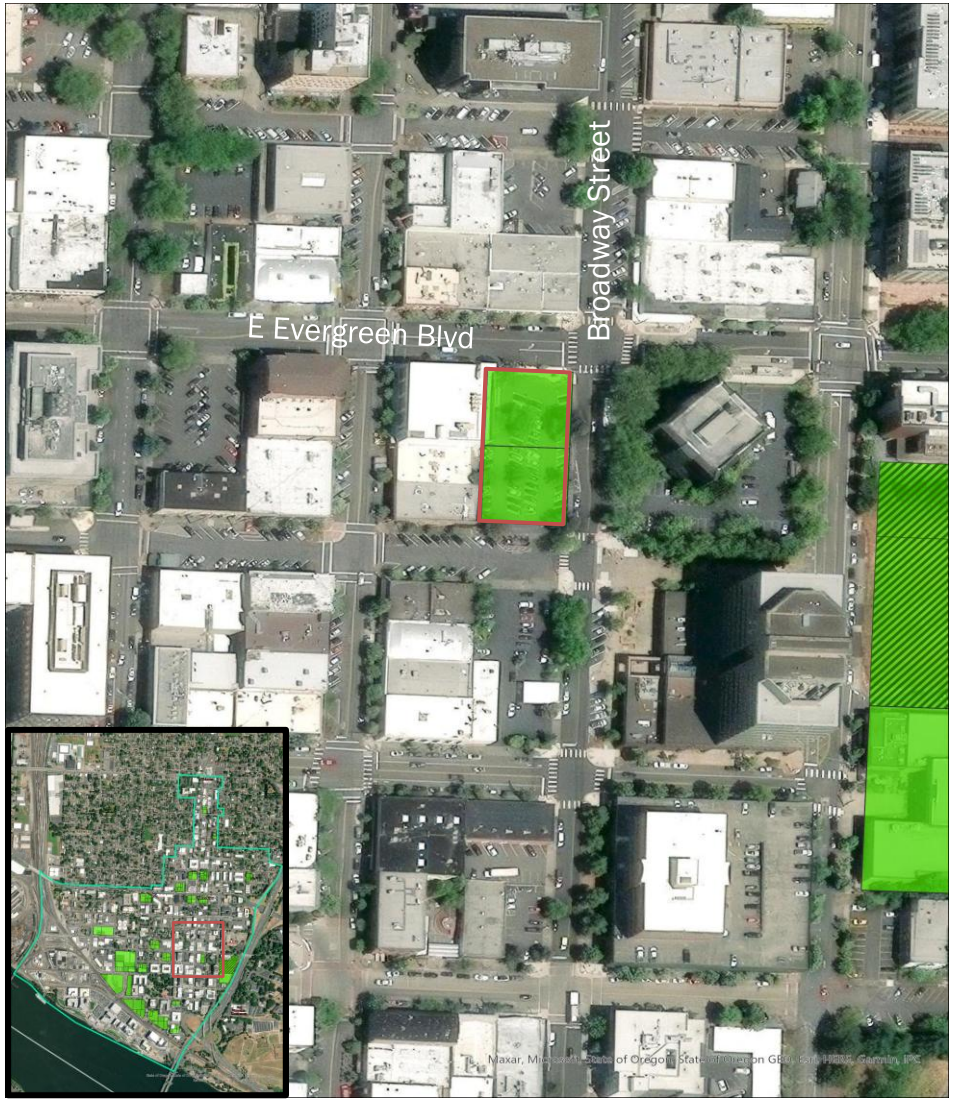
- Replacement Parking

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 70 Units
  - High Density: 130 Units

Catalytic Potential

Development would capitalize on proximity to future transit node and planned development of site to the south of the Library. Given the site is City-owned, development could prove opportunity for half-block sites within Downtown, which could catalyze redevelopment of existing nearby surface parking lots.





Strategic Parcel #14

Library Square and Regal Theater

Description

- 1 parcel
- 1.60 Acres
- Address: C street and 8th Street

Current Uses

- Regal Theater with Small Ground-Floor Retail

Opportunities

- Planned Transit Node
- Neighboring City-Owned Parcel with Development Potential

Challenges

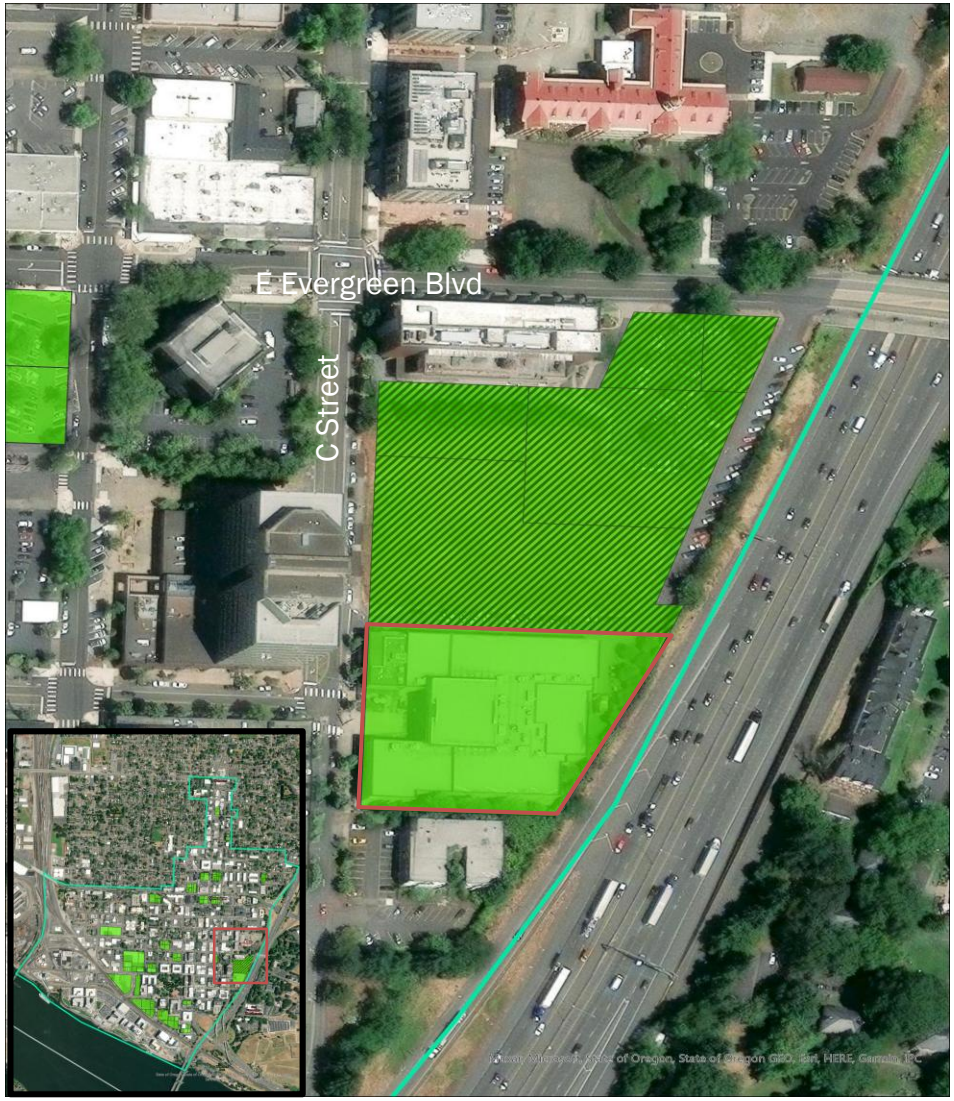
- Existing Movie Theater
- Displacement of Restaurant (Nom Nom)
- Coordination with future development to the north

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 121 Units
  - High Density: 168 Units

Catalytic Potential

Development would capitalize on proximity to future transit node and planned development of the City-owned site immediately to the north. Development on this site could leverage existing surplus of off-street parking garages through shared parking agreements and catalyze future development to incorporate shared parking agreements into their development plan.





Strategic Parcel #15

Harney and 8th Street

Description

- 7 parcels
- 5.31 Acres
- Address: Harney and 8th Street

Current Uses

- Light Manufacturing
- Office Leasing Class B
- Surface Parking

Opportunities

- Largest Developable Area in Downtown
- Proximity to Recent Development and Downtown Amenities

Challenges

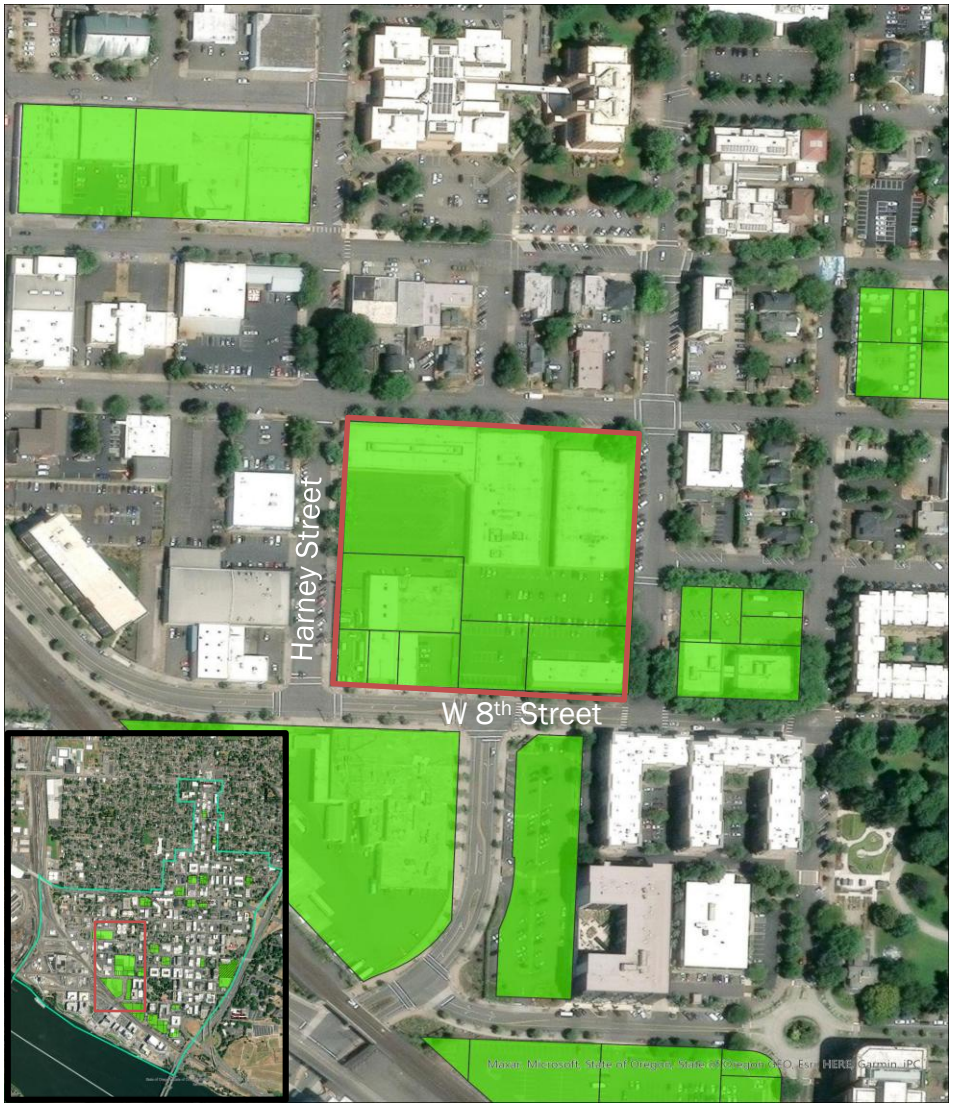
- Infrastructure Upgrades
- Required Demolition
- Multiple Parcel Owners

Yield Capacity

- Residential Unit Capacity (All Residential)
  - Medium Density: 520 Units
  - High Density: 1,062 Units
- Mixed Use Capacity (25% Office/75% Residential):
  - Residential: 390-797 Units
  - Office Space: 140,000 Square Feet

Catalytic Potential

As the largest contiguous development site in Downtown Vancouver, development of this site could capture a large portion of future demand, including residential and non-residential uses. Due to the site size and multiple parcel owners, the City can catalyze development by coordinating with the existing owners. Development on this site would further catalyze development of the underutilized parcels in the northwest of Downtown Vancouver.







Strategic Parcel #16

500 W 8th Street

Description

- 5 parcels
- 0.92 Acres
- Address: 500 W 8th Street

Current Uses

- County Office Space and Parking

Opportunities

- Underutilized Structures
- Owned by Clark County
- Proximity to Esther Short Park

Challenges

- Existing Office Use

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 140 Units
  - High Density: 218 Units

Catalytic Potential

This County-owned site serves as an opportunity for the City to initiate conversations with the County over future development opportunities on County land. Located at the corner of Esther Short park, and adjacent to other high-density development, this site has the opportunity to leverage proximity to Downtown amenities to further densify development in the core Downtown area. Development on this site could catalyze additional City-County development opportunities while also catalyzing additional development to the north of Esther Short park.





Strategic Parcel #17

701 W 8th Street

Description

- 1 parcel
- 4.81 Acres
- Address: 701 W 8th Street

Current Uses

- Light Industrial and Office
- The Columbian Main Office

Opportunities

- Previous Partnership with Owner
- Large Development Area
- Proximity to Waterfront Gateway and Waterfront Area

Challenges

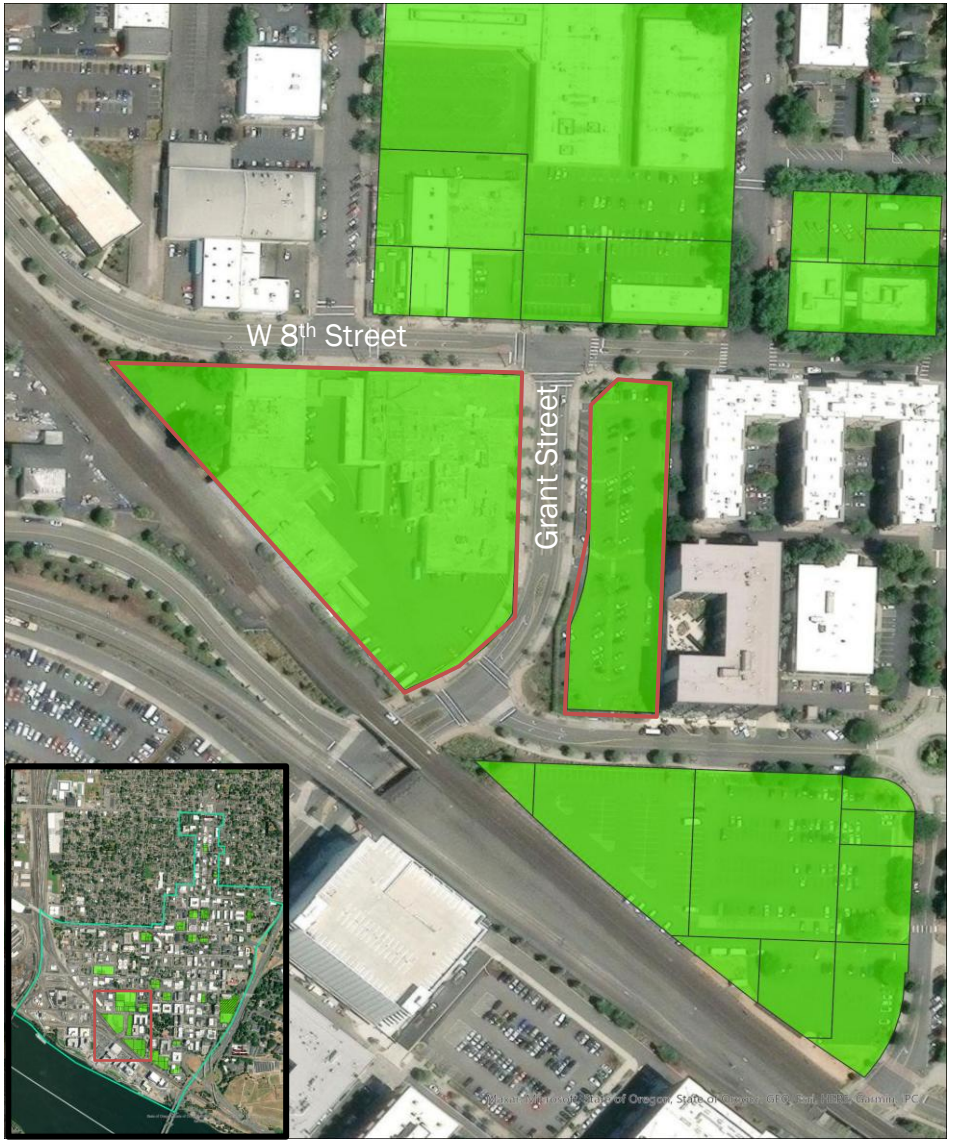
- Necessary Infrastructure Upgrades
- Narrow Eastern Parcel
- Displacement of Current Business

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 653 Units
  - High Density: 717 Units

Catalytic Potential

As one of the largest parcels in Downtown, this site would leverage the proximity to Vancouver's waterfront area, and the future Waterfront Gateway. Similar to other sites, development on this site would catalyze a second wave of development centered around Esther Short park. In addition, development on this site would catalyze development to the northwest of Downtown which has a significant amount of underutilized sites.





Strategic Parcel #18

Washington and 6th Steet

Description

- 2 parcels
- 0.46 Acres
- Address: 209 W 6th Street and 514 Washington Street

Current Uses

- Framing Store
- Plaid Pantry
- Salon

Opportunities

- Proximity to Esther Short Park
- Narrow Site

Challenges

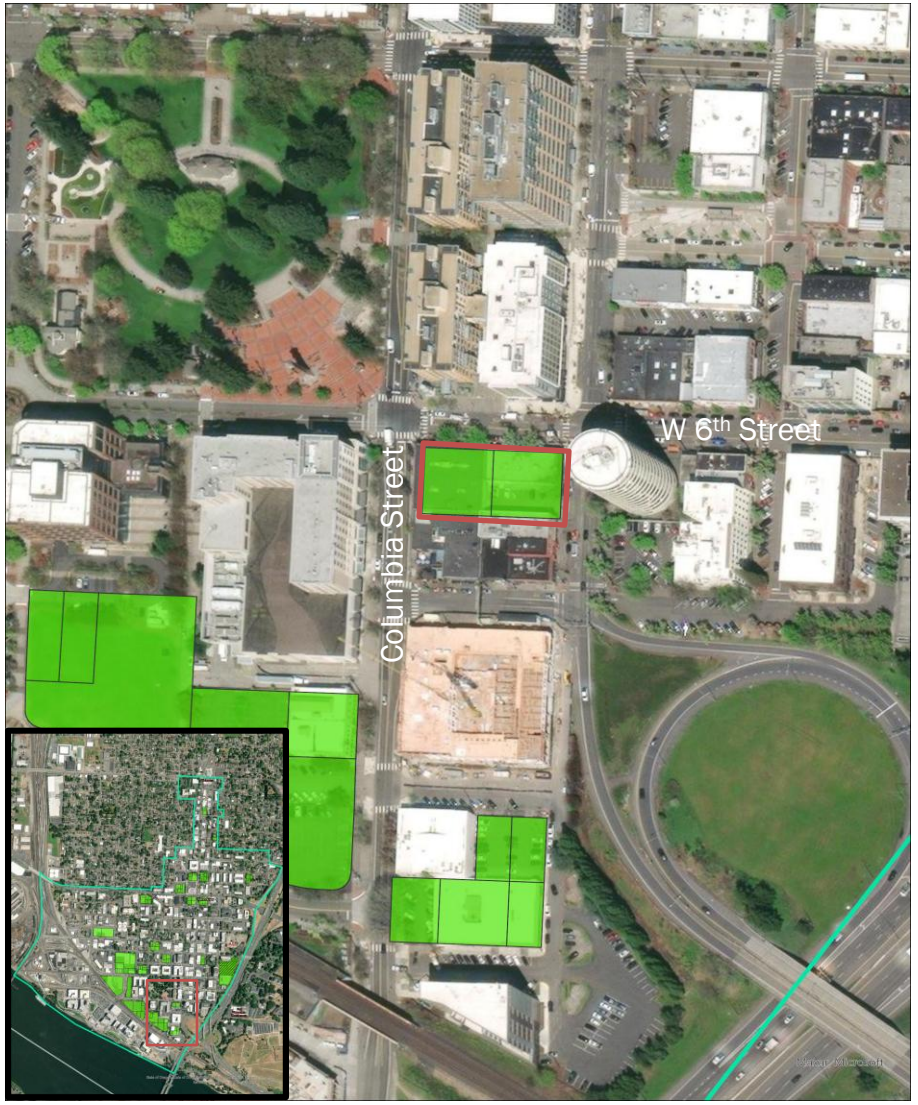
- Existing Structure Character
- Business Displacement

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 71Units
  - High Density: 131 Units

Catalytic Potential

Underutilized site with close proximity to Downtown amenities. Development on this site could catalyze additional redevelopment of sites with existing businesses and serve as an opportunity to strategically relocate existing businesses in order to facilitate redevelopment efforts.





Strategic Parcel #19

Waterfront Gateway

Description

- 17 parcels
- 7.34 Acres
- Address: Esther Street and Phil Arnold Way

Current Uses

- Parking Lots and Vacant Land

Current Proposals

- Affordable Housing, Market-Rate Housing, Plaza, and Convention Center Extension

Opportunities

- Large Developable Area
- City-Owned
- Close Proximity to Waterfront and Esther Short Park

Challenges

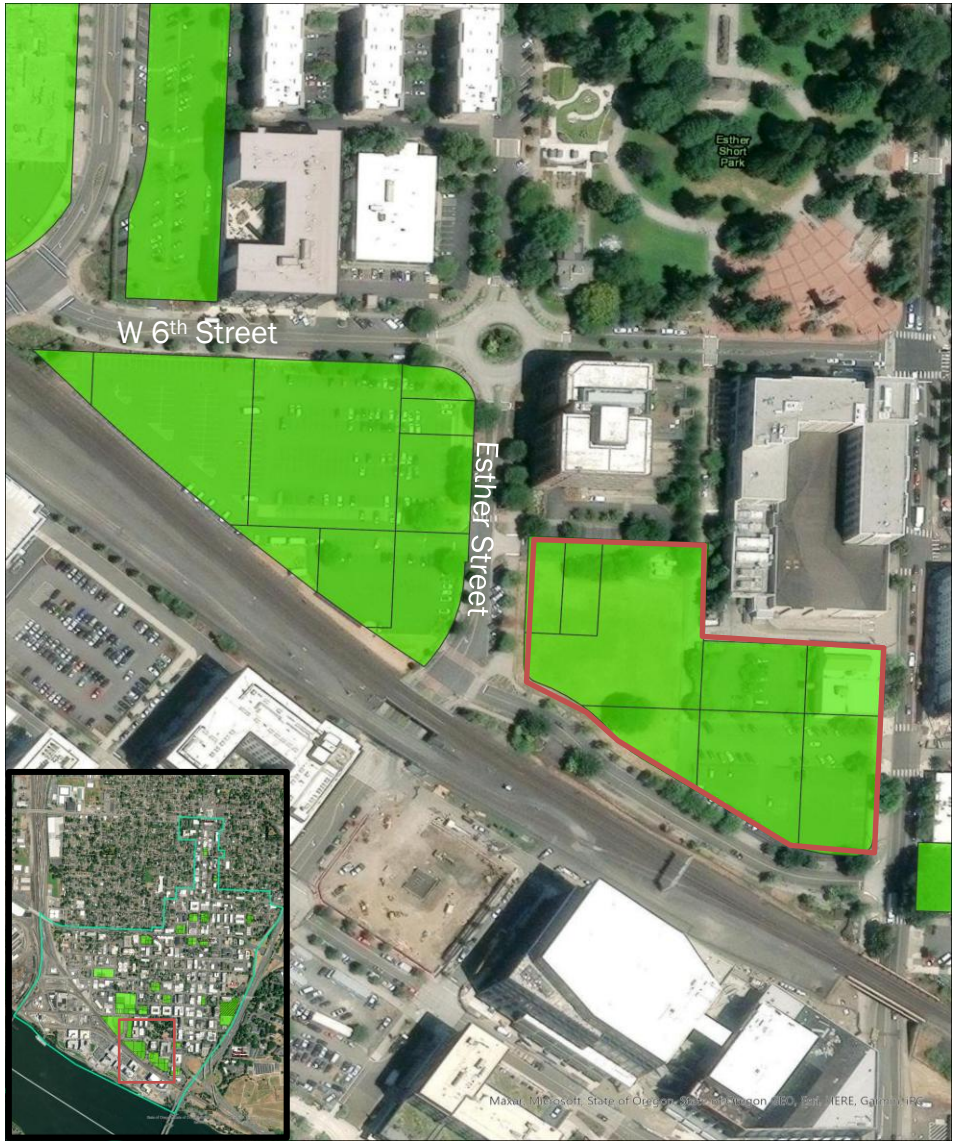
- Balancing Financial Feasibility and Community Needs

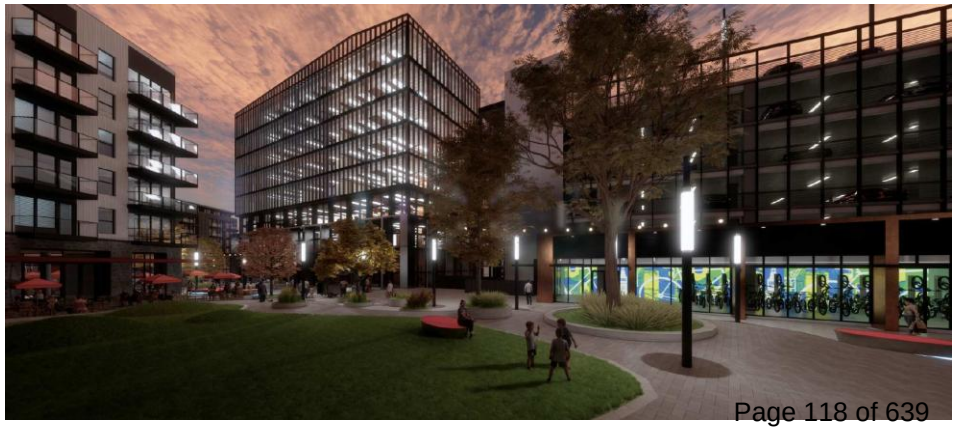
Yield Capacity

- Residential Unit Capacity (All Residential)
    - Medium Density: 720 Units
    - High Density: 1,469 Units
- Mixed-Use Development Capacity (20% Office/80% Residential):
    - Residential: 576-1,176 Units
    - Office Space: 150,000 Square Feet

Catalytic Potential

Bound by two connections between the Vancouver Waterfront and the remainder of Downtown Vancouver, development of this site will facilitate improved connectivity between the two areas. Development on these sites will also catalyze development on other underutilized buildings along the railroad tracks and throughout Downtown. Given the property is City-owned, the City could also explore supporting innovative housing solutions to further support innovative approaches to housing development.





Strategic Parcel #20

Columbia and 3rd Street

Description

- 5 Parcels
- 0.74 Acres
- Address: 210 W 3rd Street

Current Uses

- Office Leasing Class B
- Adjoining Building Parking

Opportunities

- Proximity to Waterfront
- Proximity to Recent Multifamily Development

Challenges

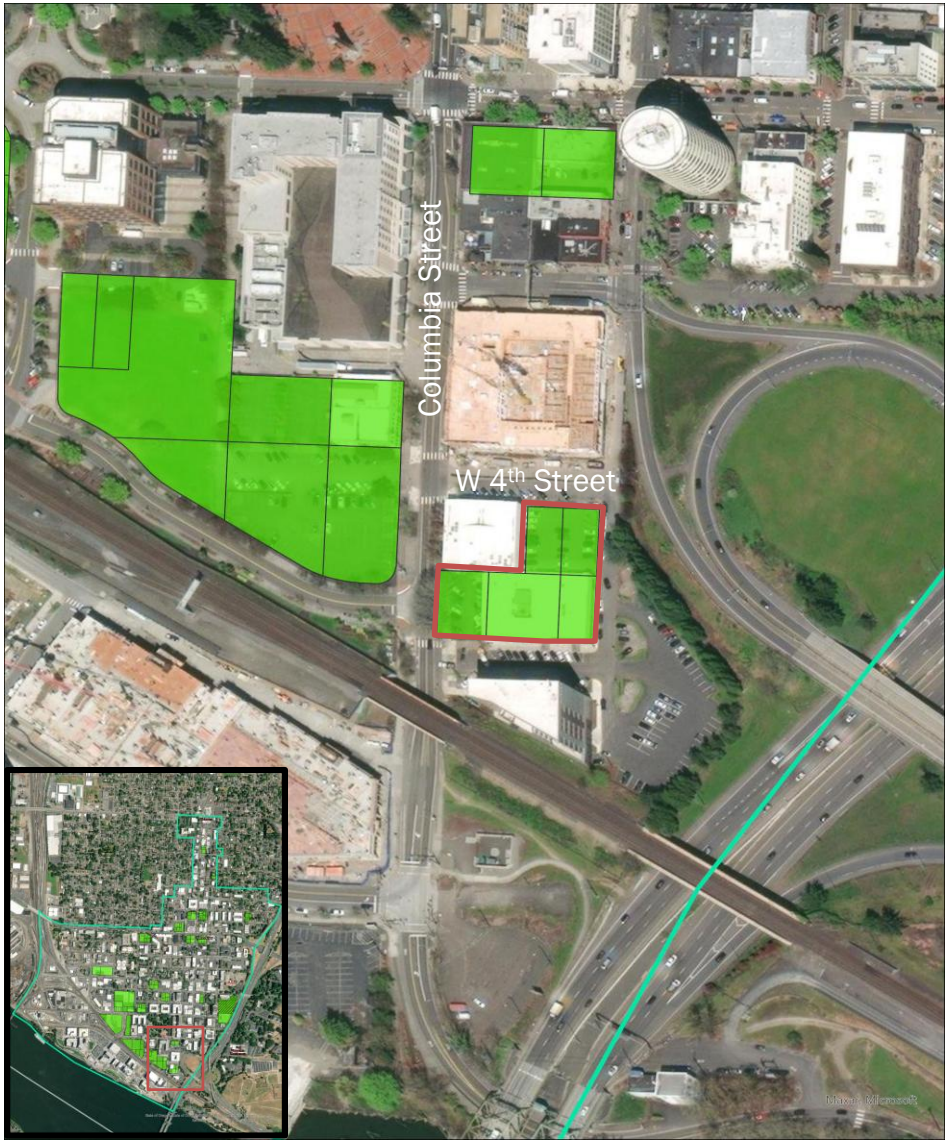
- Existing Structures
- Neighboring Historical Building
- Business Displacement

Yield Capacity

- Residential Unit Capacity:
  - Medium Density: 112 Units
  - High Density: 175 Units

Catalytic Potential

Development on this site would leverage the waterfront development and potential future waterfront transit node to further densify the connection between Waterfront and the rest of Downtown. Similar to other smaller sites, development of this site can catalyze redevelopment of smaller sites throughout Downtown, which represent a significant portion of development potential.





STRATEGIES AND RECOMMENDATIONS

The following section identifies specific strategies and recommendations for the City to support redevelopment efforts in the Downtown Vancouver area. The recommendations are broken down into five categories, including: (1) Land Use Policies, (2) City Process, (3) Financial Incentives, (4) Direct and Indirect City Investment, and (5) Methods for Raising City Capital. For each recommendation, this section summarizes the general strategy, and then discusses the application of that strategy specifically within Downtown Vancouver. While all of these potential strategies are intended to support redevelopment efforts in Downtown, the section concludes by identifying the potential near-term strategies that will be most impactful, given current market and economic conditions. In addition, Table 40 at the end of this section summarizes each recommendation and ranks the potential impact on redevelopment and the policy implementation time horizon.

Local Land Use Policies

The City of Vancouver has authority over what can be built on sites throughout the City. Through the ongoing comprehensive planning process, the City should seek to unlock development potential in Downtown by reducing any major land use impediments that negatively impact project feasibility. As noted in the Real Estate Market Conditions section above, adding costs to a development project through land use policy either results in infeasible projects or projects that must increase rents to a level that is unaffordable relative to the existing inventory of units in Downtown and the City of Vancouver.

This section highlights numerous policies that will be addressed as part of the ongoing Comprehensive Plan Update. Currently, the land use constraints within Downtown are fairly limited, with only minor requirements on future development. However, this section aims to highlight the importance of each land use policy to ensure the City understands how each factors into the feasibility of future development within Downtown.

Density and Height Limits

Density and height limits restrict the potential size of a future development project. As noted above, Downtown Vancouver does not have minimum or maximum density requirements, but does have maximum height restrictions that are fairly reasonable relative to typical development heights within the general Downtown Vancouver area. In the bulk of the areas with future redevelopment potential, maximum building heights typically allow buildings of at least 100 feet. The majority of the Uptown Redevelopment Opportunity Area, however, has a maximum height of 50 to 75 feet which would restrict certain high-density development. In addition to the City height limits, due to the proximity of the Pearson Field Airport and the flight path that goes over a strip of Downtown, the Federal Air Administration (FAA) must issue a determination of no hazard to air navigation on development projects in Downtown Vancouver. This process adds uncertainty and risk to future development in Downtown.

Implementation in Downtown Vancouver

- Explore height increases to support new development, particularly in the Uptown Redevelopment Opportunity area.
- Collaborate with FAA to pre-approve height limits for future development throughout Downtown. This collaboration shall incorporate the impact of the future Interstate Bridge Replacement structure, which is likely to exceed the current bridge height and may unlock additional allowed height of Downtown buildings.

Parking Requirements

Similar to height and density requirements, the City does not have stringent parking requirements for multifamily development within Downtown. For traditional multifamily development, the City requires 0.75 parking spaces per unit, which is likely comparable to or below the current provision of parking within multifamily developments. However, as alternative forms of transportation arise, developments may prefer to deliver fewer parking spaces in new development projects. While the City code does allow a reduction in the minimum parking spaces requirement provided the development includes other alternative transportation features, this requirement may have negative impacts on project feasibility in the future.

Implementation in Downtown Vancouver

- Consider revisions to parking requirements, including potential options:
  - Eliminate parking minimums to allow flexibility based on location and market demand.
  - Implement parking maximums that align with expected market demand. Ensure any parking maximums do not negatively impact project feasibility by restricting the available parking spaces that align with tenant expectations and demand.
- Facilitate shared parking agreements with existing underutilized off-street parking garages.
  - Require lower on-site parking ratios if projects enter into shared parking agreements with public or private parking garages.

Ground Floor Retail Requirements

Due to changes in consumer behavior, overall demand for brick-and-mortar retail and commercial space has decreased over the past decade. As a result, requiring ground floor retail within mixed-use buildings can have negative impacts on project economics in locations where retail demand is weak. The City may wish to require active uses along certain corridors or key nodes, but should consider more flexible requirements outside of key commercial areas.

Implementation in Downtown Vancouver

- Concentrate required ground floor retail to specific nodes and corridors, including:
    - Fronting Esther Short Park
    - Main Street Corridor
    - Other key pedestrian nodes and corridors
    - Future City plans and investments (e.g., IBR Transit pedestrian connectivity, downtown bike paths, Waterfront Gateway, etc.)
- Consider allowing greater flexibility in ground floor uses outside of key retail nodes, including:
    - Ground floor residential
    - Lobbies and amenities
    - Bicycle parking rooms

Building Design/Façade Requirements

While high-quality building designs are desirable from an urban fabric perspective, these design components can result in additional development costs, leading to further feasibility challenges. To spur development in Downtown, the City could consider relaxing any major design or façade requirements or guidelines within Downtown, within reason. This would lead to a small reduction in overall development costs that could help incentivize development in the near term.

Implementation in Downtown Vancouver

- Consider relaxing any major design or façade requirements or guidelines.
- Consider relaxing setback or step back requirements that limit development potential.

Other Requirements

Many other local requirements can add costs to the delivery of new projects. In Downtown, this may include items like bike parking requirements and green building standards. While critical to achieving the City's goals and promoting public good, passing these costs off to the development community often results in higher development costs. Given the current challenges in economic feasibility, increasing the cost of development through local requirements will negatively impact development in the Downtown area. Similar to requirements listed above, the City could consider revising or temporarily relaxing certain standards that create development feasibility challenges in order to support development within Downtown.

Implementation in Downtown Vancouver

- Review existing and future land use requirements that limit development potential, add project costs, or lengthen review timelines.

City Process

In addition to direct land use authority, the City of Vancouver can also support development by having an approval process that is transparent and does not add complexity and costs to new development projects.

Downtown Planned Action Ordinance or Adopt State Environmental Exemption

A Planned Action Ordinance would facilitate future development efforts by conducting an environmental analysis associated with future growth in the whole Downtown area. Project-level State Environmental Policy Act (SEPA) analyses add costs and risk to any development project, leading to more challenging economic feasibility. By conducting the analysis for all of Downtown, this area-wide assessment would facilitate a more streamlined environmental analysis for individual development projects, leading to improved economics. The City approved a Planned Action Ordinance for the Downtown area as part of the prior Vancouver Central City Vision (VCCV) plan in 2007, which is set to expire in 2027. While this ordinance can help facilitate additional development in the near-term, the City would benefit from creating a new Planned Action Ordinance that will assess the potential environmental impacts and associated mitigations for future Downtown growth. Alternatively, the City could explore adopting exemptions from SEPA for targeted redevelopment types specifically within Downtown.

Implementation in Downtown Vancouver

- Conduct a Planned Action Ordinance that includes SEPA review for future growth envisioned in Downtown Vancouver.

Downtown Project Ombudsman/Support Staff

Another strategy to support Downtown projects would be to assign an internal city staff person to help navigate a project through the entire approval process. This "ombudsman" program would help shorten the approval process and ensure that someone within City Hall is helping progress the project through approvals, rather than putting the burden fully on the private sector developer. BAE understands the City currently assigns staff to help support public-private partnership projects (e.g., Waterfront Gateway) where the City is an active partner in the project, and this type of support could be further offered to private developments that meet certain city goals.

Implementation in Downtown Vancouver

- Consider expanding the current City real estate project management program to private sector development in Downtown.
    - This could come from within existing City departments; or
    - The Central City Redevelopment Authority (CCRA) could consider leveraging existing and future resources to hire staff specifically oriented toward supporting the approval process of projects in Downtown Vancouver.

Facilitate Shared Parking Agreements

One of the major challenges with urban development is the space required for automotive parking. Typically, individual projects must provide adequate parking on-site to meet City requirements and market demand. While larger multifamily developments are able to accommodate these parking requirements through subterranean or podium parking garages, smaller development sites are often challenged to deliver high-density projects with sufficient parking access due to circulation inefficiencies on the small site. The City can potentially support these types of projects by facilitating shared parking agreements with existing underutilized off-street parking lots and garages within Downtown. A recent study of parking utilization in the Downtown Vancouver study area found that no more than 54 percent of all off-street parking spaces in Downtown are utilized throughout a normal weekday or weekend day.[1] This indicates that of the 7,687 off-street parking spaces in downtown, roughly 3,500 spaces are generally available. This identifies an opportunity for future development to leverage existing underutilized off-street parking garages through shared parking agreements, rather than accommodating all required parking on-site. In addition to working with existing off-street parking garages, the City may also consider providing a "district-level" parking garage that can more efficiently provide adequate parking for multiple new development projects. This is particularly attractive in Downtown Vancouver given the way Tax Increment Financing is structured in Washington State and the presence of the Downtown Parking Fund, which reserves parking revenue generated in Downtown for future parking provision.

Implementation in Downtown Vancouver

- Collaborate with owners of underutilized off-street parking garages to identify opportunities for shared parking agreements with new residential development projects.
- Consider a City-funded "district" parking garage to support the feasibility of high-density development in areas with a significant concentration of vacant and underutilized sites.
    - Between E. 15th Street and E. McLoughlin Blvd.
    - North of Esther Short Park
    - Uptown Neighborhood
- Invest in pedestrian infrastructure that connects shared parking facilities to future residential developments.

Facilitate Business Relocation to Support Redevelopment

Part of the challenge of redevelopment efforts is the potential displacement of existing businesses on underutilized sites. Private-sector developers often assist with business relocation to support their redevelopment efforts. The City of Vancouver could consider collaborating with existing businesses and business groups to support relocation of

[1] Downtown Access, Mobility, and Parking Plan, Existing Conditions Report. Walker Consultants. Published August 27, 2024. Available at: https://www.beheardvancouver.org/downtownparking

businesses located in spaces on underutilized sites throughout Downtown. While Downtown does not currently have a significant amount of vacant space for re-tenanting, any new development project will likely provide some portion of ground-floor retail space, which could present an opportunity for the City to assist with business relocation on sites identified in the above analysis.

Implementation in Downtown Vancouver

- Conduct outreach to businesses operating on underutilized sites.
- Identify opportunities to pair existing tenants with vacant retail spaces or retail spaces in new development projects.

Collaborate to Support Redevelopment of Underutilized Private Sites

The City can act as a liaison to supporting redevelopment of private sites throughout Downtown. Several underutilized sites are under the ownership of real estate developers and investors, while others are owned by longer-term owners who may not be fully aware of the opportunity to redevelop their site. The City should collaborate with major owners of underutilized sites to identify potential redevelopment plans and discuss any opportunities for City support in reaching the redevelopment goals.

Implementation in Downtown Vancouver

- Conduct outreach to owners of underutilized sites identified in this study.
- Align City investments and support with long-term redevelopment goals of private site owners.

Coordinated Infrastructure Improvements

As the City prioritizes future infrastructure improvements, these investments should be coordinated with future development projects or targeted in areas with a significant amount of future development capacity in order to spur redevelopment of these sites.

Implementation in Downtown Vancouver

- Conduct upfront outreach to project applicants to identify potential City infrastructure investments that support new development.
- Identify infrastructure investments that can catalyze development in areas with a concentration of vacant and underutilized sites.
    - Daniels Street bike/pedestrian infrastructure
    - 11th Street bike/pedestrian infrastructure
    - 9th Street bike/pedestrian infrastructure tied to future IBR transit node

Permit Streamlining

As noted in the Real Estate Market Conditions section, long and complex approval processes lead to increased development costs and risks for new development projects. To support the feasibility of redevelopment projects in Downtown, the City could consider streamlining permits for projects that meet specific criteria. Similar to other efforts, this streamlining will benefit feasibility in multiple ways, including reduced financing and holding costs, and it will

also signal to the development community that Vancouver is committed to supporting projects aligned with its goals, which can attract investment to the City and even reduce required returns through a perception of reduced project risk. It should be noted, however, that the City of Vancouver already has a fairly efficient approval process relative to nearby jurisdictions, but additional streamlining can further improve project feasibility and attract investment to the area.

Implementation in Downtown Vancouver

- Ensure cooperation with other departments to maintain efficient permitting process
- Consider preapproved residential plans to reduce time spent in the permitting process

Support Innovative Housing Types and Tenures

Based on the financial feasibility challenges of traditional market-rate development, the City should support innovations to development, construction, and ownership structures. This could come in the form of broader support and investment in innovative housing types, or the City could choose to leverage a City-owned site to experiment with new housing typologies and ownership structures.

Implementation in Downtown Vancouver

- Support innovative development typologies and construction methods in future public-private partnerships, including:
  - Cross-Laminated Timber
  - Modular Housing
  - Prefabrication or panelized construction
  - District-level parking garage
- Support innovative housing tenures in future public-private partnerships, including:
  - Limited Equity Cooperatives
  - Community Land Trusts
  - Co-housing
  - Middle-Density Ownership Housing
- Collaborate with local academic institutions (i.e., Clark College, Portland State University, University of Portland, Portland Community College, etc.) to support innovative housing design competitions that explore opportunities for innovative development types and tenures in Downtown Vancouver.

Financial Incentives

While reducing local land use constraints and providing a clear and reasonable project approval process is a significant step in supporting redevelopment of Downtown sites, during more challenging economic conditions, projects may also require additional financial incentives to achieve financial feasibility.

Leverage City-Owned Land

Given land purchase and ongoing holding costs often account for a modest portion of the overall cost of new construction projects, one of the most impactful financial incentives a City can provide to support new development is offering City-owned sites at discounted rates to new development projects. Similar to the ongoing Waterfront Gateway project, the City can attract development teams to build new projects on City-owned land by entering into a public-private partnership. In this partnership, the City provides the land, either at fair market value or at a discounted rate, and the developer collaborates with the City to envision a new development project. While the Waterfront Gateway site is the largest City-owned site in Downtown, the City owns a variety of other sites that could present development opportunities. Several of these sites are included in the Strategic Sites assessment and will be included in a separate database of all parcels with redevelopment potential. The City should consider public-private partnership opportunities, or potential land swap opportunities to acquire other strategic parcels in Downtown, on any sites that are deemed surplus to the City's future needs.

Implementation in Downtown Vancouver

- Identify all City-owned land (provided in separate parcel database as part of this study) and identify what parcels are surplus to the City's long-term land need.
- Develop public land disposition strategy to identify suitable developments and when the City should seek developer partnerships.
- Major City-owned sites include:
    - Waterfront Gateway (has development agreement)
    - Library Square (~2.8-acre parcel south of Library at Evergreen and C Street)
    - Parcels behind Vancouver Convention Center
    - Half-Block Parking Lot at Broadway and Evergreen

Coordinate with Other Public and Non-Profit Landowners

In addition to City-owned land, several other public entities own underutilized land throughout Downtown Vancouver, including Clark County, Vancouver Housing Authority, the Federal Government, and religious institutions. The City should coordinate with these landowners to identify potential surplus property that may present opportunities for future development.

Implementation in Downtown Vancouver

- Identify all public- and non-profit-owned sites (provided in separate parcel database as part of this study) and identify opportunities to collaborate on methods to support future development.
- Major publicly-owned sites include:
    - 500 W. 8th Street (Full block northwest of Esther Short Park)
    - 812 W. 11th Street (Underutilized Industrial Building)
    - Surface parking lots surrounding Clark County District Court
    - W. 14th Street and Esther Street Parking Lot

City Fee Waivers/Deferrals

The City of Vancouver charges impact fees on new development projects to cover the project impact on transportation infrastructure, parks, and schools. While these fees support critical City services, the fees do increase the cost of delivering new development projects, worsening project financial feasibility. The City does currently offer fee waivers or deferrals for specific projects, including civic uses and low-income housing, but these fee waivers or deferrals could be offered to additional development projects that meet City goals.

Implementation in Downtown Vancouver

- Consider extending fee waivers or deferrals to other project types that align with City goals, potentially including:
    - High density development
    - Green buildings
    - Innovative housing typologies/tenures
    - Large sites that provide amenities on-site (i.e., open space, public art, etc.)

Property Tax Exemptions

The City currently offers a Multifamily Housing Tax Exemption (MFTE) Program that exempts new multifamily projects from property taxes for eight or 12 years if the project includes affordable housing on-site or pays an affordable housing fee. This exemption is intended to balance the financial impact of including affordable housing on-site or the fee payment but does not necessarily incentivize the market-rate component of the project. If the City wants to encourage more development in Downtown, the City could explore additional property tax exemptions beyond those offered to multifamily development with affordable housing. This could include supporting workforce housing projects that target higher income levels relative to the current MFTE program or extending the property tax exemption program to non-residential uses that meet certain city goals. The City should, however, seek to balance the desire for new development with the fiscal goals of supporting new development.

Implementation in Downtown Vancouver

- Consider extending property tax exemptions to additional developments that align with City goals, potentially including:
    - Green buildings
    - Deed-restricted workforce housing
    - Non-residential development

Construction Sales Tax Rebate/Deferral

During new development projects, sales and use taxes are charged on all materials, leading to a higher cost of construction relative to projects that are not subject to the same taxes. The City could consider a rebate or deferral of sales tax on construction projects that meet certain City goals. For reference, the State of Washington recently allowed local jurisdictions to waive sales taxes on office-to-residential conversion projects that reserve at least ten percent of the

new units for low-income residents. Depending on State legislation, the City could consider a similar policy for new development projects on underutilized land in Downtown that meet certain criteria.

Implementation in Downtown Vancouver

- Consider a construction sales tax rebate or deferral programs for projects that align with City goals, potentially including:
  - High density development
  - Green buildings
  - Innovative housing typologies/tenures
  - Office-to-residential conversion
  - Large sites that provide on-site amenities (i.e., open space, public art, etc.)

Direct and Indirect City Investments

In addition to providing financial incentives directly to developments, the City can also invest in supportive infrastructure and amenities that will support broader redevelopment efforts by increasing demand for residential units in Downtown and eliminating infrastructure capacity barriers.

Purchase Strategic Parcels

The City could consider approaching private land owners with the intent of acquiring strategic parcels throughout the City for future development. In order to purchase parcels, the City would likely be required to pay fair market value, but this investment could unlock future development that aligns with City goals.

Implementation in Downtown Vancouver

- Review Strategic Sites inventory presented above and engage with existing landowners
- Focus potential site acquisition on sites that have unique constraints to development or present unique catalytic potential, including:
  - Large sites
  - Sites with multiple owners
  - Sites with major infrastructure needs (i.e., Mega block at Evergreen and Franklin)
  - Sites near future infrastructure investments (i.e., IBR Transit Stations, bike/pedestrian infrastructure, open space, etc.)
  - Sites with significant nearby development capacity to act as catalyst site

Direct City Investment/Gap Funding to Development Projects

To fill a financial feasibility gap, the City could also consider providing direct financial assistance, or gap funding, to projects that align with City goals. Typically, financial contributions are offered to affordable housing developments, but the City could expand these

financial contributions and incentives to other types of development that support the City's redevelopment goals, including workforce housing or more naturally affordable housing and commercial types.

Implementation in Downtown Vancouver

- Consider expanding City financial contributions to projects that meet City goals.
- Identify future funding sources (discussed below).
- Identify potential financing mechanisms:
    - Direct Gap Funding
    - Low-interest rate loans
    - Residual Receipts Loans

City-Funded Shared Parking Infrastructure

Developing City-led shared parking infrastructure encourages dense development by reducing the need for developers to include parking on-site and increases unit potential within individual project sites. This translates to reduced costs for developers and may support the utilization of innovative construction types that are not feasible with on-site parking (i.e., mass timber, multifamily development on small lots, etc.) Given the City has the Downtown Parking Fund, which provides ongoing revenue to support parking provision in Downtown Vancouver, the City could leverage these funds to build parking that accommodates both visitors and resident needs.

Implementation in Downtown Vancouver

- Identify opportunities for City-funded shared parking structures to accommodate future residential parking demand. Potential areas of opportunity include:
    - Centrally Located
    - Proximity to significant future development potential
    - Ability to meet visitor and resident demand

Increase Access to Open Space

One critical element of City infrastructure that has attracted high-density development in Downtown is the provision of parks and open space. The most significant concentration of housing units in Downtown are centered around Esther Short Park. However, the northern portion of the downtown study area, primarily the Uptown Subarea, lacks sufficient access to high-quality open space. As such, the City should consider investing in open space in the Uptown neighborhood, as shown below in Figure 16 below. Investment in a new park would serve as an amenity that would increase demand for housing in the Uptown neighborhood and lead to improved project feasibility. Through the Strategic Sites assessment, BAE identified a potential park location between E. Mill Plain Boulevard and E. McLoughlin Boulevard that would catalyze high-density development of large development sites in the Uptown neighborhood. If this proposed area is unable to accommodate a park, BAE recommends the City identify other potential locations to invest in open space that will spur future housing development.

Implementation in Downtown Vancouver

- Identify areas with limited access to open space (i.e., Uptown neighborhood).
- Identify sites that could accommodate new park space, potentially including:
    - Area between E. Mill Plan Boulevard and E. McLoughlin Boulevard
    - Northwest portion of Downtown Vancouver

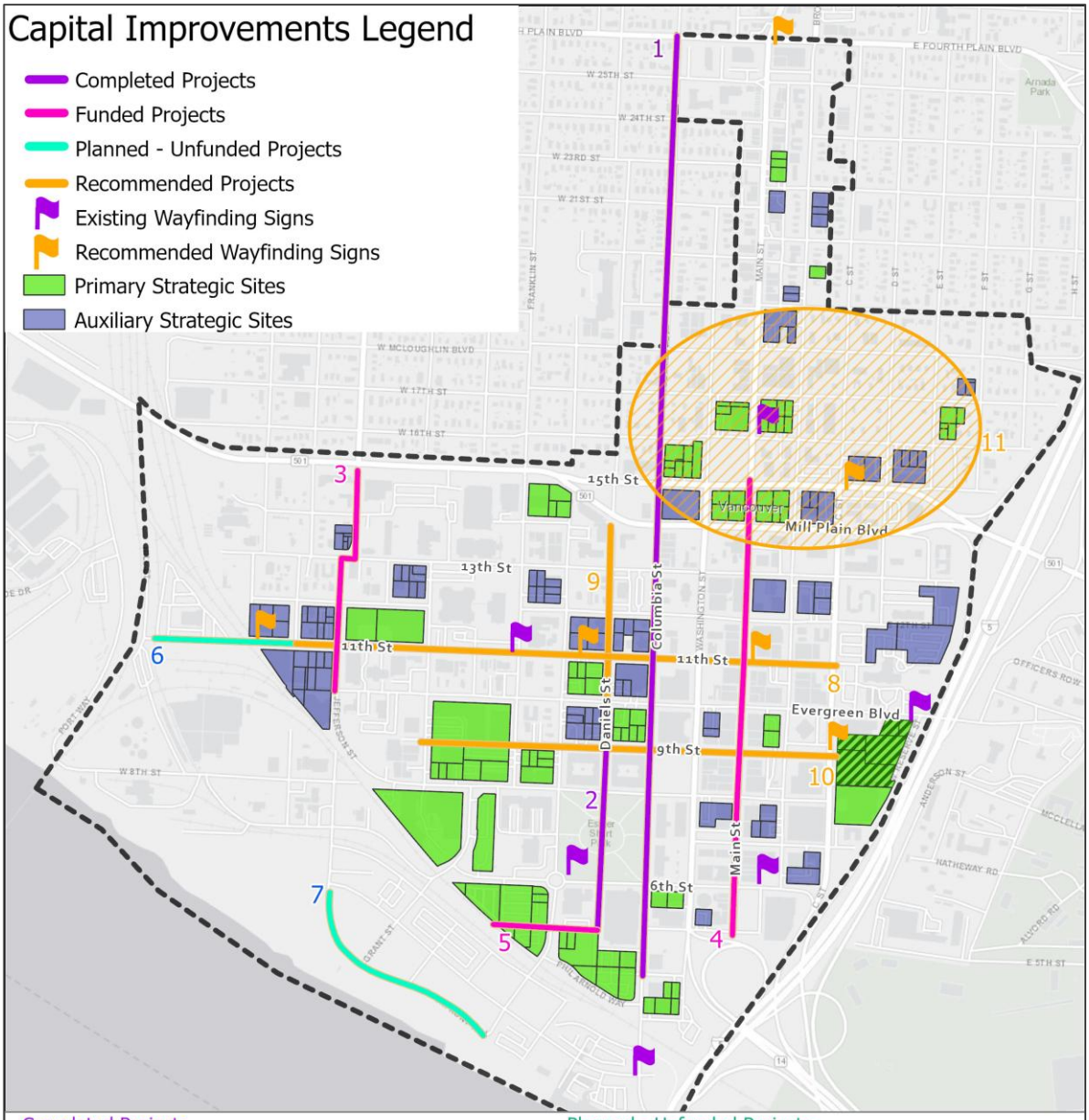
Invest in Bike and Pedestrian Infrastructure

Improving infrastructure to support alternative forms of transportation and improve pedestrian access to proximate amenities can lead to increased demand for residential units and a better Downtown living environment. As seen below in Figure 16 and Table 39, the City has recently invested in a range of infrastructure projects, including bike and pedestrian infrastructure along E. 15th Street and E. Mill Plain Boulevard, intersections along Columbia Street, and the ongoing Main Street Promise streetscape improvements. Continuing these types of capital investments to areas with a significant amount of future development capacity can catalyze development of underutilized sites. For example, to catalyze development of sites in the western portion of the Downtown area, the City should consider infrastructure upgrades along 11th Street. Not only does this street connect Downtown to the Amtrak station and the Western Industrial subarea, but it would serve as a primary method of connection for future residents and employees in the western portion of the study area. Similarly, smaller strategic investments can also stimulate redevelopment efforts. For example, there are a number of vacant or underutilized sites north of Esther Short Park, on the east and west of Daniels Street. Improving a stretch of Daniels Street that connects to the existing pedestrian-only path through the Heritage Place condominium project would improve access to Esther Short Park and could connect further to the Waterfront Gateway pedestrian path and to the Waterfront area.

Implementation in Downtown Vancouver

- Identify infrastructure investments needed to support new development, including those included in the City's Capital Improvement Plan. Potential infrastructure investments include:
    - 11th Street bike/pedestrian infrastructure
    - Daniels bike/pedestrian infrastructure
    - 9th Street bike/pedestrian infrastructure following IBR Transit Station

Figure 16: Recommended Capital Improvements in Downtown Vancouver



Completed Projects

1 Columbia Bicycle Lane Improvements

2 Esther Short Park Walkway

Funded Projects

3 Kauffman and Jefferson Alignment

4 Main Street Promise

5 Waterfront Gateway Paseo

Planned - Unfunded Projects

6 Amtrak Multimodal Access

7 Waterfront Way Traffic Calming

Recommended Projects

8 11th Street Pedestrian and Bicycle Improvements

9 Daniels Street Pedestrian and Bicycle Improvements

10 9th Street Pedestrian and Bicycle Improvements

11 Uptown Park Infrastructure

Source: City of Vancouver; SERA Architects; BAE, 2025.

Table 39: Recommended Capital Improvements

	Improvement Description	Project Description	Project Impact
Completed			
1	Westside Bike Mobility - Columbia Bike Lane Improvements	Protected one way bicycle lanes on both sides of Columbia from 5th Street to 45th Street. Proposed through Westside Mobility Plan.	High
2	Esther Short Park Walkway and Pedestrian Infrastructure	The existing pedestrian path and infrastructure through Esther Short Park.	High
	Wayfinding Signs	Existing wayfinding signs and infrastructure in Downtown Vancouver.	Low
Funded			
4	Main Street Promise	Improvements for the safety of pedestrians, cyclists and motorcycles with sidewalk expansion and new street pavement. Upgrade of existing streetlights, traffic signals and pedestrian crossings.	High
5	Waterfront Gateway Paseo	Plaza and pedestrian walkway through the planned Waterfront Gateway project.	High
3	Kauffman and Jefferson Alignment	Alignment of Kauffman and Jefferson Street, ADA ramps, Sidewalk infill, mobility lanes and streetlights.	Medium
Planned - Unfunded			
6	Amtrak Multimodal Access	Installment of multimodal mobility lanes and pedestrian access on 11th Street from King Street to the Amtrak station. Proposed through Vancouver City Center Vision Plan in 2007.	Low
7	Waterfront Way Traffic Calming	Implementation of traffic calming treatments along Waterfront Way.	Low
Recommended			
8	11th Street Pedestrian and Bike Infrastructure Improvements	Protected bike lanes and sidewalk expansion from C Street to the Amtrak station. A continuation of the proposed Amtrak Multimodal Access Project.	High
9	Daniels Street Pedestrian and Bike Infrastructure Improvements	Improvements on Daniels Street for Pedestrian and multimodal mobility from 8th Street to Mill Plain Blvd to connect to Esther Short Park and Downtown.	High
11	Uptown Park Infrastructure	The 2022-2031 Parks, Recreation and Cultural Services Comprehensive Plan shows that the Uptown Neighborhood is not properly served by a park or green space.	High
10	9th Street Pedestrian and Bike Infrastructure Improvements	Bicycle and pedestrian infrastructure improvements along 9th street from Harney Street to the Library Square site.	Medium
	Wayfinding Signs	Wayfinding signs in connection with recommended infrastructure upgrades that guide and direct bikes, pedestrians, and cars through Downtown Vancouver	Low

Sources: City of Vancouver; BAE, 2025.

Methods for Raising City Capital

In order to provide direct financial incentives, the City needs to identify mechanisms to increase local capital. There are various methods that the City can explore, all with varying implications on Downtown businesses and broader tax-receiving entities throughout the City and Downtown area.

Tax Increment Financing District

Recently approved by the Washington State legislature, local jurisdictions are now eligible to set up tax increment financing (TIF) districts to fund public improvements. In order to establish a TIF district, a city must find that:

- Public improvements are expected to encourage private development that will increase assessed values in the area
- The private development would not be reasonably expected without the public investments
- The expected assessed value within the area would be less without the public investment
- The projected future development is allowed under local zoning and development standards

Downtown Vancouver meets these conditions and serves as a valuable opportunity to create a Downtown TIF district. Potential public improvements that could spur development include open space, bike and pedestrian infrastructure, and internal roadway improvements for larger redevelopment sites. To capitalize on future development, a TIF district is most impactful when it is created around a large amount of redevelopment potential but prior to the development efforts in order to keep the baseline assessed values relatively low. The City could consider a full downtown TIF district, or more defined districts to fund specific infrastructure investments.

Implementation in Downtown Vancouver

- Initiate study of feasibility and revenue expectations for Downtown Tax Increment Financing District.
- Identify infrastructure investment needed to support new development that can be funded through TIF revenue.
    - Bike/Pedestrian Infrastructure
    - Shared Parking
    - Open Space

Business Improvement Areas

Business Improvement Areas (BIAs) are entities that collect special assessments imposed on existing businesses, residential and mixed-use buildings within a specific geography to support shared investment, management, services, and programs within the defined area. Downtown Vancouver currently has a Downtown Association that functions like a BIA but is not funded by

all businesses and property owners within a specific geography - rather they rely on optional contributions from residents, businesses, and property owners. While a BIA requires a specific legislative approval, which requires that 60 percent of the businesses and property owners agree to the additional assessment, it can create a steadier flow of revenue that can be used to support a variety of infrastructure investments, either through supporting bonds or pay-as-you-go strategies.

Implementation in Downtown Vancouver

- Collaborate with existing Downtown businesses and stakeholders to discuss potential for a Business Improvement Area.
- Identify potential investments from Business Improvement Area revenue.

Local Improvement Districts

Under Washington State Law, local governments can form Local Improvement Districts (LIDs) to fund specific infrastructure projects that will lead to improved feasibility of development. Similar to the TIF, the LID would require a specific geography centered around an infrastructure investment like a park, transit node, or major utility upgrade. The LID would be an additional assessment on existing property owners that will benefit from the infrastructure investment. These funds could be used to fund projects as a "pay-as-you-go" model or by bonding against future revenues.

Implementation in Downtown Vancouver

- Identify potential capital investment that would qualify for the creation of a LID.
- Identify local appetite for LID, given it requires local property owner approval.
- Identify potential LID revenue around infrastructure investment.

Recommended Near-Term Strategies to Support Redevelopment

Given the current challenges to development feasibility largely driven by factors outside of the City's control, the City should prioritize certain strategies in the near-term in order to support development on certain sites, while also investing in certain strategies to pave the way for future development. These include:

Leverage Publicly-Owned Sites for Development: The City owns various parcels throughout Downtown that can be used to support near-term development. The City can support the feasibility of development by offering the land at discounted rates, either through a low-cost ground lease or fee simple sale. In addition, the City can collaborate with other public agencies to identify surplus sites that could support development. These agencies primarily include Clark County and the Vancouver Housing Authority. The City would not necessarily have to purchase these sites, but rather provide resources and support for future development projects on these publicly-owned sites.

Acquire Privately-Owned Sites: The above analysis identifies a range of privately-owned sites that are currently vacant or underutilized. The City can support redevelopment of these sites through strategic acquisition. The City should target two types of sites: (1) large catalytic sites, and (2) challenging sites with multiple owners. The larger catalytic sites offer an opportunity for the City to catalyze large-scale development through the acquisition of individual parcels. The City acquiring entire sites or portions of sites with multiple owners can support a cohesive and efficient development of these sites, rather than piecemeal development of smaller parcels which will translate into lower density developments.

Analyze Potential to Establish a Downtown TIF District: Given the significant amount of redevelopment potential in Downtown Vancouver, future development will increase the total assessed value and associated property tax revenue in Downtown. By setting up a Tax Increment Financing District in Downtown, the City will reserve a share of this increase in property tax revenue for future infrastructure investments in Downtown. By setting up a TIF district, the City will have flexible funds to meet the infrastructure necessary to support future development and growth in Downtown.

Conduct a Downtown Planned Action Ordinance or Adopt SEPA Exemptions: Intended to unlock future development in Downtown, the City should conduct a Downtown Planned Action Ordinance to analyze the environmental impacts associated with the future planned growth or adopt SEPA exemptions for the desired development types. Aligning with State Environmental Policy Act (SEPA) requirements, this Downtown-wide ordinance would develop a strategy to mitigate the environmental impacts of growth in Downtown, rather than requiring each individual property to analyze their environmental impacts and associated mitigation measures. Allowing individual properties to "tier" off from the Downtown-wide study, or exempting them entirely, reduces the required time and costs to conduct property-level analyses and acts as a significant incentive for future development in Downtown.

Table 40: Strategies and Recommendations Matrix (Page 1 of 4)

Policy	Policy Description	Policy Impact on Redevelopment	Policy Implementation Time Horizon
Land Use			
Increase Height and Density Limits	Increasing height and density enables projects to maximize development potential. Within Downtown there are no density restrictions and height limits are fairly unrestricting, but the Uptown subarea could see potential increased height limits. In addition, the City should consider collaborating with the Pearson Airfield and the FAA to pre-approve height limits for future development throughout Downtown.	**Medium**	**Near**
Eliminate Parking Minimums	Decreasing the required space for parking by introducing parking minimums in Downtown can allow for more flexibility within a development project to increase unit yield and decrease development costs.	**Medium**	**Near**
Reduce Ground Floor Retail Requirements	Limit ground floor retail requirements to pedestrian heavy nodes or corridors and eliminate ground floor retail requirements in low pedestrian areas to ensure required retail does not cause a financial burden to properties by being required where conditions would not otherwise support retail.	**Medium**	**Near**
Reduce Building Design or Façade Guidelines	Reduce building design or façade guidelines to reduce development costs and increase efficiency within a development.	**Low**	**Near**
City Process			
Downtown Planned Action Ordinance or State Environmental Exemption	Completing a city-led environmental study for all of Downtown Vancouver or adopting state exemptions in local code that achieve a similar outcome would reduce development risk and project timelines.	**High**	**Near**
Downtown Project Ombudsman/Support Staff	Dedicate a city staff member for all development projects in Downtown to help move projects through the city process, reducing time and costs for development.	**Medium**	**Near**

- *Continued on next page* -

Table 40: Strategies and Recommendations Matrix (Page 2 of 4)

Policy	Policy Description	Policy Impact on Redevelopment	Policy Implementation Time Horizon
City Process *(continued)*			
Facilitate Shared Parking Agreements	Coordinate parking for future residential development with existing parking garages in Downtown to increase development and land efficiency.	**Medium**	**Near**
Facilitate Business Relocation to Support Redevelopment	Coordinate with existing businesses on underutilized sites to assist with relocation efforts. Support business relocation to ensure businesses are not displaced by redevelopment.	**Medium**	**Near**
Collaborate to support Redevelopment of Underutilized Private Sites	Conduct outreach to owners of underutilized sites identified in this study. Determine long-term goals for the sites and identify potential actions the City can take to support redevelopment efforts.	**Medium**	**Near**
Coordinate Infrastructure Improvements	Coordinate with existing funded infrastructure plans and further infrastructure improvements in adjacent areas to catalyze development.	**Medium**	**Medium**
Permit Streamlining	Limit the time that a project spends in permitting by ensuring efficient review, reducing resubmittal review times, considering preapproved residential plans, and coordinating with city departments to streamline communication with and feedback to applicants.	**Low**	**Near**
Support Innovative Housing Types and Tenures to Reduce Development Costs	Encourage innovative housing types and ownership structures that reduce cost to deliver units through direct investment, code changes, or supportive programs to help development overcome current development feasibility challenges.	**Low**	**Long**
Financial Incentives			
Leverage City-Owned Land	To catalyze development and reduce land or holding costs for development, the City can use current land inventory to lease, or sell at a discounted price to developers.	**High**	**Near**

- *Continued on next page* -

Table 40: Strategies and Recommendations Matrix (Page 3 of 4)

Policy	Policy Description	Policy Impact on Redevelopment	Policy Implementation Time Horizon
Financial Incentives *(Continued)*			
Coordinate with Other Public and Non-Profit Landowners	Collaborate with other public or non-profit entities that own land in Downtown and work together to allow ground leases, or sales at a discounted price to catalyze development.	**High**	**Long**
City Fee Waiver/Deferrals	Waive or defer impact fees on new development to reduce development costs for projects that provide affordable housing, green building standards, or innovative housing types.	**Medium**	**Near**
Property Tax Exemptions	Adopt property tax exemptions to support goals beyond just housing such as non-residential development or other City initiatives such as green building standards.	**Medium**	**Medium**
Construction Sales Tax Rebate/Deferral	Waive or defer the sales taxes and use taxes charged on construction materials to decrease development costs.	**Medium**	**Medium**
Direct and Indirect City Investments			
Purchase Strategic Parcels	Purchase underutilized sites throughout Downtown and offer ground leases or discounted sales to developers to reduce development costs.	**High**	**Near**
Direct City Investment/Gap Funding to Development Projects	Provide direct financial assistance through gap funding or low interest loans to developments that provide affordable housing or public benefits.	**High**	**Medium**
City-Funded Shared Parking Infrastructure	Develop City-led shared parking infrastructure for dense residential developments by reducing the need for developers to include parking on site.	**High**	**Long**
Increase Access to Open Space	Invest and coordinate with related departments to provide open space in the Uptown subarea to attract high density development and economic growth.	**Medium**	**Medium**

- *Continued on next page –*

Table 40: Strategies and Recommendations Matrix (Page 4 of 4)

Policy	Policy Description	Policy Impact on Redevelopment	Policy Implementation Time Horizon
Direct and Indirect City Investments *(Continued)*			
Invest in Bike and Pedestrian Infrastructure	Increase bicycle and pedestrian infrastructure throughout Downtown to increase development desirability and demand in Downtown.	**Medium**	**Medium**
Funding for Public Investments			
Tax Increment Financing District	Establish tax increment financing districts in Downtown to fund infrastructure and public improvements that would further attract development interest and investment.	**High**	**Medium**
Business Improvement Areas	An entity that collects special assessments imposed on existing businesses and residences within a specific geography to support shared investment, management, and services within the defined area.	**Medium**	**Medium**
Local Improvement Districts	An entity that collects special assessments imposed on existing businesses and residences within a specific geography to support shared investment, management, and services within the defined area.	**Medium**	**Medium**

APPENDIX A: DOWNTOWN SITE CAPACITY TEST FIT ANALYSIS



Vancouver Downtown Redevelopment Opportunities Analysis (Vancouver, WA)

Strategic Parcel Test Fits

10 March 2025

City of Vancouver: Chim Chune Ko
BAE: Matt Fairris
SERA: Travis Shappell

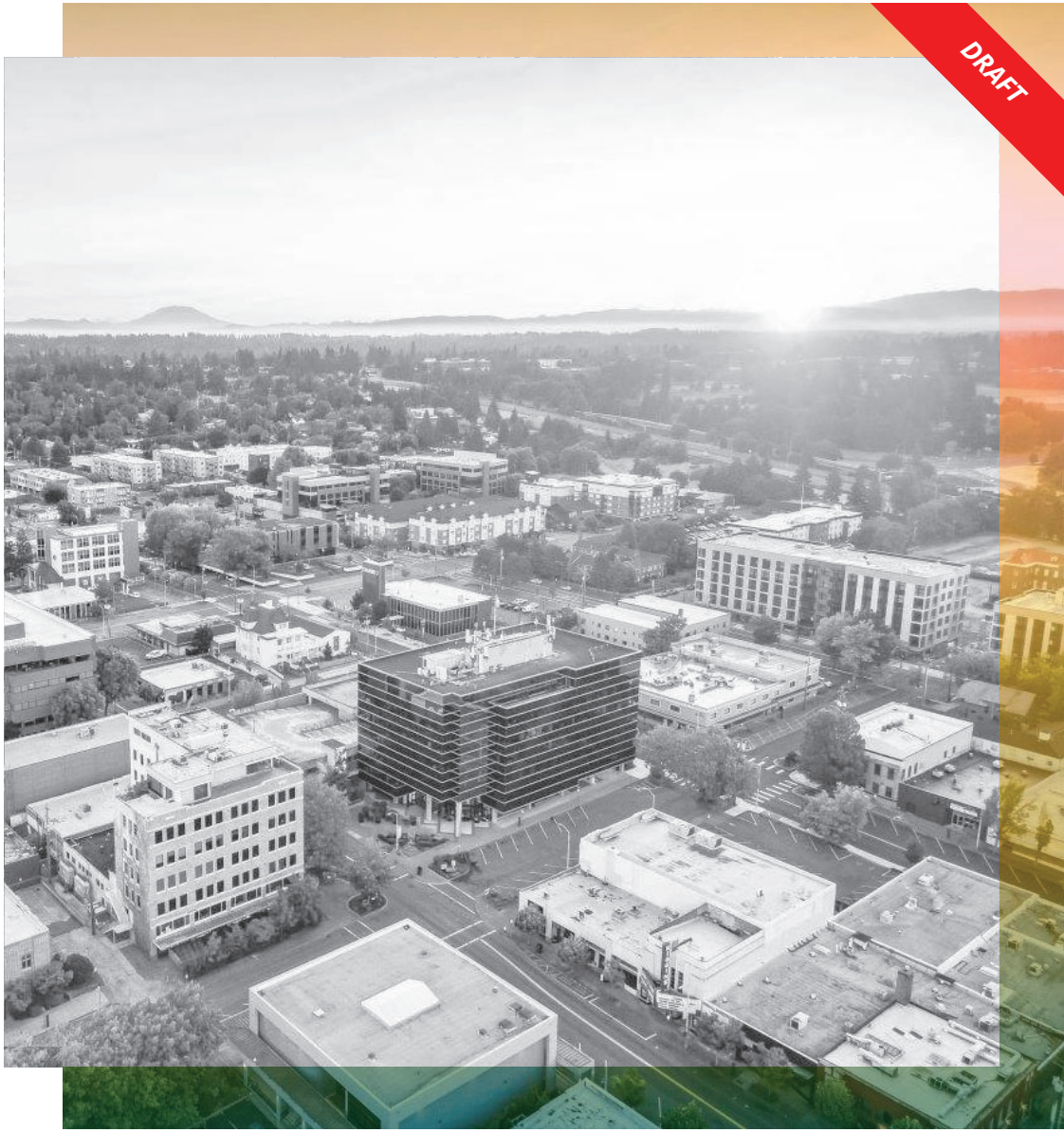
Contents

City of Vancouver
Strategic Parcel Test Fits

Sites / Locations

- Regal Theater
- Columbian
- Convention Center Expansion
- Generic Eighth-Block

Appendix





Regal Theater

Strategic Parcel Test Fits

Site

Regal Theater Test Fit

DRAFT



Site Info	
Property Identification Number*	38840000
Address*	801 C ST, VANCOUVER, WA 98660
Zoning*	City Center (CX)
Gross Parcel Size (AC)*	1.6
Gross Parcel Size (SQFT)*	69,562
Maximum Building Height (FT)**	150-300
Floor Area Ratio (FAR)**	2:1
Parking Control**	Limited Surface Parking Area
Maximum Lot Coverage**	100%
Setbacks**	Front Yard = None Rear Yard = None Side Yard = 0’/5’ Side Street = None BLDG = None
Minimum Landscape**	None
Approx. Lot Width (FT)	233
Approx. Lot Depth (FT)	341
Notes: Property Fact Sheet * Data from Clark County GIS Property Information Center ** City of Vancouver Municipal Code Title 20	

Parcel Considerations:

- Large site for significant vertical development.
- Protect from noise and pollution from highway.
- Setback at south lot line for windows.
- E 8th St alignment.
- Coordination with Library Site development.

RT1: Recent Market, 5-over-2 w/ Basement

Regal Theater Test Fit

DRAFT



Development Yield	
Building Type	5-Over-2, 5-Levels Type-III over 2-Levels Type-I
Building Height (Stories)	7
Building Size, Total (GSF)	332,900
Building Size, Excluding Parking (GSF)	244,820
Gross Residential Area (GSF)	242,650
Residential Units	266
Average Unit Size (GSF)	766
Estimated Building Efficiency, Excluding Parking	83%
Estimated Net Rentable (NSF)	203,750
Retail / MISC Area (GSF)	2,170
Residential Density (DU/AC)	176
Floor Area Ratio, Total (FAR)	3.72

Notes:

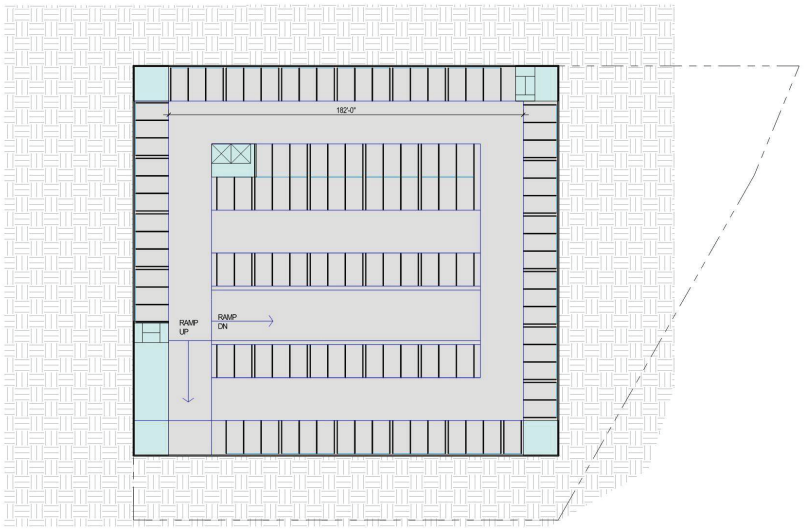
- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

RT1: Recent Market, 5-over-2 w/ Basement

Regal Theater Test Fit

DRAFT

Basement Plan



SERA VDROA - REGAL THEATER 21 NOVEMBER 2024

FLOOR PLAN - LEVEL P1 C100

Upper-level Typical Plan



SERA VDROA - REGAL THEATER 21 NOVEMBER 2024

FLOOR PLAN - L2-7 C102

Parking	
Total Parking (Stalls)	235
Residential Parking Ratio (Stalls per Unit)	0.88
Commercial Parking Ratio (Stalls per 1kSF)	0
Notes: • Assumes commercial parking would be served on-street. • Residential Stalls reflect the building logics of the test fit and may not align with market conditions.	

Open Space	
Private Common Outdoor Space (SQFT)	23,000
Private Common Outdoor Space per Unit (SQFT)	86.6
Enhanced Site Area (Setback/Plaza) (SQFT)	Not Considered
Notes: • Does not factor in requirements related to green roofs and/or stormwater. • Open Space may not align with market conditions.	

RT2: Recent Market, 4-Story Tuck-Under w/ Surface Parking

Regal Theater Test Fit

DRAFT

Ground-level Plan



Development Yield	
Building Type	4-Story, 4-Levels Type-V
Building Height (Stories)	4
Building Size, Total (GSF)	111,280
Building Size, Excluding Parking (GSF)	101,599
Gross Residential Area (GSF)	101,599
Residential Units	115
Average Unit Size (GSF)	696
Estimated Building Efficiency, Excluding Parking	80%
Estimated Net Rentable (NSF)	81,340
Retail / MISC Area (GSF)	0
Residential Density (DU/AC)	76
Floor Area Ratio, Total (FAR)	1.69

Notes:

- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

RT2: Recent Market, 4-Story Tuck-Under w/ Surface Parking

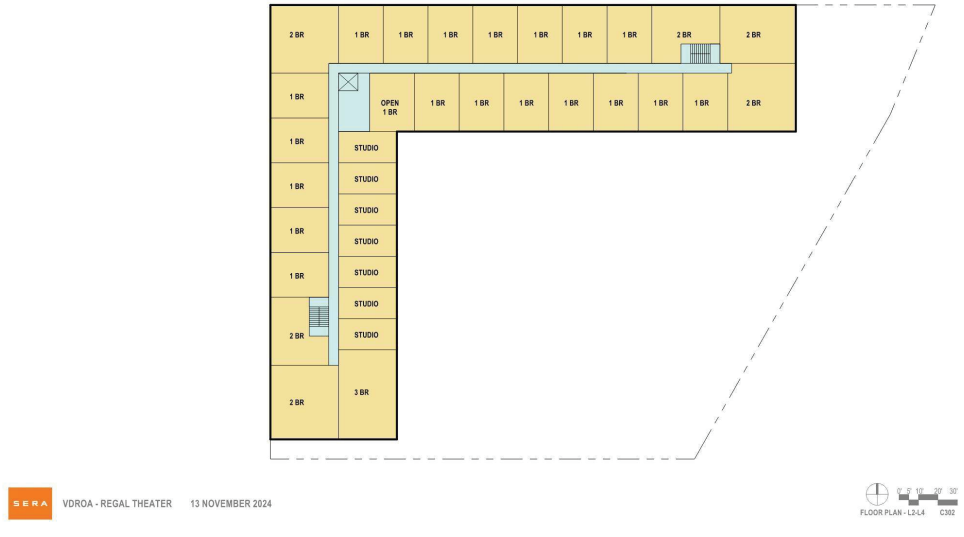
Regal Theater Test Fit

DRAFT

Basement Plan



Upper-level Typical Plan



Parking	
Total Parking (Stalls)	115
Residential Parking Ratio (Stalls per Unit)	1.00
Commercial Parking Ratio (Stalls per 1kSF)	0

Notes:
- Assumes commercial parking would be served on-street.
- Residential Stalls reflect the building logics of the test fit and may not align with market conditions.

Open Space	
Private Common Outdoor Space (SQFT)	12,500
Private Common Outdoor Space per Unit (SQFT)	108.6
Enhanced Site Area (Setback/Plaza) (SQFT)	Not Considered

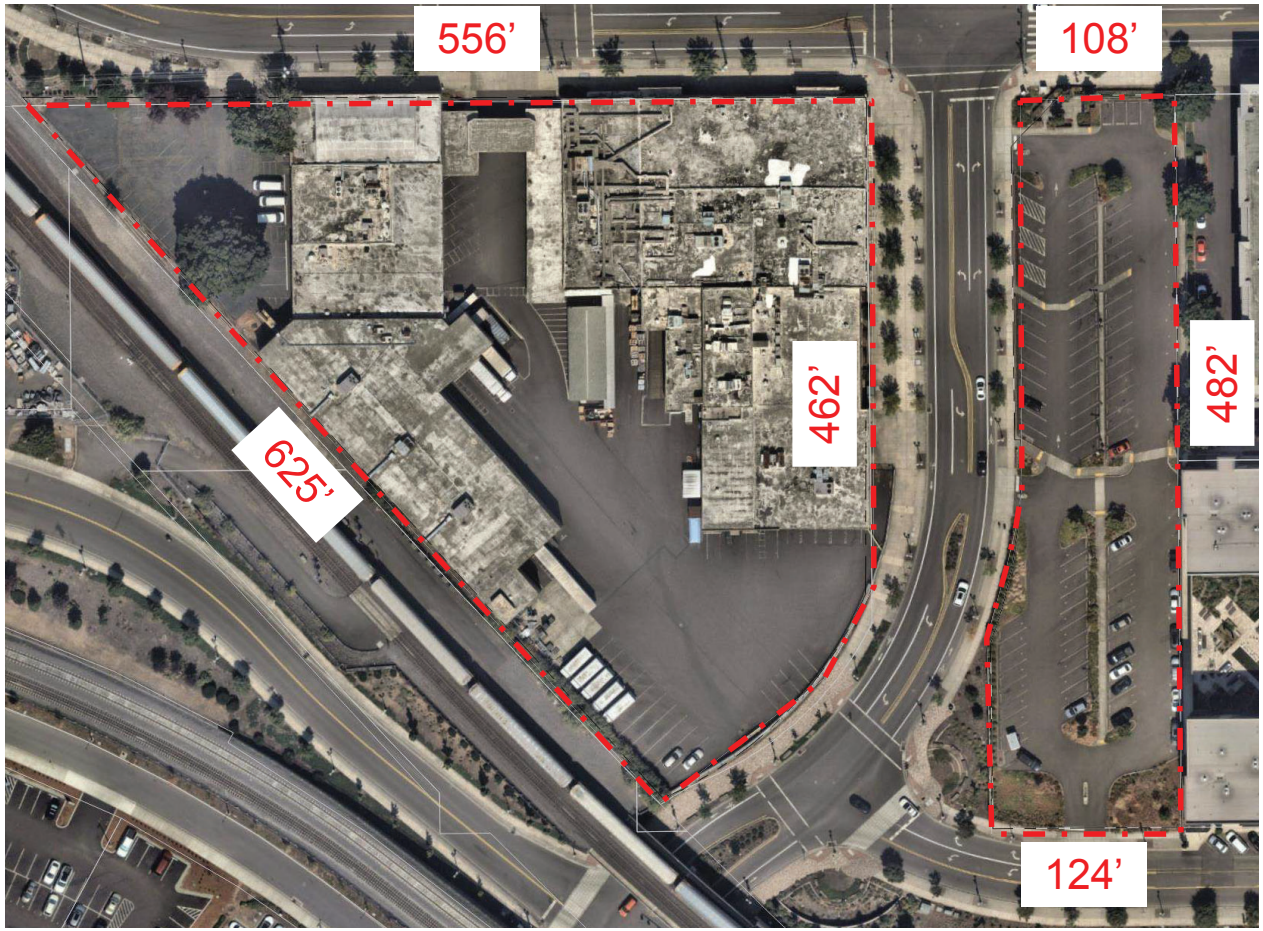
Notes:
- Does not factor in requirements related to green roofs and/or stormwater.
- Open Space may not align with market conditions.


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Columbian
Strategic Parcel Test Fits
Columbia St
CITY OF Vancouver WASHINGTON
bae
SERA
Strategic Parcel Test Fits | March 2025

Site

Columbian Test Fit

DRAFT



Site Info	
Property Identification Number*	986041535, 986069268, 986069269
Address*	Multiple
Zoning*	City Center (CX)
Gross Parcel Size (AC)*	4.83
Gross Parcel Size (SQFT)*	210,395
Maximum Building Height (FT)**	100-200
Floor Area Ratio (FAR)**	1:1
Parking Control**	Limited Surface Parking Area
Maximum Lot Coverage**	100%
Setbacks**	Front Yard = None Rear Yard = None Side Yard = 0’/5’ Side Street = None BLDG = None
Minimum Landscape**	None
Approx. Lot Width (FT)	556 / 108
Approx. Lot Depth (FT)	462 / 482
Notes: Property Fact Sheet 1, PFC 2, PFC 3 * Data from Clark County GIS Property Information Center ** City of Vancouver Municipal Code Title 20	

Parcel Considerations:

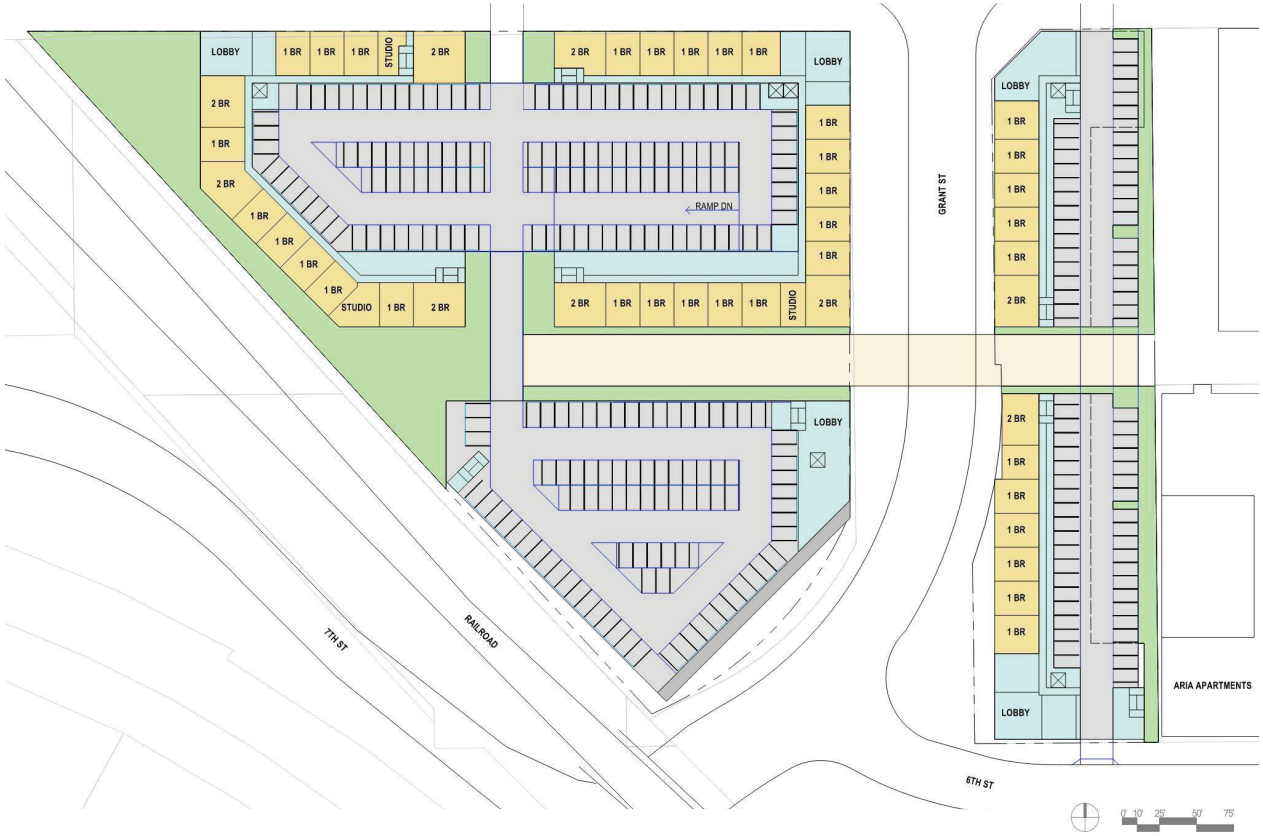
- Large site for significant vertical development, variety of building types (ie wrap) viable.
- Site divided by Grant street. Difficulty parking eastern parcels above grade. Recommend consolidating amenities / parking/ logistics between the sites.
- Midblock pedestrian linkage to Esther Short Park.
- Protect from rail line.
- Alignments with Harney St and W 6th St.

C1: Recent Market, Basement and Podium Mid-Rises

Columbian Test Fit

DRAFT

Ground-level Plan



Development Yield	
Building Type	4-Story & 7-Story, Type-III over 2-Levels Type-I
Building Height (Stories)	4 & 7
Building Size, Total (GSF)	705,732
Building Size, Excluding Parking (GSF)	538,817
Gross Residential Area (GSF)	538,817
Residential Units	653
Average Unit Size (GSF)	734
Estimated Building Efficiency, Excluding Parking	80% (### To Be Verified)
Estimated Net Rentable (NSF)	479,190
Retail / MISC Area (GSF)	0
Residential Density (DU/AC)	137
Floor Area Ratio, Total (FAR)	2.6

Notes:

- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

C1: Recent Market, Basement and Podium Mid-Rises

Columbian Test Fit

DRAFT

Upper-level Typical Plan



C1: Recent Market, Basement and Podium Mid-Rises

Columbian Test Fit

DRAFT

Development Yield(s)

	Building 1 & 2	Building 3	Building 4	Building 5	All Buildings
Building Type	6-Story & 7-Story, 4-over-2 & 5-over-2	4-Story, 3-over-1	4-Story Type V	4-Story Type V	4-Story & 7-Story, Type-III over 2-Levels Type-I
Building Height (Stories)	6 & 7	4	4	4	4 & 7
Building Size, Total (GSF)	463,183	112,531	59,378	70,640	705,732
Building Size, Excluding Parking (GSF)	340,250	80,947	53,445	64,175	538,817
Gross Residential Area (GSF)	340,250	80,947	53,445	64,175	538,817
Residential Units	424	90	63	76	653
Average Unit Size (GSF)	692	732	676	659	734
Estimated Building Efficiency, Excluding Basement	84%	81%	73%	72%	88%
Estimated Net Rentable (NSF)	318,890	65,880	43,445	50,975	479,190
Retail / MISC Area (GSF)	0	0	0	0	0
Residential Density (DU/AC)	146 (Buildings 1-3)		51	61	137
Floor Area Ratio, Total (FAR)	2.76 (Buildings 1-3)		0.99	1.19	2.6

Notes:

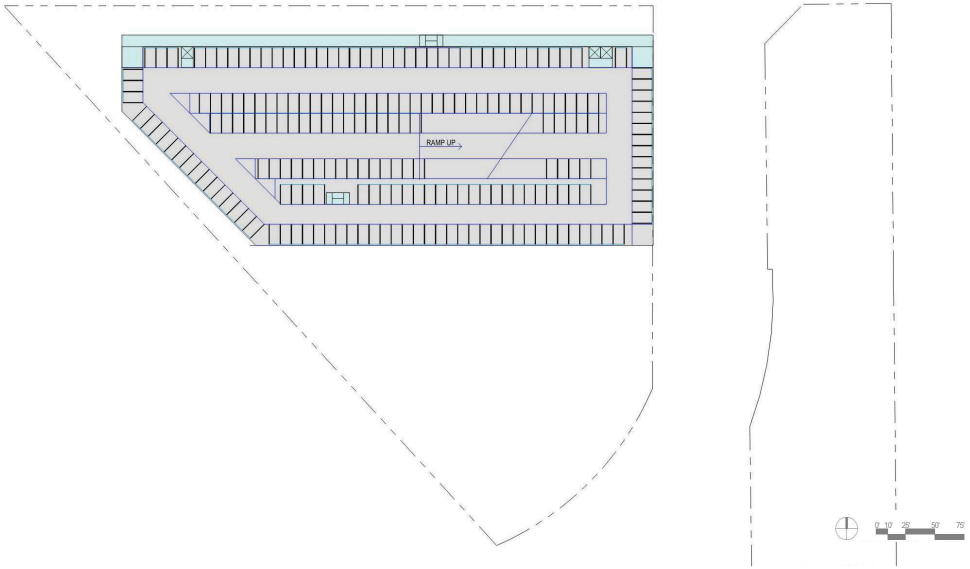
- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

C1: Recent Market, Basement and Podium Mid-Rises

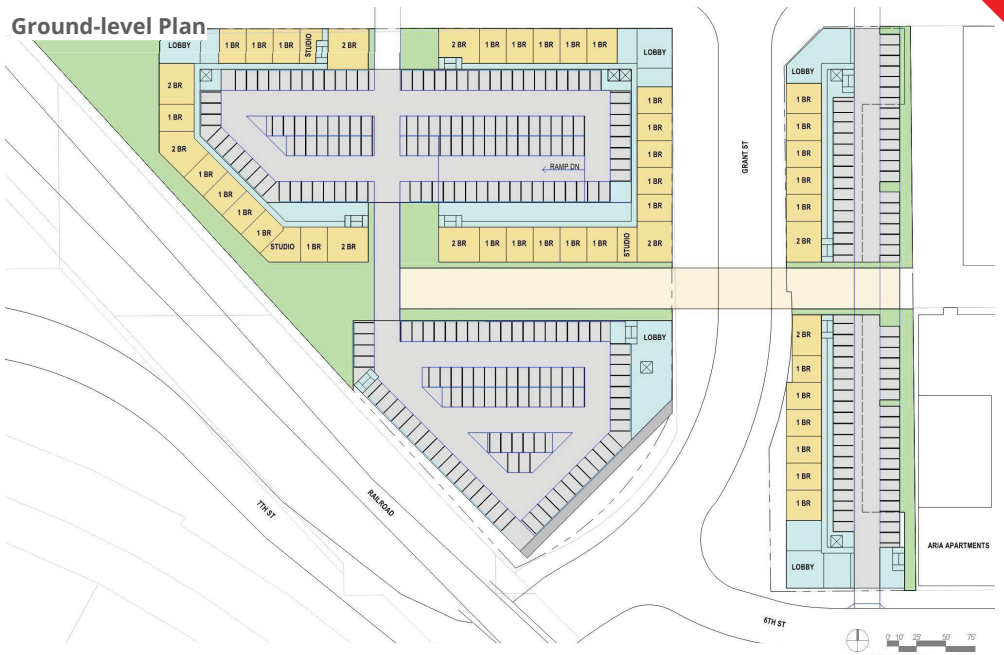
Columbian Test Fit

DRAFT

Basement Plan



Ground-level Plan



Parking	
Total Parking (Stalls)	486
Residential Parking Ratio (Stalls per Unit)	0.74
Commercial Parking Ratio (Stalls per 1kSF)	0

Notes:
- Assumes commercial parking would be served on-street.
- Residential Stalls reflect the building logics of the test fit and may not align with market conditions.

Open Space	
Private Common Outdoor Space (SQFT)	61,500
Private Common Outdoor Space per Unit (SQFT)	85.7
Enhanced Site Area (Setback/Plaza) (SQFT)	25,500

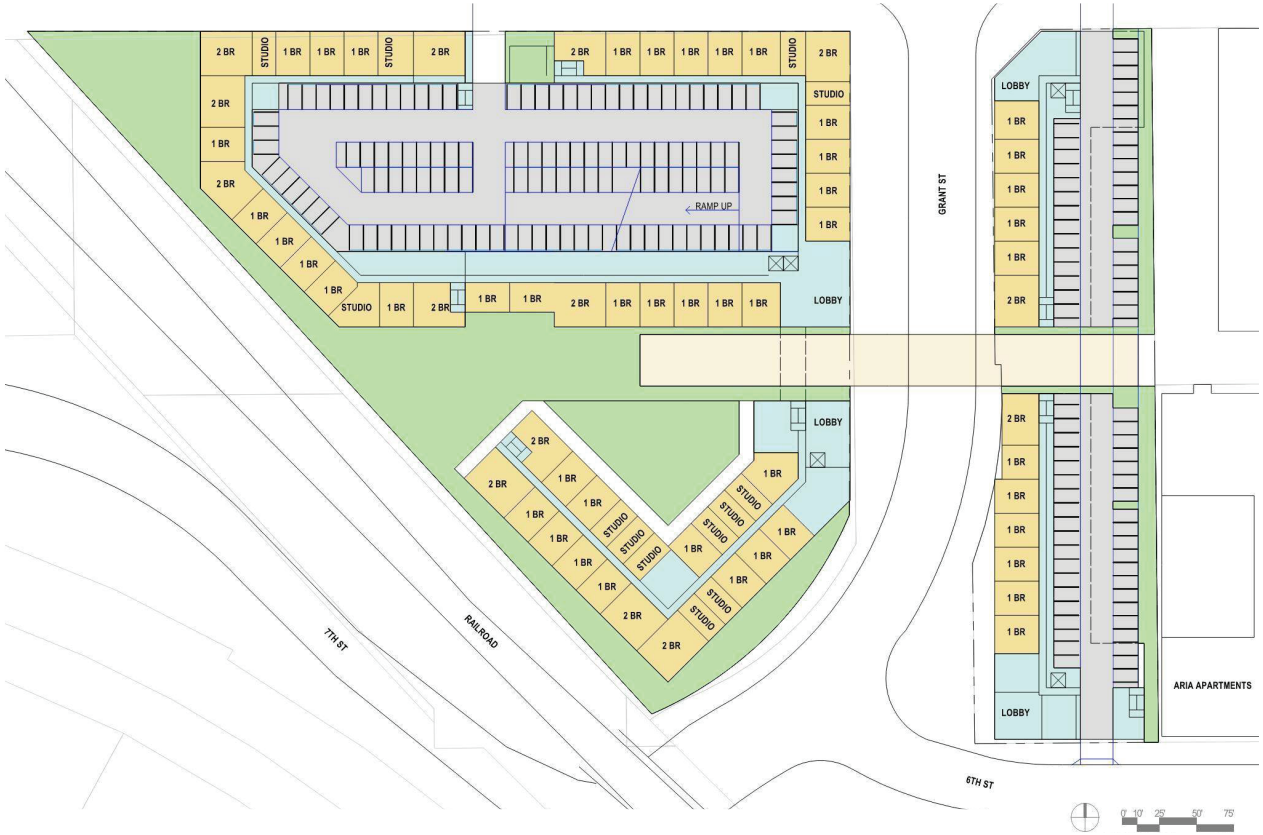
Notes:
- Does not factor in requirements related to green roofs and/or stormwater.
- Open Space may not align with market conditions.

C2: 5-Story Wrap

Columbian Test Fit

DRAFT

Ground-level Plan



Development Yield	
Building Type	4-Story & 5-Story, Type V and Type III
Building Height (Stories)	4 & 7
Building Size, Total (GSF)	608,312
Building Size, Excluding Parking (GSF)	447,276
Gross Residential Area (GSF)	447,276
Residential Units	497
Average Unit Size (GSF)	693
Estimated Building Efficiency, Excluding Parking	77%
Estimated Net Rentable (NSF)	344,790
Retail / MISC Area (GSF)	0
Residential Density (DU/AC)	104
Floor Area Ratio, Total (FAR)	2.17

Notes:

- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

C2: 5-story Wrap

Columbian Test Fit

DRAFT

Upper-level Typical Plan



C2: 5-story Wrap

Columbian Test Fit

DRAFT

Development Yield(s)

	Building 1	Building 2	Building 3	Building 4	All Buildings
Building Type	5-story wrap, 5-story Type I garage	4-Story Type V	4-Story Type V	4-Story Type V	4-Story & 5-Story, Type V and Type III
Building Height (Stories)	5	4	4	4	4 & 7
Building Size, Total (GSF)	388,816	89,478	59,378	70,640	608,312
Building Size, Excluding Parking (GSF)	240,178	89,478	53,445	64,175	447,276
Gross Residential Area (GSF)	240,178	89,478	53,445	64,175	447,276
Residential Units	258	100	63	76	497
Average Unit Size (GSF)	683	747	676	659	693
Estimated Building Efficiency, Excluding Basement	73%	83%	73%	72%	77%
Estimated Net Rentable (NSF)	176,228	74,142	43,445	50,975	344,790
Retail / MISC Area (GSF)	0	0	0	0	0
Residential Density (DU/AC)	102		51	61	104
Floor Area Ratio, Total (FAR)	2.16		0.99	1.19	2.17

Notes:
- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

Parking

Total Parking (Stalls)	524
Residential Parking Ratio (Stalls per Unit)	0.86
Commercial Parking Ratio (Stalls per 1kSF)	0

Notes:
- Assumes commercial parking would be served on-street.
- Residential Stalls reflect the building logics of the test fit and may not align with market conditions.

Open Space

Private Common Outdoor Space (SQFT)	49,300
Private Common Outdoor Space per Unit (SQFT)	75.5
Enhanced Site Area (Setback/Plaza) (SQFT)	15,900

Notes:
- Does not factor in requirements related to green roofs and/or stormwater.
- Open Space may not align with market conditions.



Convention Center Expansion

Strategic Parcel Test Fits

Site

Convention Center Expansion Test Fit

DRAFT



Site Info	
Property Identification Number*	48740000, 48750000, 48790000, 48760000
Address*	Multiple
Zoning*	City Center (CX)
Gross Parcel Size (AC)*	1.53
Gross Parcel Size (SQFT)*	66,594
Maximum Building Height (FT)**	75
Floor Area Ratio (FAR)**	1:1
Parking Control**	Limited Surface Parking Area
Maximum Lot Coverage**	100%
Setbacks**	Front Yard = None Rear Yard = None Side Yard = 0’/5’ Side Street = None BLDG = None
Minimum Landscape**	None
Approx. Lot Width (FT)	260
Approx. Lot Depth (FT)	300
Notes: Property Fact Sheet * Data from Clark County GIS Property Information Center ** City of Vancouver Municipal Code Title 20	

Parcel Considerations:

- Large site for significant vertical development.
- Extension of pedestrian path north to Esther Short Park.
- Waterfront Gateway Master Plan.
- Viability of ground programming along Columbia St.
- Adjacency to rail line, new commercial, and future rail station.

Master Plan Context

Convention Center Expansion Test Fit





CCE1: Market Parked Office

Convention Center Expansion Test Fit

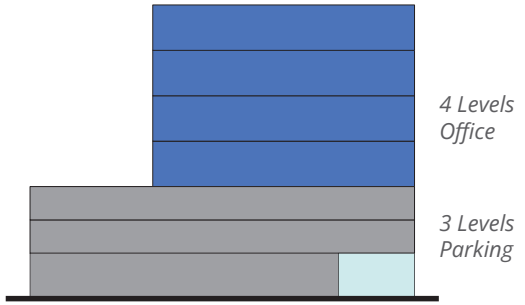
DRAFT



Development Yield	
Building Type	7-Story, Type-I
Building Height (Stories)	7
Building Size, Total (GSF)	316,120
Building Size, Excluding Parking (GSF)	162,020
Gross Office Area (GSF)	150,140
Estimated Building Efficiency, Excluding Parking	83%
Estimated Net Rentable (NSF)	143,740
Retail / MISC Area (GSF)	2,450
Floor Area Ratio, Total (FAR)	2.43

Notes:

- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.



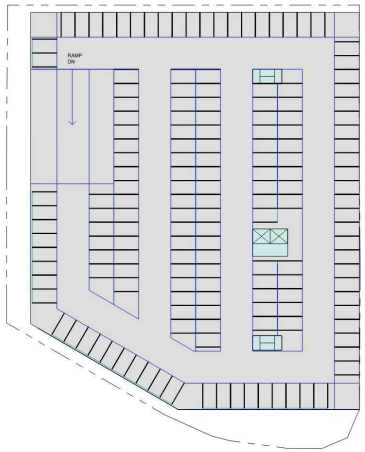
Section Diagram

CCE1: Market Parked Office

Convention Center Expansion Test Fit

DRAFT

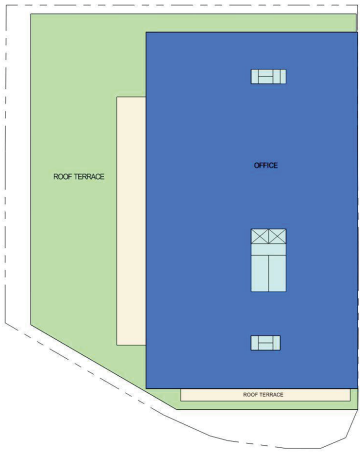
Parking Typical Plan



SERA VDROA - CONVENTION CENTER 29 JANUARY 2025

FLOOR PLAN - LEVEL 2 C102

Upper-level Typical Plan



SERA VDROA - CONVENTION CENTER 29 JANUARY 2025

FLOOR PLAN - LEVEL 6-7 C106

Parking	
Total Parking (Stalls)	459
Commercial Parking Ratio (Stalls per 1kSF)	3.19

Notes:
- Assumes commercial parking would be served on-street.
- Residential Stalls reflect the building logics of the test fit and may not align with market conditions.

Open Space	
Private Common Outdoor Space (SQFT)	4,400
Enhanced Site Area (Setback/Plaza) (SQFT)	9,000

Notes:
- Does not factor in requirements related to green roofs and/or stormwater.
- Open Space may not align with market conditions.

CCE2: Transit-Oriented Development (TOD) Parked Office

Convention Center Expansion Test Fit

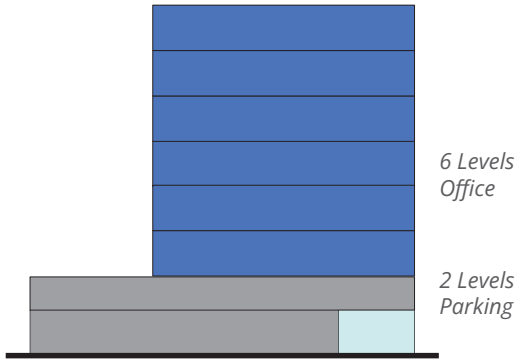
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Development Yield	
Building Type	8-Story, Type-I
Building Height (Stories)	8
Building Size, Total (GSF)	364,060
Building Size, Excluding Parking (GSF)	267,160
Gross Office Area (GSF)	247,660
Estimated Building Efficiency, Excluding Parking	83%
Estimated Net Rentable (NSF)	236,460
Retail / MISC Area (GSF)	2,450
Floor Area Ratio, Total (FAR)	4.01

Notes:

- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.



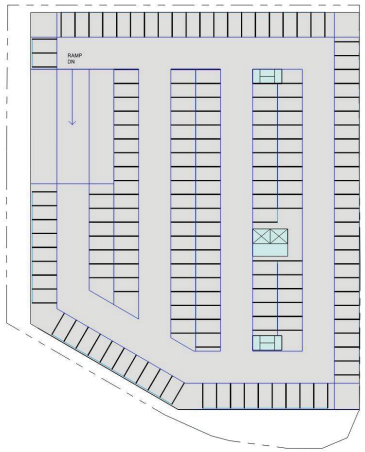
Section Diagram

CCE2: Transit-Oriented Development (TOD) Parked Office

Convention Center Expansion Test Fit

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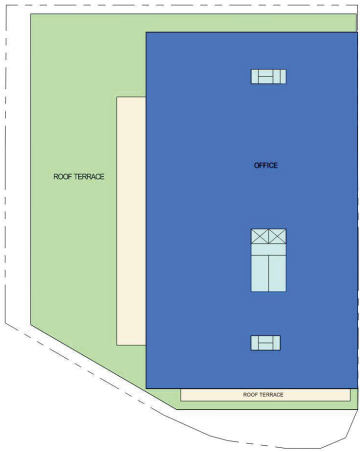
Parking Typical Plan



SERA VDROA - CONVENTION CENTER 29 JANUARY 2025

FLOOR PLAN - LEVEL 2 C102

Upper-level Typical Plan



SERA VDROA - CONVENTION CENTER 29 JANUARY 2025

FLOOR PLAN - LEVEL 6-7 C106

Parking	
Total Parking (Stalls)	278
Commercial Parking Ratio (Stalls per 1kSF)	1.18

Notes:
- Assumes commercial parking would be served on-street.
- Residential Stalls reflect the building logics of the test fit and may not align with market conditions.

Open Space	
Private Common Outdoor Space (SQFT)	4,400
Enhanced Site Area (Setback/Plaza) (SQFT)	9,000

Notes:
- Does not factor in requirements related to green roofs and/or stormwater.
- Open Space may not align with market conditions.



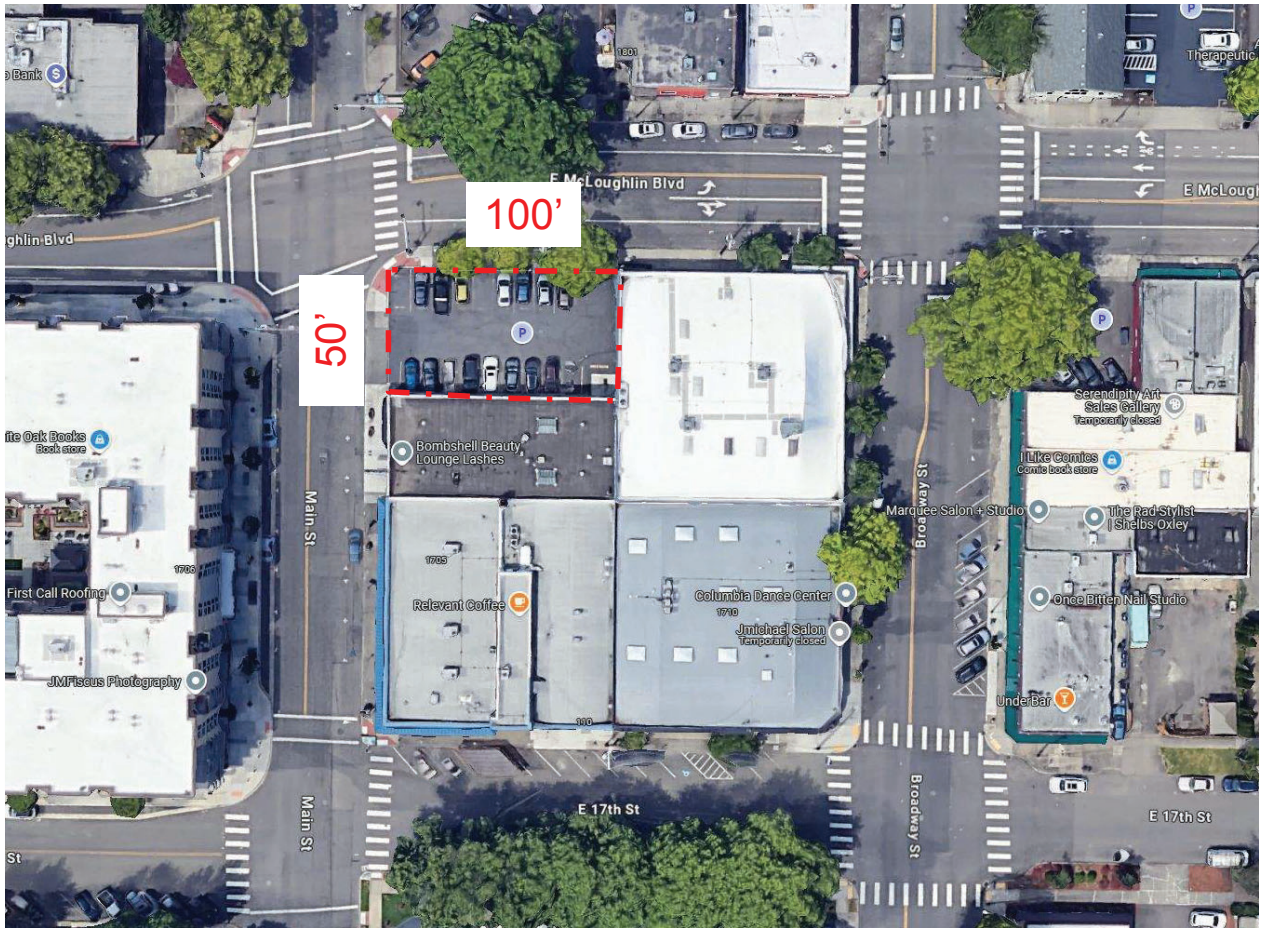
Generic Eighth-Block

Strategic Parcel Test Fits

Site

Generic Eighth-Block Test Fit

DRAFT



Site Info	
Property Identification Number*	N/A
Address*	Multiple
Zoning*	Commercial and Mixed Use (CC & CX)
Gross Parcel Size (AC)*	~0.12
Gross Parcel Size (SQFT)*	~5,000
Maximum Building Height (FT)**	Varies
Floor Area Ratio (FAR)**	Varies
Varies	Varies
Maximum Lot Coverage**	Varies
Setbacks**	Varies
Minimum Landscape**	Varies
Approx. Lot Width (FT)	50
Approx. Lot Depth (FT)	100
Notes: * Data from Clark County GIS Property Information Center ** City of Vancouver Municipal Code Title 20	

Parcel Considerations:

- Many sites throughout downtown area. Can be consolidated with other parcels, but many blocks are owned by multiple property owners and consist of building / lots of varying conditions / value.
- Significant difference between corner lots, midblock lots, and blocks that maintain a midblock vehicular circulation for services / logistics.

GEB1: Mid-Block 3-Story Walkup (Recent Market)

Generic Eighth-Block Test Fit

DRAFT

Typical Floor Plan



Development Yield	
Building Type	3-Story, Type-V
Building Height (Stories)	3
Building Size, Total (GSF)	9,660
Building Size, Excluding Parking (GSF)	9,660
Gross Residential Area (GSF)	9,660
Residential Units	12
Average Unit Size (GSF)	710
Estimated Building Efficiency	80%
Estimated Net Rentable (NSF)	8,520
Retail / MISC Area (GSF)	0
Residential Density (DU/AC)	109
Floor Area Ratio, Total (FAR)	1.93

Notes:

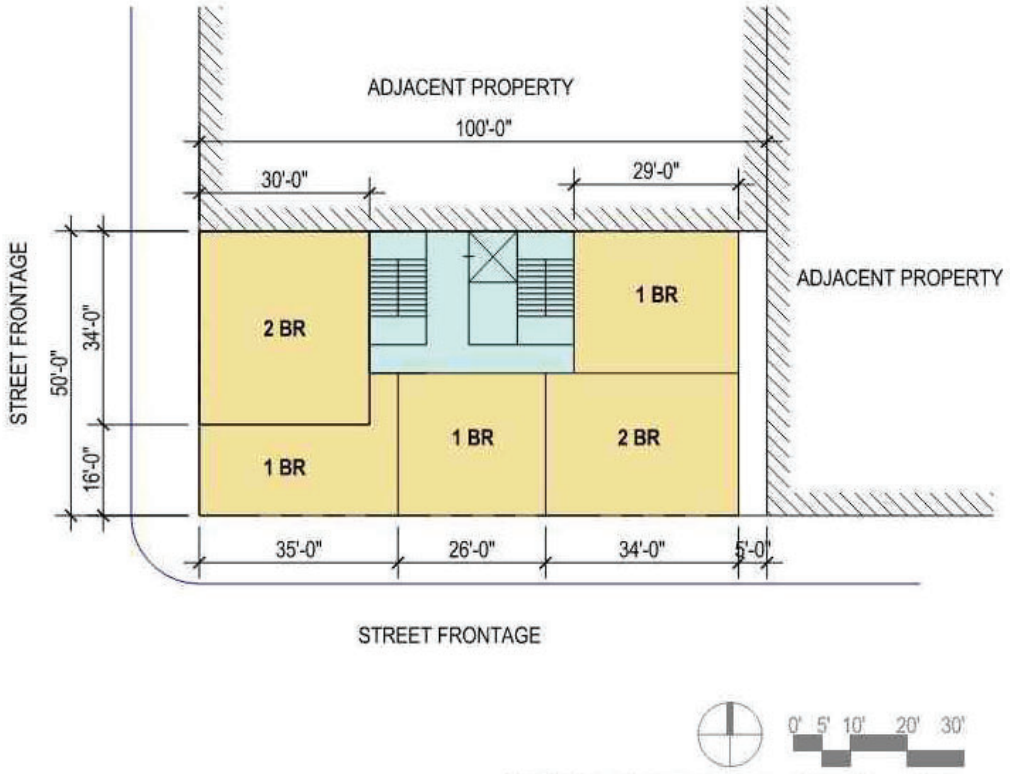
- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

GEB2: Corner Lot 5-Story (Recent Market)

Generic Eighth-Block Test Fit

DRAFT

Typical Floor Plan



Development Yield	
Building Type	5-Story, Type-III
Building Height (Stories)	5
Building Size, Total (GSF)	23,750
Building Size, Excluding Parking (GSF)	23,750
Gross Residential Area (GSF)	23,750
Residential Units	20
Average Unit Size (GSF)	770
Estimated Building Efficiency	81%
Estimated Net Rentable (NSF)	15,400
Retail / MISC Area (GSF)	0
Residential Density (DU/AC)	182
Floor Area Ratio, Total (FAR)	4.75

Notes:

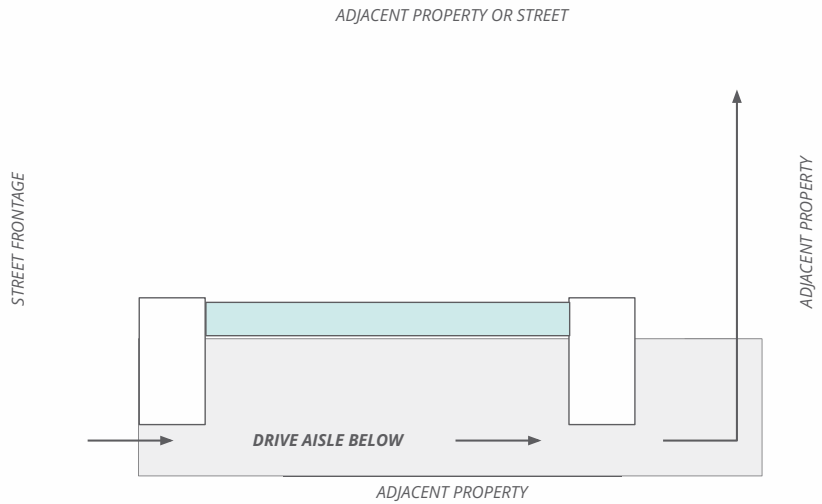
- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.

GEB3: Corner Lot 3-Story w/ Site Parking (Recent Market)

Generic Eighth-Block Test Fit

DRAFT

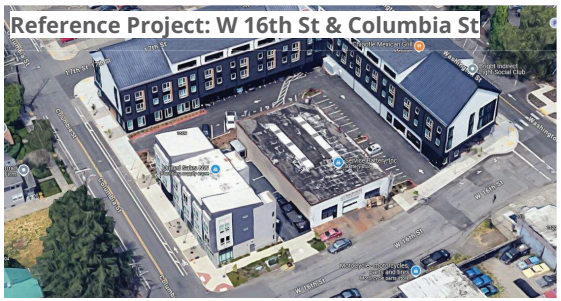
Typical Floor Plan



Development Yield	
Building Type	3-Story, Type-V
Building Height (Stories)	3
Building Size, Total (GSF)	9,660
Building Size, Excluding Parking (GSF)	9,660
Gross Residential Area (GSF)	9,660
Residential Units	12
Average Unit Size (GSF)	710
Estimated Building Efficiency	80%
Estimated Net Rentable (NSF)	8,520
Retail / MISC Area (GSF)	0
Residential Density (DU/AC)	109
Floor Area Ratio, Total (FAR)	1.93

Notes:

- High-level development yield / capacity study based on a general assessment of the site. Yield does not consider other development viability factors such as circumstantial site constraints, design guidelines, private amenities / open space, and other market and jurisdictional elements that influence design, finance, and delivery.





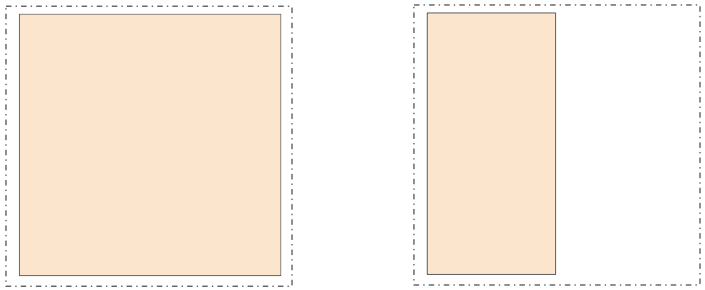
Appendix

Strategic Parcel Test Fits

Typical Downtown Vancouver Block Relative Density Matrix

Strategic Parcel Test Fits

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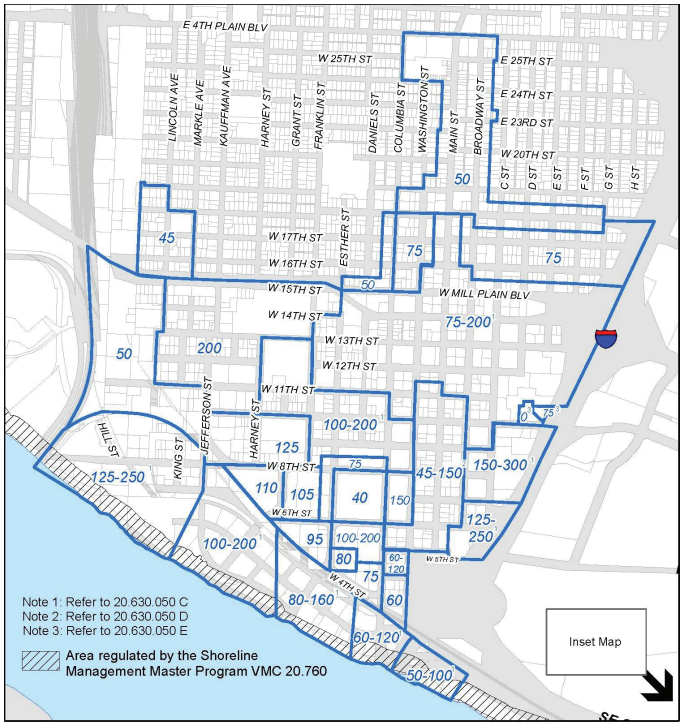
	Full Block	Half Block
4-Story	**120-160 Units** *(130-174 du/ac)*	**60-80 Units** *(130-174 du/ac)*
5-over-2	**190-245 Units** *(207-267 du/ac)*	**120-140 Units** *(261-305 du/ac)*
12-Story	**280-300 Units** *(305-327 du/ac)*	**180-200 Units** *(392-436 du/ac)*

Notes:
- Unit yield and densities will vary dramatically based on how the site conditions parking.

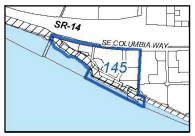
Jurisdictional References That Informed Test Fits (Not Limited To)

Strategic Parcel Test Fits

DRAFT



0 500 1,000 2,000 Feet



Maximum Building Heights

FIGURE 20.630-4

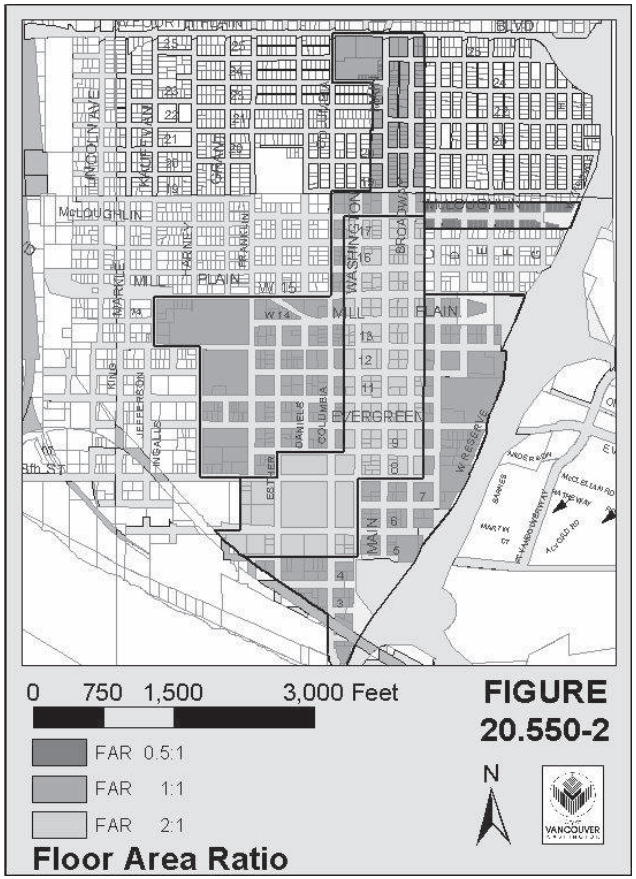


FIGURE 20.550-2

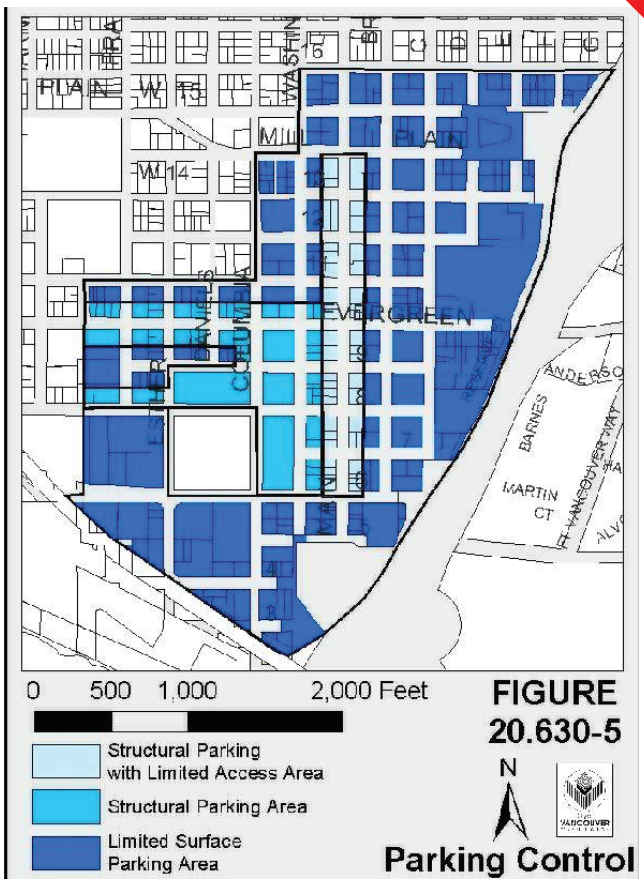


FIGURE 20.630-5

Project Reference: 12th & Main St.

Strategic Parcel Test Fits

DRAFT



Development Yield	
Building Type	5-Over-2, 5-Levels Type-V over 2-Levels Type-I
Building Height (Stories)	7
Building Size, Total (GSF)	332,544
Building Size, Excluding Parking (GSF)	245,739
Gross Residential Area (GSF)	226,747
Residential Units	198
Average Unit Size (GSF)	816
Estimated Building Efficiency, Excluding Parking	71% (84% typical residential floors)
Estimated Net Rentable (NSF)	161,606
Retail / MISC Area (GSF)	9,279
Office / Commercial (GSF)	9,713
Residential Density (DU/AC)	215
Floor Area Ratio, Total (FAR)	6.41

Notes:
- Building developed in partnership with Pahlish Commercial.
- Below-grade parking.

Project Reference: Terminal 1 Block A and C

Strategic Parcel Test Fits

DRAFT



Office / Retail	
Building Height (Stories)	9 (Block A) and 10 (Block C)
Gross Area, Excluding Parking (GSF)	~330,000

Parking	
Parking Levels	5
Parking Area (GSF)	346,900
Parking Yield (Stalls)	1,439
Parking Ration (Stall per 1kGSF)	4.15

Notes:
- Data taken from publicly-available documents on the City of Vancouver web presence.

City Council Meeting Minutes

Vancouver City Hall | Council Chambers | 415 W. 6th St.
PO Box 1995 | Vancouver, WA 98668-1995
cityofvancouver.us

Anne McEnerny-Ogle, Mayor • Bart Hansen • Ty Stober • Erik Paulsen • Sarah J. Fox • Diana H. Perez • Kim D. Harless

August 4, 2025

Workshops: 4:45-6:00 p.m.

Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

The City Council Meeting was held on 8/4/2025 at 4:45 PM in the Vancouver City Hall, Council Chambers 415 West 6th Street, Vancouver, WA 98660.

Workshops were conducted in person in the Council Chambers of City Hall. Members of the public were invited to view the meeting in person, via the live broadcast on www.cvtv.org and CVTV cable channels 23 or HD 323, or on the City's Facebook page, or www.facebook.com/VancouverUS.

View the CVTV video recording, including presentations and discussion, for workshops at:
https://www.cvtv.org/vid_link/38193?startStreamAt=0&stopStreamAt=3628

Comprehensive Plan Update
(Approximately 45 minutes)

Rebecca Kennedy, Deputy Community Development Director,
rebecca.kennedy@cityofvancouver.us

Staff led Council through a discussion of the Comprehensive Plan Update.

Councilmember Perez was absent from the workshop.
Councilmember Harless was late to the workshop.

Clark County Parks Sustainable Funding Team
(Approximately 30 minutes, to immediately follow the previous workshop)

David Perlick, Director of Parks, Recreation and Cultural Services,
david.perlick@cityofvancouver.us

Staff led Council through a discussion of the Clark County Parks Sustainable Funding Team.

Councilmember Perez was absent from the workshop.

Council Dinner / Administrative Updates (6:00 - 6:30 PM)

Regular Council Meeting

6:30 PM
Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

This meeting was conducted as a hybrid meeting with in person and remote viewing and participation over video conference utilizing a GoToMeeting platform. Members of the public were invited to view the meeting in person, via the live broadcast on www.cvtv.org and CVTV cable channels 23 or HD 323, or on the City's Facebook page, www.facebook.com/VancouverUS. Public access and testimony on Consent Agenda items and under the Community Forum were also facilitated in person and via the GoToMeeting conference call.

Vancouver City Council meeting minutes are a record of the action taken by Council. To view the CVTV video recording, including presentations, testimony and discussion, for this meeting please visit:
https://www.cvtv.org/vid_link/38195?startStreamAt=0&stopStreamAt=4871

Electronic audio recording of City Council meetings are kept on file in the office of the City Clerk for a period of six years.

Pledge of Allegiance

Call to Order and Roll Call

The regular meeting of the Vancouver City Council was called to order at 6:30 p.m. by Mayor McEnerny-Ogle. This meeting was conducted as a hybrid meeting, including both in person and remotely over video conference.

Present: *Councilmember Harless, Councilmember Fox, Councilmember Paulsen, Councilmember Stober, Councilmember Hansen, Mayor McEnerny-Ogle*

Absent: *Councilmember Perez*

Motion by Councilmember Paulsen, seconded by Councilmember Hansen, and Yes: 6, No: 0, Abstaining: 0, to excuse Councilmember Perez. Absent from vote: Councilmember Perez.

Approval of Minutes

Minutes - July 7, 2025

Motion by Councilmember Hansen, seconded by Councilmember Fox, and Yes: 5, No: 0, Abstaining: 1, to approve the July 7, 2025, Meeting Minutes. Absent from vote: Councilmember Perez.

Councilmember Stober abstained.

Minutes - July 14, 2025

Motion by Councilmember Paulsen, seconded by Councilmember Stober, and Yes: 6, No: 0, Abstaining: 0, to approve the July 14, 2025, Meeting Minutes. Absent from vote: Councilmember Perez.

Community Communication

This is the place on the agenda where the public is invited to speak to Council regarding any matter on the Agenda not already scheduled for Public Hearing. (Separate instructions are provided for offering testimony on Public Hearing when applicable.) This includes the option to testify about Workshops. Members of the public addressing Council are requested to give their name and city of residence for the audio record. Speakers are to limit their testimony to a total of three minutes for all items combined. RCW 42.17A.555 and City Council Policy 100-32 prohibit the use of public facilities to support or oppose any ballot measure, or to support or oppose any candidate for elective office. Any violation of these rules could result in a suspension of speaking privileges during public comment periods at City Council Meetings for 90 days or longer for multiple offenses.

Mayor McEnerny-Ogle opened Community Communication and received testimony from the following community members regarding any matter on the agenda not scheduled for a Public Hearing:

- *Anastasiya Kozlovska, Vancouver*

There being no further testimony, Mayor McEnerny-Ogle closed Community Communication.

Consent Agenda

The following items will be passed by a single motion to approve all listed actions and resolutions. There will be no discussion on these items unless requested by Council. If discussion is requested, the item will be moved from the Consent Agenda and considered separately – after the motion has been made and passed to approve the remaining items.

Council pulled items 3, 6, 8, and 9 for discussion.

Council remanded Item 3 on the Consent Agenda back to staff.

Motion by Councilmember Paulsen, seconded by Councilmember Stober, and Yes: 6, No: 0, Abstaining: 0, to approve Items 1, 2, 4, 5, 7, and 10-12 on the Consent Agenda. Absent from vote: Councilmember Perez.

Motion by Councilmember Stober, seconded by Councilmember Hansen, and Yes: 6, No: 0, Abstaining: 0, to approve Item 6 on the Consent Agenda. Absent from vote: Councilmember Perez.

Motion by Councilmember Fox, seconded by Councilmember Paulsen, and Yes: 6, No: 0, Abstaining: 0, to approve Item 8 on the Consent Agenda. Absent from vote: Councilmember Perez.

Motion by Councilmember Hansen, seconded by Councilmember Stober, and Yes: 5, No: 1, Abstaining: 0, to approve Item 9 on the Consent Agenda. Absent from vote: Councilmember Perez. Councilmember Fox voted No.

1. Bid Award - NE 122nd Ave Sewer and Water Improvements - ITB 25-30

Staff Report: 157-25

Request: On Monday, August 4, 2025, award a construction contract for NE 122nd Avenue Sewer and Water Improvements Project to the lowest responsive bidder, Halme Excavating, Inc., of Battle Ground, WA, at the bid price of $1,117,708.60, which includes Washington State Sales tax, and authorize the City Manager, or designee, to finalize and execute the contract and authorize any legal action necessary to enforce the terms of the same.

Sheryl Hale, Engineering Manager, sheryl.hale@cityofvancouver.us

Motion approved the request.

2. Bid Award - Trunk G2 Sewer Diversion - ITB 25-31

Staff Report: 158-25

Request: On Monday, August 4, 2025,award a construction contract for the G2 Trunk Diversion project to the lowest responsive and responsible bidder, Tapani, Inc of Battle Ground, WA at their bid price of $2,014,933.57, which includes Washington State sales tax, and authorize the City Manager or designee to finalize and execute a contract and authorize any legal action necessary to enforce the terms of the same.

Sheryl Hale, Engineering Manager, sheryl.hale@cityofvancouver.us

Motion approved the request.

3. Contract Amendment - United Rentals for Hygiene Units at Safe Stay and Safe Park Communities - C-101224

Staff Report: 159-25

Request: On Monday, Monday, August 4, 2025, authorize the City Manager, or designee, to execute a contract amendment for rental, waste removal and water fills of restroom/shower units (hygiene) to our safe stay and safe park communities.

Kimbra Ledbetter, Financial Analyst,
Kimbra.Ledbetter@cityofvancouver.us

Council remanded the item back to staff to come back at a later date.

4. Contract Increase – Increase Spending for Bound Tree Medical LLC Contract through BuyBoard 704-23 for First Aid, Emergency Medical, and Athletic Trainer Supplies and Equipment - C-101251

Staff Report: 160-25

Request: On Monday, August 4, 2025, authorize the City Manager, or designee, to continue purchasing First Aid, Emergency Medical, and Athletic Trainer Supplies and Equipment from Bound Tree Medical LLC, under BuyBoard Contract #704-23, up to a maximum of $450,000 for the life of the contract.

Michelle Bresee, Senior Management Analyst,
michelle.bresee@cityofvancouver.us

Motion approved the request.

5. Contract Amendment - Green Janitorial Products and Supplies, Waxie's Enterprises, LLC - WA Department of Enterprise Services - C-101486

Staff Report: 161-25

Request: On Monday, August 4, 2025, authorize the City Manager, or designee, to continue purchasing green janitorial products and supplies from Waxie's Enterprises, LLC, under Washington State Contract #25723, up to a maximum of $800,000 through October 1, 2028.

Brian Taylor, Operations Superintendent,
brian.taylor@cityofvancouver.us

Motion approved the request.

6. Interagency Agreement - City Hall Lighting Upgrade

Staff Report: 162-25

Request: On Monday, August 4, 2025, award a contract and authorize the City Manager, or designee, to finalize and execute a construction contract and any required amendments with Ameresco of Portland, OR for the lighting upgrades at City of Vancouver City Hall at their bid price of $803,027, which includes Washington State sales tax.

Wyatt Jones, Capital Projects Project Manager, Julia Denton, Senior Procurement Specialist, Wyatt.Jones@cityofvancouver.us, julie.denton@cityofvancouver.us

Motion approved the request.

7. Purchase and Sale Agreement - 2575 Falk Road

Staff Report: 163-25

Request: On Monday, August 4, 2025, approve the City's acquisition of the Parcel at 2575 Falk Road, Vancouver, WA 98661 pursuant to the Purchase and Sale Agreement ("PSA"), and authorize the City Manager, or designee, to finalize and execute the Purchase and Sale Agreement in substantially the form attached and to execute all other documents and related agreements necessary to implement the Purchase and Sale Agreement.

Chim Chune Ko, Principal Project Manager, ChimChune.Ko@cityofvancouver.us

Motion approved the request.

8. Resolution Requesting a Voted Measure from the City to be Placed on the Ballot during the General Election on November 4, 2025, Proposing a Property Tax Levy Lid Lift to Fund Police and Public Safety Services

A RESOLUTION of the City Council of the City of Vancouver, Washington, providing for the submission to the qualified electors of the City of Vancouver at the November 4, 2025, General Election of a proposition authorizing the City to increase its regular property tax levy above the limit established in chapter 84.55 RCW to fund police and public safety services; requesting the Clark County Auditor to place the proposition on the November 4, 2025, ballot; and approving matters properly related thereto.

Staff Report: 164-25

Request: On Monday, August 4, 2025, adopt the proposed resolution authorizing a proposition to be put before voters during the November 4, 2025, general election that, if approved by voters, would increase the City's regular

property tax levy limit by approximately $0.15 per $1,000 in assessed value, in addition to the annual 1% increase, to fund police and public safety services as set forth the ballot proposition. The 2026 levy would serve as the basis to calculate future levies.

Lon Pluckhahn, City Manager, lon.pluckhahn@cityofvancouver.us

Motion adopted Resolution M-4346 to approve the request.

9. 2025 Site Specific Rezone - 58th Street

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-22 to R-50 at a 1.6 acre property at 7711 and 7809 NE 58th Street, tax lots 107971000 and 107982000; providing for severability; and establishing an effective date.

Staff Report: 165-25

Request: On Monday, August 4, 2025, advance for consideration of the ordinance approving the 58th Street rezone to R-50, for a second reading and review at the public hearing on August 11, 2025.

Bryan Snodgrass, Principal Planner, bryan.snodgrass@cityofvancouver.us

Bryan Snodgrass, Principal Planner, provided an overview of the item to Council. The applicant's representative, Jayson Taylor of PLS Engineering, provided additional information about the proposal.

Mayor McEnerny-Ogle read the title of the ordinance into the record.

Motion approved the request.

10. 2025 Site Specific Rezone - Bella Grove

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-18 to R-30 at a 6.2 acre property at 13401 and 13309 NE 59th Street, tax lots 107812000 & 107814000; providing for severability; and establishing an effective date.

Staff Report: 166-25

Request: On Monday, August 4, 2025, advance for consideration of the ordinance approving the Bella Grove rezone to R-30, setting the date for the second reading and public hearing for August 11, 2025.

Bryan Snodgrass, Principal Planner,
bryan.snodgrass@cityofvancouver.us

Mayor McEnerny-Ogle read the title of the ordinance into the record.

Motion approved the request.

11. Boards and Commissions Member Removal – Transportation and Mobility Commission (VMC 11.75.020(B)(4))

Request: On Monday, Monday, August 4, 2025, Pursuant to VMC 11.75.020(B)(4) and the TMC Bylaws, remove Michael Moore from membership on the Transportation and Mobility Commission effective August 4, 2025.

Mayor McEnerny-Ogle

Motion approved the request.

12. Approval of Claim Vouchers

Request: Approve claim vouchers for August 4, 2025.

Motion approved claim vouchers in the amount of $30,847,031.01.

Public Hearings
The following item(s) are scheduled for public hearing. Members of the public addressing Council are requested to give their name and city of residence for the audio record. Unless otherwise announced by the Presiding Officer, speakers are to limit their testimony to three minutes for each public hearing.

13. Grayrock Second Pre-Annexation Development Agreement Amendment

A RESOLUTION approving Grayrock second pre-annexation development agreement amendment.

Staff Report: 167-25

Request: On Monday, August 4, 2025, authorize the City Manager, or designee, to finalize and execute the second amendment to the Grayrock Pre-Annexation Development Agreement in substantially the form attached.

Chim Chune Ko, Principal Project Manager, Chad Eiken, Community Development Director, ChimChune.Ko@cityofvancouver.us, chad.eiken@cityofvancouver.us

Chim Chune Ko, Principal Project Manager, Chad Eiken, Community Development Director, provided an overview of the Grayrock Second Pre-Annexation Development

Agreement Amendment.

Council discussed the item briefly with staff.

Mayor McEnerny-Ogle opened the public hearing and did not receive testimony from community members.

There being no testimony, Mayor McEnerny-Ogle closed the public hearing.

14. Section 30 PIT, LLC Second Pre-Annexation Development Agreement Amendment

A RESOLUTION approving section 30 PIT, LLC second pre-annexation development agreement amendment.

Staff Report: 168-25

Request: On Monday, August 4, 2025, authorize the City Manager, or designee, to finalize and execute the second amendment to the Section 30 PIT, LLC Pre-Annexation Development Agreement in substantially the form attached.

Chad Eiken, Community Development Director, Chim Chune Ko, Principal Project Manager, chad.eiken@cityofvancouver.us, ChimChune.Ko@cityofvancouver.us

Chad Eiken, Community Development Director, Chim Chune Ko, Principal Project Manager, provided an overview of the Section 30 PIT, LLC Second Pre-Annexation Development Agreement Amendment.

Council discussed the item briefly with staff.

Mayor McEnerny-Ogle opened the public hearing and did not receive testimony from community members.

There being no testimony, Mayor McEnerny-Ogle closed the public hearing.

Unfinished Business

15. Council Action to Appoint Committees to Prepare Arguments Advocating Voters' Approval and Rejection of the Council's Proposed Amendments to the Vancouver City Charter

Staff Report: 169-25

Request:

1. By motion, formally appoint a committee to prepare arguments advocating voters' approval of the proposed amendment to the City Charter, or, alternatively, defer such action to the County Auditor.

2. By motion, formally appoint a committee to prepare arguments advocating voters' rejection of the proposed amendment to the City Charter, or, alternatively, defer such action to the County Auditor.

Aaron Lande, Assistant City Manager, aaron.lande@cityofvancouver.us

1. Council selected Councilmember Sarah Fox, Janet Landesburg, and Siobhana McEwen to appoint to the Pro Committee.

Motion by Councilmember Harless, seconded by Councilmember Paulsen, and Yes: 6, No: 0, Abstaining: 0, to appoint Councilmember Sarah Fox, Janet Landesburg, and Siobhana McEwen to the Pro Committee. Absent from vote: Councilmember Perez.

2. Council selected Councilmember Ty Stober and Cemal Richards to appoint to the Con Committee. The Council deferred the selection of the third appointment to the County Auditor.

Motion by Councilmember Paulsen, seconded by Councilmember Fox, and Yes: 6, No: 0, Abstaining: 0, to appoint Councilmember Ty Stober and Cemal Richards to the Con Committee. Absent from vote: Councilmember Perez.

16. Council Action to Appoint Committees to Prepare Arguments Advocating Voters' Approval and Rejection of the Council's Proposed Single-Year Levy Lid Lift Property Tax Measure to Support Police and Public Safety Services

Staff Report: 170-25

Request:

1. By motion, formally appoint a committee to prepare arguments advocating voters' approval of the proposed single-year levy lid lift property tax measure, or, alternatively, defer such action to the County Auditor.

2. By motion, formally appoint a committee to prepare arguments advocating voters' rejection of the proposed single-year levy lid lift property tax measure, or, alternatively, defer such action to the County Auditor.

Aaron Lande, Assistant City Manager, aaron.lande@cityofvancouver.us

1. Council selected Jeff Anaya, Martha Baumgarten, and Cindy Reed to appoint to the Pro Committee.

Motion by Councilmember Stober, seconded by Councilmember Paulsen, and Yes: 6, No: 0, Abstaining: 0, to appoint Jeff Anaya, Martha Baumgarten, and Cindy Reed to the Pro Committee. Absent from vote: Councilmember Perez.

2. Council deferred selection of the Con Committee to the County Auditor.

Communications

A. From the Council

B. From the Mayor

C. From the City Manager

Comprehensive Solid Waste Management Plan Update

Will Elder, Environmental Services Manager, Julie Gilbertson, Solid Waste Supervisor, and Sara Schroeder, Clark County Environmental Operations Specialist, discussed the Comprehensive Solid Waste Management Plan Update.

Adjournment

7:50 p.m.

_____
Anne McEnerny-Ogle, Mayor

Attest:

_____
Natasha Ramras, City Clerk

The written comments below are those of the submitter alone and are not representative of the views of CVTV or the City of Vancouver, its elected or appointed officials, or its employees.

From: Jay Renaud
To: City Council
Subject: Testimony Item for Aug 4 Council Meeting
Date: Wednesday, August 6, 2025 2:15:40 PM

You don't often get email from [redacted]. Learn why this is important

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To: City Council of Vancouver

Re: 58th Street Zoning Public Hearing on August 4, 2025.

Dear Commissioners:

During the several decades that we have lived at our address of 7402 NE 58th Street, we have welcomed new residents as the area transitioned from semi-rural to highly urban. We support densification as reasonable and necessary given the growth in Vancouver's population. First to come here were two-storey single family homes followed by a multi-storey public housing project and then row homes. All these led to much more traffic on our now thru street which, despite the welcome installation of speed bumps, has become a GPS choice for drivers from west of Andresen who hasten to access Vancouver Mall and the I-205. Most recently, a just-completed dense project of 18 rental units will add further to the busy traffic load. All of these changes we recognize are proper and inevitable given the many desirable features of this part of Vancouver, and the surrounding neighborhood is now a thriving mix of housing styles, life styles and income levels, density and open space. But now we do reject the proposal to rezone and build to R-50 as proposed by the Sunlight group. This is too radical a shift that would threaten the existing positive qualities of life on this street. Those lots should be developed for housing, but at the existing level of R-22, which would allow a significant increase in housing here without upsetting the level of serenity that now exists. The project just opened at NE 74th Ct. would be a good model to go into those lots, meeting the community need for increased density while retaining the current flavor and advantages of the neighborhood, which with all the additional building, has retained its neighborly qualities.

Jay and Mary Renaud

[redacted]

Vancouver WA 98662

[redacted]

[redacted]

From: inna diduk
To: City Council
Subject: 58th Street Standalone Rezone Written Testimony
Date: Wednesday, August 6, 2025 2:15:46 PM
Attachments: 58th St Rezone Issue, 57th Cir Flooding and Landslide.pdf

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You don't often get email from [redacted] Learn why this is important

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

Please see the following attachment for written testimony addressing the 58th St Rezone, with evidentiary images. Please include the attachment as public testimony. Thank you.

Attn: Regarding 58th St Rezone Proposal

To The City Council:



1. Map orienting to the locations of each property. Properties in rezone proposal are 7711 NE 58th St and 7809 NE 58th St (tax lots 107982000 and 107971000).

Flooding and Landslide Risk

I am writing as a homeowner of the immediately abutting home to the proposed 58th St development, 7708 NE 57th Cir – with shared concern of my neighbors at 7704 and 7709.

One of the important aspects that no one knows or talks about is the huge land grade (abruptly cut-off ground) between the 7711 NE 58th St (above) and the 7708 NE 57th Cir lot (below), and part of the NE 57th Circle itself.

The entire length of the lot proposed for rezone (7711 NE 58th St) has a grade (abrupt cut) immediately bordering 7708 NE 57th Cir, and that length is reinforced with old wood boards on the 7708-home side, and on 57th Circle this drop is supported by an old (32-years-old) concrete slab, which already has deep, large cracks. The drop between the 58th St lot down to 57th Cir properties is between 2.7 ft to 4 ft. Photos are below.

If there is any significant weight load on the soil above—as an example, a 5-story building and over 1 acre of asphalt—land could slide down onto the 7708 home and 57th Circle.



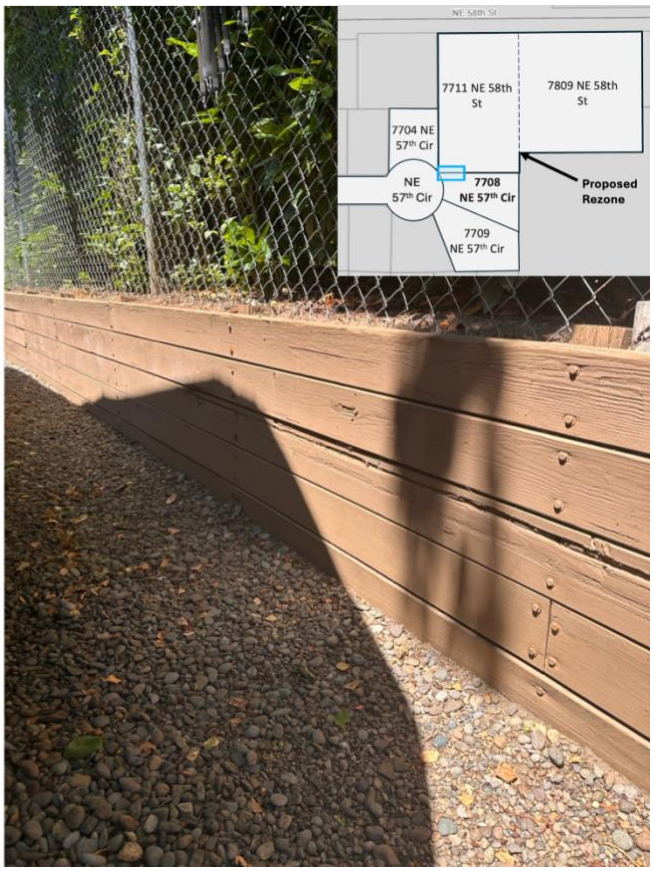


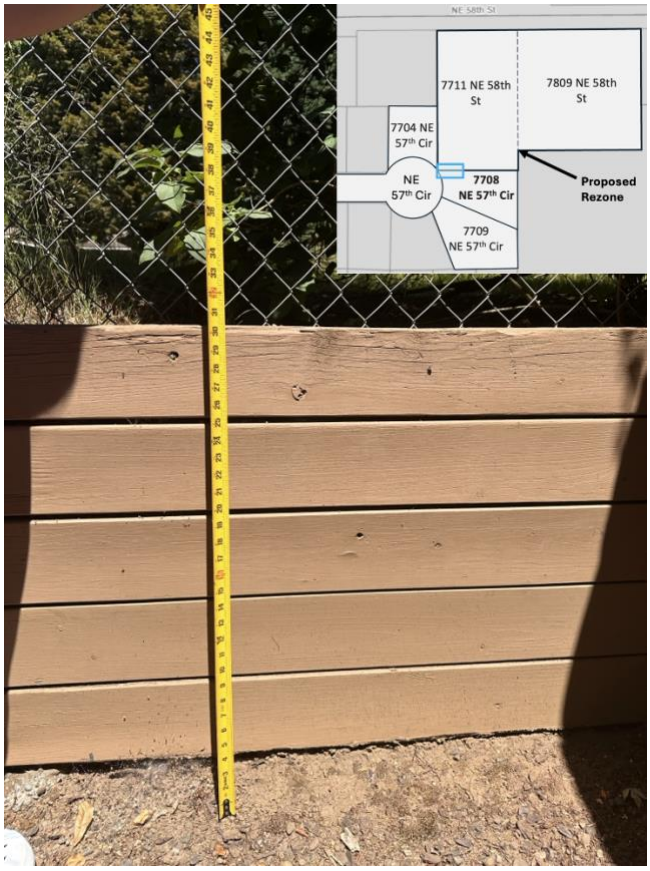


2. Photos of cement crack (32-year-old slab) and height of grade between 7711 58th St and 7704, 7708 NE 57th Cir and right-of-way. Demonstrable risk of flooding and landslide onto 57th Cir.

(Location marked in light blue box, upper right corner).







3. Photos of 2.5-foot-tall grade on 7708 front yard, held by a thin layer of wood for decades.





4. Photos of 2.6-foot-tall grade on backyard of 7708; held by a thin layer of wood for decades. The backyard itself on 7708 starting from grade and down to 7709 is a natural steep downward slope, allowing water to rapidly descend from 7711 flooding both 7708 and 7709. Requires constant maintenance at personal cost of 7708 homeowners as is.

Also, special attention should be paid to the correct drainage of water.

Since the developer plans to fill more than 90% of the entire section 7711 and 7809 NE 58th St with asphalt for a parking lot, all the water from rain (which is constant in our area) will flow down to sections 7708 and below to section 7709, since both sections are at a lower level than 7711. 7704 NE 57th Cir is also located sharply downhill from 7711 and will be similarly impacted.

Therefore, it is very important that the developer must ensure proper water drainage. This would involve leaving as much green set back as possible throughout the entire lot of 7711, at least 30 ft along each downward sloped property line.

Otherwise, lots 7708, 7709, and 7704 and also 57th Circle itself will be chronically flooded with water, which will naturally flow down due to the unevenness of the soil—destroying houses, driveways, and 57th Circle. The bordering soil and wood holding the sharp grade difference will be constantly wet, leading to erosion, soil instability, and mud slipping down

toward 7708 and 57th Cir. With the massive weight of a five-story structure and 1.5 acres of asphalt and cars relying on 32-year-old concrete and thin wooden boards to hold them back, **there is absolutely no reassurance against a landslide.**

Inadequate Infrastructure for Stormwater Runoff (No Stormwater Drains)

Northeast 58th St, up where the proposed rezone is, does not have centralized stormwater drains. All water from Raymond Shaffer Park, 58th St, and other uphill neighborhoods has been draining naturally to our Stormwater Facility and towards 57th Cir. This hasn't been a frequent issue thus far given the rich nature of 7711 and 7809, having lots of permeable green land to absorb this water. Though, a massive impermeable parking lot is planned, and without stormwater drains, many questions demand answers from the developer:

1. Where is the water drainage plan?

2. Does the developer know all the ins and outs of their own and abutting sites?

3. What recourse will 7708, 7709, and the entire NE 57th Cir have in case of flooding and landslide?

4. What protections of financial and, importantly, physical safety will the City ensure for us in planning, construction, and maintenance of any future development up on 58th St?

5. How will the City hold the developers accountable to us?

One vague proposition mentioned in documentation is direction of stormwater runoff underground. Because of the sudden grade difference, what is considered "underground" for 7711 is actually 4 feet *above* ground for 7708 and 57th Circle. All water that is sent "underground" will rush directly onto 7708 and on. Again, there is no assurance against a landslide.

As it stands, R-50 and the 90% asphalted parking lot will realistically have only one path to follow: down. Along its way, it will be chronically flooding our backyards, homes, and 57th Circle's right-of-way, eating away at the circle's pavement and home foundations. "Underground" runoff is equivalent to "directly into your backyards and street" runoff. Water needs to be redirected away from the property to centralized drains, not underground or overflowing onto our land.

Lower density is safer

Regarding flooding and landslide risk, we believe that the R-50 is out of the question on such a small plot size as 7711 and 7809!

More land must be allocated and utilized to manage water runoff with formal infrastructure and expanded setbacks for *public safety*—which must be a priority over density. A smaller density development would de-prioritize a massive parking lot and retain more space for expanded green setback from NE 57th Cir, allowing for the space that would have been asphalted to remain a gorgeous urban forest. The forest and nature will continue to have the function of minimizing risk of flooding and landsliding. Less parking and more green land would also address our desire to maximally preserve hundreds-old evergreens and wildlife-rich parts of 7711 and 7809. A lower density zone is simply required to preserve our circle, forest, safety, and overall landscape of the neighborhood.

Sincerely,

Inna Kozlovska

[redacted] Vancouver WA

From: Dollar, Sarah
To: Dollar, Sarah
Subject: FW: 58th Rezone Staff Report Amendment Request
Date: Monday, August 4, 2025 12:36:13 PM
Attachments: Screenshot 2025-08-04 at 11.01.52 AM.png

8-4 Written Public Testimony

Sarah Dollar | Executive Assistant to the City Council
Pronouns: She/Her/Hers
CITY OF VANCOUVER, WASHINGTON
City Manager's Office (CMO)
Primary (Cell): 360-624-2949 | **Desk:** 360-487-8641
www.cityofvancouver.us

From: Ana From Walnut Grove [redacted]
Sent: Monday, August 4, 2025 11:12 AM
To: City Council <council@cityofvancouver.us>; Snodgrass, Bryan <bryan.snodgrass@cityofvancouver.us>
Subject: 58th Rezone Staff Report Amendment Request

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Bryan,

I hope your morning is going well!

In reading the Staff Report submitted for 58th Rezone August 4th First Reading, it currently states the following:

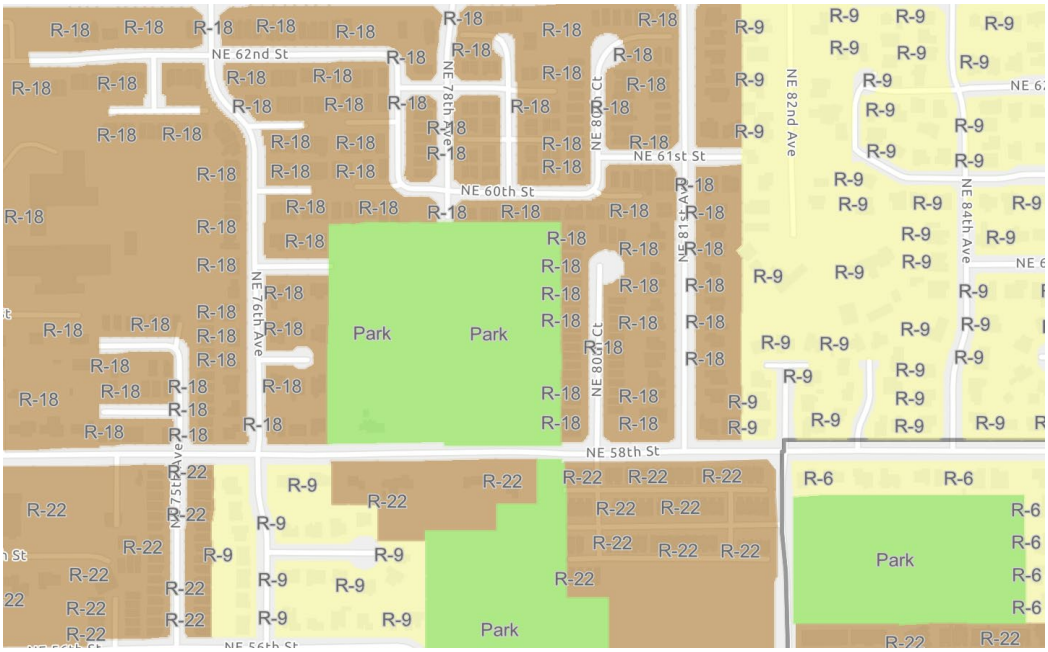
"To the north of the proposal site across NE 58th Street is Raymond Shaffer Park, zoned Park. West are single-family homesites zoned R-22. South and southeast is a City of Vancouver stormwater facility also zoned Park."

I am requesting an amendment for clarity to add to that to the West and Southwest of the mentioned properties are **two** single family homes zoned **R-9**. In total, two bordering properties are R-22, as the report mentions (50+ year old single-family homes), and two are R-9, which the report does not mention. The entire abutting Southwest neighborhood (NE 57th Cir) is also R-9.

For additional context: R-9 also includes two homes to the immediate west of the abutting 7705 NE 58TH ST (7607 and 7613 NE 58th St). Additionally, per GIS data, with the notable exception of duplexes to the east, the vast majority of Walnut Grove is R-9

and R-18. Attached below is a screenshot.

This is important information for the Council to have a complete picture.



Source: https://city-of-vancouver-strategic-plan-dashboard-cityofvancouver.hub.arcgis.com/maps/5a99e283ea6547b696ad54247ac74335/explore?location=45.664128%2C-122.590358%2C15.49

Hope this helps. Thank you for your time and diligence!

Best,
Ana

From:	Dollar, Sarah
To:	Dollar, Sarah; Jones, Wyatt; Taylor, Brian; Moyle, Geraldene
Subject:	FW: 2025.08.04 CoV - City Council - consent item #6 - lighting city hall SR-162-25 - pull from agenda
Date:	Monday, August 4, 2025 12:34:21 PM
Attachments:	Screenshot 2025-08-04 09.34.36.png

8-4 Written Public Testimony

Sarah Dollar | Executive Assistant to the City Council
Pronouns: She/Her/Hers
CITY OF VANCOUVER, WASHINGTON
City Manager's Office (CMO)
Primary (Cell): 360-624-2949 | **Desk:** 360-487-8641
www.cityofvancouver.us

From: Urbane Streets [redacted]>
Sent: Monday, August 4, 2025 10:44 AM
To: City Council <council@cityofvancouver.us>
Cc: Pluckhahn, Lon <lon.pluckhahn@cityofvancouver.us>
Subject: 2025.08.04 CoV - City Council - consent item #6 - lighting city hall SR-162-25 - pull from agenda

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear council members,

I would request pulling today´s consent agenda item #6 regarding the lighting update at City Hall, so as to address some questions and concerns identified below:

I was looking over today´s agenda last night when this consent agenda item (Staff Report: 162-25) regarding the updating of City Hall lighting caught my eye, just wonder if its the 'right thing' to do given the following:
- POOR PUBLIC OPTICS: spending $803,027 (much of it general funds) on lighting City Hall during a time of approaching budgetary belt tightening, continued remote work by staff, and priority programs' competition for general funds;
- WEAK ROI: This scope of work has a very weak ROI, one that will take ¨56 years¨, at a minimum, to reach through energy savings (see table 10 from Ameresco report), BUT if ALL external project costs are included in this calculations, then it will take over 94 years for payback;
- OPTIONS: Did the original staff study evaluate the more cost effective option to retain the existing fixtures with smart LED bulbs without rewiring / ballast modification, especially as many LED fixtures are ´throw away´ once they reach their hour lifespan

(~20k) vs exchanging LED bulbs as they fail, one cannot tell;
- BUDGET IMPACT: the staff memo states there is ¨no¨ budget impact since there are sufficient funds are on hand for the biennium, BUT any of these funds saved through a SOW with a better ROI would be available for other priority capital projects;
- PRIOR COUNCIL REVIEW ´UNKNOWN´: The staff memo included a typo in referring to a reported past council discussion on staff recommendations that cannot be found on the date reference given to the public (6 November 2023), a correct date for SR-197-23 would aid the public to better understand this project´s need and any past council input given to address potential shortcomings; and
- OUT OF DATE: The long period of time since council (and public), as briefed on this staff proposal (~18 months per date in staff report) raises some concern, as costs, tariffs and technology changes rapidly and the findings for SOW may need revisiting.

In closure, as an environmental planner, I recommend pulling this item from agenda for further discussion. AND I also would recommend not entering into this contract today and to revise the scope of work to more economically meet the City´s climate and energy goals, especially given the scope of work¨s full **RETURN ON INVESTMENT of over 94 YEARS.**

Best regards,

- Todd

Todd Boulanger
[redacted]
Vancouver WA 98666

Selected Measures

Table 10. Summary of Selected Measures

	Existing Electric Consumption (kWh/Yr)	Proposed Electric Consumption (kWh/Yr.)	Electric Consumption Savings (kWh/Yr.)	Total Energy Savings ($/Yr.)	Average Annual Maintenance Savings** ($/Yr.)	Total Savings ($/Yr.)	Total Costs* ($)	Estimated Utility Incentives ($)	Est. Net Cost* ($)	Est. Simple Payback (Yrs)
CITY HALL INTERIOR	223,496	104,082	119,413	$6,329	$1,980	$8,309	$481,963	$20,000	$461,963	56

*__IMPORTANT__: Savings and payback estimates based on labor and material costs only. See Section 11 for total cost.
**__NOTE__: The estimated maintenance savings considers only replacement parts; it does not account for labor cost savings.

From: City Council
To: Dollar, Sarah
Subject: FW: Submission: Contact City Council
Date: Tuesday, July 22, 2025 12:02:07 PM

8-4 Written Public Comment

Sarah Dollar | Executive Assistant to the City Council
Pronouns: She/Her/Hers
CITY OF VANCOUVER, WASHINGTON
City Manager's Office (CMO)
Primary (Cell): 360-624-2949 | **Desk:** 360-487-8641
www.cityofvancouver.us

From: City of Vancouver, WA <noreply@cityofvancouver.us>
Sent: Monday, July 21, 2025 4:18 PM
To: City Council <council@cityofvancouver.us>
Subject: Submission: Contact City Council

Contact the City Council

Name
Janis Yarbrough
Email
[redacted]
Phone
3604331633
Address
[redacted] Vancouver, WA 98662 United States Map It
Subject
Share an Opinion of a City project or Initiative
Choose Recipient
All the Council
Message

I regret not attending the public hearing concerning the rezoning of the 7711 and 8109 NE 58th Street properties. Please consider my thinking regarding rezoning of this nature: Rather than having to settle on immediate stop-gap measures like replacing green spaces with cramped, stacked housing benefiting construction and leasing companies, why not put the emphasis of the City's future on living wages as opposed to subsistence wages? Thus, creating a more fair, profitable Vancouver for everyone.
Sincerely.
Janis Yarbrough
[redacted]

From: Wynn Grcich
To: Rebecca Messinger; City Council; Justin Forsman
Subject: Watch "A VERY Interesting New Lawsuit AND Info re Aluminum in Vaccines" on YouTube
Date: Thursday, July 24, 2025 11:44:59 AM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtu.be/RS8i19vPmvI?si=zNWKrlpqXj5caW-2 ....please send to council members and Melnick. Put on public record and confirm that you did. I talked about the aluminum in vaccines. The lawsuits are coming.

From: Wynn Grcich
To: Rebecca Messinger; City Council
Subject: Watch "'They lied, billions were made': Doctor exposes COVID-19 'vaccine lies' at fiery Senate hearing" on YouTube
Date: Wednesday, July 23, 2025 8:28:06 PM

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https://youtu.be/toDki3a_kGk?si=heDcqDWWN5uthEwc. Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; City Council; Ken Vance; Vern Jeremica; Reform Clark County - Rob Anderson
Subject: Watch "Fluoride Deception Mini Documentary water fluoridation and the phosphate mining industry" on YouTube.
Date: Wednesday, July 23, 2025 6:05:32 PM

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https://youtu.be/2aYRIhGzTUY?si=2zAlhgVkPLU_qdnp. PLEASE send to council members and Melnick. Make sure Glenn Young sees this, since he read the book! Put on public record and confirm that you did. Thanks from Wynn

From:	Wynn Grcich
To:	Rebecca Messinger; Victorialeeferrer@gmail.com; City Council; Cemal Richards; Vern Jeremica; Justin Forsman
Subject:	Aluminum Autism Link Buried + Pediatricians Bullying Parents to Vaccinate + Mothers 2B | Childrens Health Defense
Date:	Wednesday, July 23, 2025 3:45:04 PM

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https://live.childrenshealthdefense.org/chd-tv/shows/good-morning-chd/aluminum-autism-link-buried--pediatricians-paid-to-vaccinate--mothers-2b/ Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; City Council
Subject: Clef pallet
Date: Friday, July 18, 2025 10:59:00 AM

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https://www.newsweek.com/mom-given-option-terminate-20-weeks-unprepared-what-happens-next-2100775. My friend's grandchild was born like this in Clark County, last year. MELNECK should give a talk about this and what causes it. I would like the statistics on DOWN SYNDROME in the county, since fluoridation causes that. Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; City Council
Subject: Watch "They drop BIOWEAPON TICK LARVAE from planes" on YouTube
Date: Friday, July 18, 2025 2:36:48 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://www.youtube.com/live/dRAYkeonkak?si=zwCxMBwgn9BMMJQf. Please send to council members and Melnick .ThiS IS A PUBLIC HEALTH CRISIS. PLEASE MAKE AN ANNOUNCEMENT. THANKS FROM WYNN

From: Wynn Grcich
To: Rebecca Messinger; City Council; Victorialeeferrer@gmail.com; Cemal Richards; Justin Forsman; Vern Jeremica
Subject: Watch "Johnson & Johnson Lead Scientist Confesses J&J COVID-19 Vaccine Was "Not Safe and Effective"" on YouTube
Date: Friday, July 18, 2025 2:54:45 PM

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https://youtu.be/h1nr7fprFPc?si=OujpluB1UcHrGwQ_ please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; City Council
Subject: Watch "BABY POWDER COVERUP: J&J Execs Admit Baby Powder Contained "Cancer-Causing Heavy Metals"Ask ChatGPT" on YouTube
Date: Friday, July 18, 2025 5:55:10 PM

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https://youtu.be/JsMPpi8Ux0U?si=wgqz-id5VlorxCWR . Please send to council members and Melnick. Put on public record and Confirm that you did. Melnick should talk about this. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; City Council
Subject: ENDO 2025
Date: Friday, July 18, 2025 11:36:30 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://www.moscone.com/events/endo-2025. This was the UN event on the new Roundup . Diquat. Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn.

From: Wynn Grcich
To: City Council; Rebecca Messinger
Subject: Watch "Doctor EXPOSES Shocking Covid Vax Side Effects at Senate Hearing" on YouTube
Date: Sunday, July 20, 2025 7:52:20 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtu.be/ihXxHM2HTNw?si=4ImqkovjVU2xSpdK. Send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; City Council; cityclerkinfo@cityofbg.org
Subject: Watch "Alpha Gal Syndrome: A Deep Dive into the Red Meat Allergy Epidemic" on YouTube
Date: Monday, July 14, 2025 11:47:14 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtu.be/MKj7o_Cac0Q?si=3WgAlrH2m0YR0xtb .Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: City Council; cityclerkinfo@cityofbg.org; Rebecca Messinger
Subject: Watch "New Guidance on AlphaGal Syndromes GI Implications What to Know" on YouTube
Date: Monday, July 14, 2025 11:53:03 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtu.be/_lolKIX2CCw?si=-HTENgmpol5MlNiA. Share with council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; cityclerkinfo@cityofbg.org; City Council
Subject: Watch "Trump's EPA Chemtrails Report Is A TOTAL WHITEWASH! w/ Dane Wigington" on YouTube
Date: Tuesday, July 15, 2025 12:02:58 AM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtu.be/d8U59BuKjic?si=efHqfRu4Fl13fE4g.. please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Reform Clark County - Rob Anderson; Rebecca Messinger; cityclerkinfo@cityofbg.org; City Council; Victorialeeferrer@gmail.com; Justin Forsman; Harris, Rep. Paul; stephanie.mcclintock@leg.wa.gov
Subject: Watch "SHOCKER! Medical Privacy Under HIPAA Is A Complete Lie! w/ Twila Brase" on YouTube
Date: Tuesday, July 15, 2025 1:43:18 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtu.be/vynl3jaHFpo?si=1SNtgZN8y6iOi2iy .Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From:	Wynn Grcich
To:	Reform Clark County - Rob Anderson; Rebecca Messinger; Harris, Rep. Paul; Lee Merritt MD from The Medical Rebel Commentary; City Council; cityclerkinfo@cityofbg.org; Calvin CLARK
Subject:	Fwd: Trump's DOJ Says EPA Will Appeal Landmark Fluoride Ruling • Children"s Health Defense
Date:	Tuesday, July 15, 2025 2:15:52 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

---------- Forwarded message ---------
From: **Laurel Pascual** <[redacted]>
Date: Tue, Jul 15, 2025, 8:17 AM
Subject: Trump's DOJ Says EPA Will Appeal Landmark Fluoride Ruling • Children's Health Defense
To: Wynn Grcich <[redacted]>, Donna Llamas <[redacted]>, Herbert Chiu <d[redacted]>, Justin Forsman [redacted]>, Jacqueline Pascual Gutierrez [redacted]

https://childrenshealthdefense.org/defender/trump-doj-epa-will-appeal-landmark-fluoride-ruling/

Sent from my iPhone

From: Wynn Grcich
To: Reform Clark County - Rob Anderson; Rebecca Messinger; cityclerkinfo@cityofbg.org; Victorialeeferrer@gmail.com; City Council; Justin Forsman
Subject: Watch "PFAS LAWSUIT UPDATE!" on YouTube
Date: Tuesday, July 15, 2025 3:12:24 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtu.be/1VtRhl337Zc?si=fZbHoT3MT21GQWax Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; cityclerkinfo@cityofbg.org; City Council; Justin Forsman; Reform Clark County - Rob Anderson
Subject: Watch "STOP Using Disinfectant Wipes " on YouTube
Date: Tuesday, July 15, 2025 4:28:12 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://youtube.com/shorts/KkXukX6wcb0?si=LuebJf2E8cR_geOl.Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

From: Wynn Grcich
To: Rebecca Messinger; City Council; Victorialeeferrer@gmail.com; Cemal Richards; Justin Forsman
Subject: Fwd: Summer Sewage Spills & Swimming Advisories
Date: Wednesday, July 16, 2025 2:34:02 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

---------- Forwarded message ---------
From: **The Brockovich Report** <[redacted]>
Date: Wed, Jul 16, 2025, 1:59 PM
Subject: Summer Sewage Spills & Swimming Advisories
To: [redacted]>

Forwarded this email? Subscribe here for more

Hi friends,

Today's newsletter is as much a PSA as it is an update on funding for our water infrastructure. It sounds like simple advice but don't go swimming in water that smells funky, looks discolored, or has visible debris.

Let's dive in!

Upgrade to paid

If you enjoy thought-provoking environmental news with a side of "here's what you can do about it," consider supporting us with a paid subscription for just $6/month. Our mission is to help people stay informed without distracting ads or algorithms and get action steps to make change. At least $1 from all subscriptions go to orgs fighting for clean water and a safe environment.

New Bonus: Erin and Suzanne will be going LIVE tomorrow! Free for all to join and paid subscribers can watch our Substack LIVES after they happen.

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Summer Sewage Spills & Swimming Advisories

What You Need to Know About Pollution In The Water This Summer

ERIN BROCKOVICH AND SUZANNE BOOTHBY

JUL 16



READ IN APP



On hot summer days, many people seek to cool off and have some fun at the nearest beach, lake, or river.

But what happens when a refreshing dip becomes a health hazard?

Across the country, sewage spills and overflows are forcing communities to issue swimming advisories that can turn a sunny day on the water into a public health concern.

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Watch out for Fecal Matter Contamination

In 2024, more than 60 percent of U.S. beaches had potentially unsafe contamination levels, according to a new report published by Environment America's Research & Policy Center.

That means 1,930 out of 3,187 beaches experienced at least one day on which indicators of fecal contamination reached potentially unsafe levels, which means they exceeded EPA's most protective "beach action value," a conservative, precautionary tool states can use to make beach notification decisions. Beaches may also have experienced contamination on days when testing did not take place.

About 1 in 7 beaches, 453 of those sampled, showed potentially unsafe fecal contamination on at least 25 percent of the days on which testing occurred, according to the report.

The Gulf Coast had the largest share of beaches with at least one unsafe day at 84 percent, followed by the West Coast with 79 percent, and the Great Lakes with 71 percent.

This year, during July 4th weekend, a swimming advisory was issued at Rehoboth Beach, a popular beach destination in Delaware. The advisory was put out due to above-average levels of fecal bacteria found in the water during routine testing, according to DNREC officials. Increased levels of bacteria can often show up after periods of heavy rainfall.

Swimming in polluted waters can cause a range of health issues from gastrointestinal

distress to respiratory disease, ear and eye infections, and skin rashes.

Each year, about 57 million cases of illness in the U.S. come from swimming in oceans, lakes, rivers, and ponds, and most of those cases go unreported.

Contaminated water can also trigger health warnings or closures that interfere with our ability to enjoy the water. States, territories and tribes issued more than 7,500 health warnings or closures at U.S. coastal and Great Lakes beaches in 2024, impacting one out of every 15 swimming days, according to EPA data.

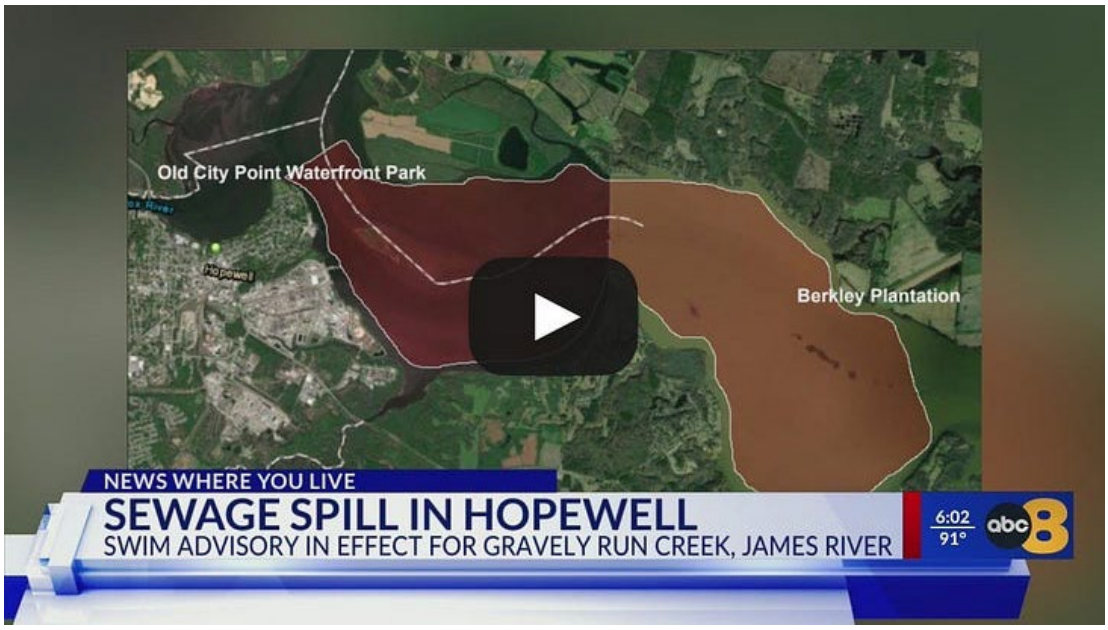
Where does all this pollution come from? One of the main sources is overflow from outdated and deteriorating sewage systems. Gross, right?!

Sewage is a particularly dangerous threat to beach safety because it contains bacteria, viruses, and parasites that can cause disease in humans. Unfortunately, sewage infrastructure around the country is inadequate or in poor repair, enabling raw sewage to find its way into our waterways.

Sanitary sewers (the most common in our country) overflow up to 75,000 times each year in the U.S.

Fecal pollution from livestock production is also responsible for water pollution, especially in areas with factory farms, also known as concentrated animal feeding operations (CAFOs), because of the sheer volume of manure they generate. Lagoons holding waste from hog and dairy farms can also be inundated during heavy rains, carrying their contents into local waterways.

Get a load of this shit.



Failing infrastructure is everywhere but we continue to get distracted by other BS.

Congress is the midst of reconsidering funding for the main federal program that could help reduce sewage overflows. It's called the Clean Water State Revolving Fund (CWSRF).

Last year the EPA reported that this program needs *at least* $630 billion in the next 20 years to provide sufficient treatment to the country's wastewater and stormwater infrastructure.

Sadly, that same fund could face steep cuts under the White House's 2026 budget proposal, decreasing funds to $305 million total to "allow States to adjust to alternative funding sources for their water infrastructure." That's $2.46 billion less than the 2025 budget, or an almost 90 percent reduction.

The National Association of Clean Water Agencies said this proposal puts clean water agencies and public health at risk by "kneecapping the primary water infrastructure financing programs on which local utilities rely."

Now let's talk about what happened this weekend in Virginia. More than a million gallons of raw sewage spilled out of the wastewater treatment facility into the James River thanks to a power failure from faulty wiring.

Sewage spills are not just accidents. They are often the result of aging infrastructure, extreme weather, and overwhelming demand on treatment systems

Hopewell Water Renewal personnel and contractors “successfully restored full operational capacity” by late Saturday afternoon to the facility, repairing the faulty wiring that led to the power failure and ultimately the spill.

A permanent repair is scheduled for July 18, according to a statement from the city spokesperson Ginger Holland. She also confirmed that there was no disruption to residential sewer service, and the drinking water supply remains safe.

While the leak has been contained, the Virginia Department of Health did issue a recreational swimming advisory for Gravely Run Creek and both sides of the James River from City Point down to Berkeley Plantation in Charles City County, meaning people should avoid swimming, wading, and paddle-boating in the water.

In 2024, more than two-thirds of the water treated by Hopewell Water Renewal came from industrial sources, contaminated with different chemicals than domestic sewage. VPM reports that a state Department of Environmental Quality spokespersons said initial reports indicate only the domestic intake was affected, meaning no industrial waste was discharged.

In the 1970s, the sign that greeted anyone driving into the city, read, “Welcome to Hopewell, Virginia, the Chemical Capital of the South.”

In the summer of 1975, Hopewell made national headlines when a toxic pesticide known as Kepone was discovered as the source of a mysterious illness afflicting workers at a local manufacturing plant. The facility had also been dumping tens of thousands of gallons of Kepone waste daily into Bailey’s Creek, causing fisheries in the lower James River to be shut down for up to 13 years afterward. Read more about it here.

Riverkeeper Tom Dunlap with the James River Association told VPM the recent spill shows a continued need to invest in wastewater management.

“We need to not only better invest in our infrastructure, whether it's wastewater infrastructure or otherwise, but also need a little bit more resilient infrastructure,” he

said.

The Department of Environmental Quality is investigating the incident and will be working with the plant to find solutions to prevent future leaks.

Always check local health department websites or social media for current water quality advisories before heading to the beach or a local lake or river.

If you're unsure about water quality, look for warning signs like unusual odors, discolored water, or visible debris. Avoid swimming in areas near storm drains, marinas, or industrial facilities where contamination is more likely.

Tips For If You Come In Contact With Contaminated Water

- Avoid any area of the waterbody where there is water with a foul or chemical odor, dead or dying fish, or discolored water.
- Promptly wash skin with soap and water if you cannot avoid contact with water in the vicinity.
- Rinse or wash items that come in contact with the water, including clothing, fishing gear, life vests, ropes and paddles.

Sewage spills will most likely continue to happen until we put more money to fix our infrastructure and improve our monitoring programs.

Public awareness can help minimize their impact on the water activities we love.

More Considerations To Protect Our Waterways

We must invest in fixing and improving our wastewater infrastructure. This work includes repairs and upgrades to conventional sewage treatment plants and stormwater storage, as well as natural and green infrastructure features such as rain barrels, permeable pavement, urban green space and green roofs; requiring the use of green infrastructure in new development; and protecting natural infrastructure such as riparian areas and wetlands that filter pathogens and other pollutants. Officials should also enforce pollution limits from wastewater systems and ensure proper maintenance of residential septic systems.

We need to prevent manure pollution by enacting moratoriums on new or expanded industrial-scale livestock operations; banning livestock waste lagoons, especially in flood-prone areas; enacting policies to stop manure from factory farms from flowing into waterways upstream from our beaches; and encouraging livestock operations to raise animals on rotational pasture.

We must continue to protect wetlands, which reduce beach contamination by absorbing floodwaters and filtering out pollutants. State and local protections for our remaining wetlands are increasingly urgent after the Supreme Court decision in *Sackett v. EPA* erased Clean Water Act safeguards for many of them.

We can continue to expand and improve beach/river/lake testing to identify waterways where pollution puts public health at risk and ensure the safety of the public.

Any sewage spills near you? Let us know your swimming plans for the summer and stay safe out there!

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From: Wynn Grcich
To: cityclerkinfo@cityofbg.org; City Council; Rebecca Messinger
Subject: FDA Announces it Will Remove Prescription Fluoride Supplements for Children From the Market - Fluoride Action Network
Date: Wednesday, July 16, 2025 12:19:15 PM

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

https://fluoridealert.org/content/fda-announces-it-will-remove-prescription-fluoride-supplements-for-children-from-the-market/ . Send to council members and Melnick. Put on public record and confirm that you did. Thanks from Wynn

Staff Report: 171-25

To: Mayor and City Council
From: City Manager
Date: August 11, 2025

Subject
Contract Amendment - Onsite Sodium Hypochlorite Generation Units C-101827

Key Points

- Amend contract to increase not to exceed value of $1,500,000.
- This agreement with TMG Services, Inc. creates an equipment standard and allows for the purchase of disinfection systems for five years with an option to extend for an additional five years.

Strategic Plan Alignment
Safe and Prepared Community – a safe place to live, work, learn and play

Present Situation
The City owns, maintains, and operates nine water stations for the production and distribution of clean, safe drinking water. These facilities play a vital role in public health by treating water to ensure an adequate chlorine residual, which protects against potential bacteriological contamination within the distribution system. Historically, chlorine gas disinfection has been used effectively and safely at these water stations. However, there are inherent safety risks associated with transporting, storing and handling chlorine gas. In addition, the cost of chlorine gas has increased significantly over the past two decades.

To enhance operator and public safety, and to address economic concerns, the City has committed to phasing out chlorine gas disinfection systems. After extensive research and evaluation, on-site sodium hypochlorite generation was selected as the preferred alternative due to its stable safety record and operational reliability. In alignment with this strategy, four water stations have already been converted to use onsite sodium hypochlorite generation systems under the previous contract C-100302, which expires in August 2025.

In anticipation of this expiring contract, the City issued a Request for Proposals (RFP 57-24) seeking sodium hypochlorite generation equipment proposals and to enter into a new contract. In January 2025, the City entered a contract with TMG Services, Inc. to provide sodium hypochlorite generation system and equipment, operator training, and technical support through a local manufacturer's representative. Initially, the contract was executed at $300,000 in order to have a new contract in place before the existing contract expired. The City anticipates ordering approximately $1,500,000 of selected equipment to support budgeted water station projects.

Under the proposed amendment, all remaining gas chlorination systems, as well as outdated sodium hypochlorite generation systems, will be replaced and upgraded accordingly. The purchase timing will coincide with maturing capital projects. The five-year agreement (extendable to 10 years) covers equipment purchases with a cost increase clause tied to the local consumer price index.

Advantage(s)

1. Eliminates risks associated with gas chlorination systems.
2. Eliminates existing maintenance-intensive, antiquated sodium hypochlorite generation systems.
3. Allows the City to purchase water disinfection equipment within water station capital projects completed in the next 10 years.
4. Price includes training and technical support.

Challenge(s)

None

Budget Impact

Funds for two sodium hypochlorite generation systems are budgeted in the 2025-2026 Water Department Capital Budget. Projects beyond the current biennium are planned within the Water Department Capital Improvement Program. The total anticipated impact will be approximately $1,500,000.

Prior Council Review

Staff Report 123-15 - Purchase of Sodium Hypochlorite Generation Units for Water Disinfection RFP #20-15

Action Requested

On Monday, August 11, 2025, authorize the City Manager, or designee, to finalize and execute Amendment No. 1 to contract C-101827 between the City of Vancouver and TMG Services, Inc. to increase the not-to-exceed amount by $1,200,000 to a total of $1,500,000.

Staff Contact

Mehrin Selimgir, Civil Engineer, Mehrin.Selimgir@cityofvancouver.us

Attachments:

1. Amendment No. 1
2. TMG Services Contract - Executed

Purchase Agreement # C-101827
Amendment No. 1
RFP 57-24 On-Site Sodium Hypochlorite Generation Units

This first amendment ("Amendment") amends the Purchase Agreement number C-101827 ("Agreement") between the City of Vancouver, ("City"), and TMG Services, Inc. a Washington State corporation ("Contractor") and is effective on the last day signed by a Party. Terms that are capitalized but undefined will have the meaning given them in the Agreement.

This Amendment amends the Agreement as follows:

1. **Section 2 Compensation** is amended as follows:

   Payment to the Contractor for the Services described in this Agreement shall not exceed $1,500,000.00 USD.

2. **Entire Agreement**. All unamended terms in the Agreement or any earlier amendment remain in full force and effect. This Amendment, together with the Agreement and any earlier amendments, is the entire agreement between the Parties, and supersedes any other agreement or discussion between them, whether written or oral in nature.

CITY OF VANCOUVER A municipal corporation	CONTRACTOR: TMG Services, Inc.
Lon Pluckhahn, City Manager	Signature
Date	Printed Name /Title
Attest:	Date
Natasha Ramras, City Clerk	
Approved as to form:	
City Attorney, City Attorney's Office	

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CITY OF VANCOUVER
PURCHASE AGREEMENT # C-101827
RFP 57-24 On-Site Sodium Hypochlorite Generation Units

This agreement for the purchase of commodities (hereinafter referred to as the "Agreement") is entered into by and between the City of Vancouver, Washington, a municipal corporation organized under the laws of the State of Washington (hereinafter referred to as the "City") and TMG Services, Inc. (hereinafter referred to as the "Contractor"). The City and Contractor may be collectively referred to herein as the "Parties" or individually as a "Party".

WHEREAS, the City desires to engage the Contractor to provide the commodities requested as described in this Agreement; and

WHEREAS, the City advertised and issued Request for Proposals, numbered 57-24 (hereinafter referred to as the "solicitation") and after evaluation of the Contractor's responsive proposal, found the Contractor to be capable of providing the required commodities; and

WHEREAS, the Contractor represents by entering into this Agreement that it is fully qualified to provide the commodities described herein and warranties and guarantees to the full satisfaction of the City.

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the parties hereto agree as follows:

1. **STATEMENT OF WORK:** The Contractor agrees to provide the City all materials set forth in the scope of work described below, as further described in the City's solicitation, and the Contractor's responsive proposal to the City's solicitation (collectively referred to herein as the "work"), which are each incorporated herein by this reference and made a part of this Agreement as fully set forth herein.

   The Contractor shall provide the City with the sodium hypochlorite generation units and associated services that meet the requirements of this Agreement including the Specification section, Appendix A of RFP 57-24, by reference made a part of this agreement. The chosen equipment will replace the current chlorine gas disinfection equipment, including the City's existing on-site hypochlorite generation (OSHG) units that are in need of replacement.

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The intent of this Agreement is to establish the Contractor and Manufacturer as the chosen chlorination equipment provider as a standard for all future purchases for the next five to ten years or until the City, at its sole discretion, determines to establish a new on-site drinking water disinfection equipment.

This is an as-needed Agreement; orders will be placed with Contractor via signed Purchase Orders on an as-needed basis. The City is not obligated to any minimum or maximum quantities under this Agreement.

2. **TERM OF AGREEMENT:** The term of this Agreement shall commence on Wednesday, January 1, 2025 and continue until Monday, December 31, 2029. The City reserves the right to extend this contract up to five additional years. The maximum term for this Agreement is ten years.

3. **ORDER OF PRECEDENCE**: Where there is a conflict among or between any of these documents, the controlling documents shall be first listed in the following sequence: Amendments to this Agreement; this Agreement; Purchase Orders; the Contractor's responsive proposal to the Cit's solicitation, and the City's solicitation.

4. **GENERAL REQUIREMENTS:** The Contractor, at its sole cost and expense, shall perform and comply with all applicable laws of the United States and the State of Washington; the Vancouver City Charter, the Vancouver Municipal Code (VMC), and ordinance of the City of Vancouver; and rules, regulations, orders, and directives of their respective administrative agencies and officers.

5. **PURCHASE ORDER**: Purchases will be authorized via valid Purchase Orders. Purchases shall correspond with the Purchase Order; any unauthorized advance or excess order is returnable at Contractor's expense.

6. **ORDER QUANITY**: This is an as-needed Agreement; orders will be placed with Contractor via signed Purchase Orders on an as-needed basis. The City is not obligated to any minimum or maximum quantities under this Agreement.

7. **PRICES**: The not to exceed value of this contract is $300,000. The applicable prices are set forth herein and must be valid for one year from the effective date of this Agreement. Price adjustments may be requested for consideration each year thereafter; the City, at its sole discretion may approve that request. Request for price increase shall be supported by the applicable Consumer Price Index for the Seattle-Tacoma-Bellevue area for the immediate previous four quarters.

8. **E-VERIFY**: The Contractor shall enter into and register a Memorandum of Understanding with the Department of Homeland Security E-Verify program within sixty days after execution of this Agreement. The Contractor shall ensure all Contractor employees and any

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subcontractors assigned to perform work under this Agreement are eligible to work in the United States. The Contractor shall provide verification of compliance upon request of the City. Failure by the Contractor to comply with this subsection shall be considered a material breach.

9. **SCHEDULE**: Unless the City requests a change in schedule, the Contractor shall deliver the required commodities and any associated services by the "Delivery Date" stated on the signed purchase order.

   In the event that the equipment and related services are not provided and/or delivered in timelines specified in the Purchase Order, the City reserves the right to reject the product and service and cancel the Purchase Order in its entirety. The City shall bear zero expense due to this breach.

10. **DELIVERY**: All costs referenced must be F.O.B. Vancouver, Washington, Prepaid and Allowed (freight included in the cost), prepaid with all transportation and handling charges paid by the Contractor. Responsibility and risk of loss or damage shall remain with the Contractor until final inspection and acceptance when responsibility shall pass to the City except as to latent defects, fraud, and the Contractor's warranty obligations.

11. **PAYMENT**: Invoices will be paid at net thirty days after the City's receipt and acceptance of the completed commodities and associated services, provided that all appropriate information has been listed on the invoice and necessary forms have been submitted. Payment periods may be computed from either the date of delivery of all materials ordered, the completion of all services, or the date of receipt of a correct invoice, or the date the invoice is received, whichever date is later. No payment shall be due prior to the City's receipt and acceptance of the materials identified in the invoice thereof.

12. **TAXES**: The Contractors shall pay, before delinquency, all taxes, levies, and assessments arising from its activities and undertakings under this Agreement; taxes levied on its property, equipment, and improvements; and taxes on the Contractor's interest in this Agreement, provided, however, that any taxes that apply directly to the sale, such as a state or local sales tax, shall be added to the purchase price set forth in the Purchase Order.

13. **ADJUSTMENTS**: The City at any time may make reasonable changes in the place of delivery, installation or inspection; the method of shipment or packing; labeling and identification; and ancillary matters that Contractor may accommodate without substantial additional expense to the City.

14. **ASSIGNMENT**: This Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any circumstances, be assigned or transferred by either party.

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15. **WAIVER**: The City's failure to insist on performance of any of the terms or conditions herein or to exercise any right or privilege or the City's waiver of any breach hereunder shall not thereafter waive any other term, condition, or privilege, whether of the same or similar type.

16. **RELATION OF PARTIES**: The Contractor, and its subcontractors, agents, employees, or other vendors contracted by the Contractor to provide services or other work for the purpose of meeting the Contractor's obligations under this agreement (collectively referred to as "subcontractors"), are independent contractors performing services for the City and are not employees of the City. The Contractors and its subcontractors shall not, as a result of this Agreement, accrue leave, retirement, insurance, bonding or any other rights, privileges, or benefits afforded to City employees. The Contractor and its subcontractors shall not have the authority to bind City in any way except as may be specifically provided herein.

17. **OWNERSHIP OF RECORDS AND DOCUMENTS**: Any and all work product prepared by the Contractor in the course of performing this Contract shall immediately become the property of the City. In consideration of the compensation provided for by this Agreement, the Contactor herby further assigns all copyright interests in such work product to the City. A copy may be retained by the Contractor. Previously owned intellectual property of the Contractor, and any know-how, methodologies or processes used by Contractor to provide the services or project deliverables under this Contract shall remain property of the Contractor.

18. **PROPRIETARY AND CONFIDENTIAL INFORMATION**: The Parties acknowledge that the City is an "agency" within the meaning of the Washington Public Records Act, Chapter 42.56 RCW, and that materials submitted by the Contractors to the City become public record. Such records may be subject to public disclosure, in whole or part and may be required to be released by the City in the event of a request for disclosure. In the event the City receives a public record request for information that the Contractors has marked as "Proprietary and Confidential" the City shall notify the Contractor of such request and withhold disclosure of such information for not less than five business days, to permit the Contractor to seek judicial protection of such information, provided that the Contractor shall be responsible for attorney fees and costs in such action and shall save and hold harmless the City from any costs, attorney fees or penalty assessment under Chapter 42.56 RCW for withholding or delaying public disclosure of such information.

19. **WARRANTIES**: All products and related services, except as specified below, shall be warranted against faulty workmanship and materials by the Contractor for a minimum period of one year from the date of acceptance by the City. Warranty shall include all costs incurred for repair or replacement that which is damaged by misuse or abuse. This one-year warranty shall in no way affect normal extended or manufacturer's warranty exceeding this one-year period. Contractor warrants that all goods and services furnished under this

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Agreement are new, conform strictly to the specification herein, are merchantable, good workmanship, free from defect, comply with all applicable safety and health standards established for such products, all good are properly packaged, and all appropriate instructions or warnings are supplied. All implied and expressed warranty provisions of the Uniform Commercial Code are incorporated into this Agreement.

20. **TERMINATION FOR CONVENIENCE**: The City may terminate this contract for convenience at any time for any reason deemed appropriate in its sole discretion. Termination is effective immediately upon "notice of termination" given by the City.

21. **TERMINATION FOR CAUSE**: In the event the Contractor is, or has been, in violation of the terms of this Contract, including the Invitation to Bid, the City reserves the right, upon written notice to the Contractor, to cancel, terminate, or suspend this Agreement in whole or in part for default. Termination shall be effected by serving a notice of termination to the Contractor setting forth the manner in which the Contractor is in default. The Contractor will be paid only the contract price for goods rendered in accordance with the manner of performance set forth in this Agreement.

    If it is later determined by the City that the Contractor had an excusable reason for not performing, such as strike, fire, or flood, or events which are not the fault of or beyond the control of the Contractor, the City after setting up a new delivery or performance schedule may allow the Contractor to continue work or treat the termination as a termination for convenience.

22. **OPPORTUNITY TO CURE**: The City at its sole discretion may in lieu of a termination allow the Contractor to cure the defect(s), but providing a "Notice to Cure" to the Contractor setting forth the remedies sought by the City and the deadline to accomplish the remedies. If the Contractor fails to remedy to the City's satisfaction to breach or default of any of the terms, covenants, or conditions of this Agreement within the time stated, the City shall have the right to terminate the Agreement with out any further obligation to the Contractor. Any such termination for default shall not in any way operate to preclude the City from also pursuing all available remedies against the Contractor and its sureties for said breach or default, including but not limited to termination of this Agreement for convenience.

23. **EVALUATION AND COMPLIANCE WITH THE LAW**: The Contractor shall have the authority to control and direct the performance and details of the work described herein. The Contractor agrees to comply with all relevant federal, state, and municipal laws, rules and regulations.

24. **CITY BUSINESS AND OCCUPATION LICENSE**: The Contractor, at no expense to the City, shall be responsible to obtain all necessary licenses, permits, and similar legal authorizations required to perform the work associated with this Agreement. The Contractor will be

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required to hold a city business license if working within Vancouver city limits. The Contractor shall apply for city license via the Sate of Washington Department of Revenue (DOR), Business Licensing Services (BLS), at https://secure.dor.wa.gov/. For application assistance contact DOR BLS at 360-705-6741. For more information about city business license regulations and fees, see www.cityofvancouver.us/businesslicense or call 360-487-8410, option 3.

25. **LIABILITY AND HOLD HARMLESS**: Contractor agrees to indemnify, defend, save and hold harmless the City, its officials, employees and agents from any and all liability, demands, claims, causes of action, suits or judgements, including costs, attorney fees and expenses incurred in connection therewith, of whatsoever kind or nature (including patent infringement or copyright claims) to the extent arising out of, or in connection with, or incident to, the negligent performance or willful misconduct pursuant to this Agreement. This indemnity and hold harmless shall include any claim made against the City by an employee of the Contractor or subcontractor or agent even if Contractor is thus otherwise immune from liability pursuant to the worker's compensation statute, Title 51 RCW, except to the extent that such liability arises from the concurrent negligence of both the City an the Contractor, such cost, fees, and expenses shall be shared between the City and the Contractor in proportion to their relative degrees of negligence. Contractor specifically acknowledges the provisions contained herein have been mutually negotiated by the parties and it is the intent of the Parties that the Contractor proved the broadest scope of indemnity permitted by RCW 4.24.115. The Contractor is an independent contractor and responsible for the safety of its employees.

26. **INSURANCE**: The Contractor shall obtain and keep in force during the entire term of this agreement, liability insurance against any and all claims for damages to person or property which may arise out of the performance of this Agreement whether such work shall be done by the Contractor, subcontractor or anyone directly or indirectly employed by either the Contractor or a subcontractor.

    All liability insurance required herein shall be under a Comprehensive or Commercial General Liability and business policies.

COVERAGE	LIMITS OF LIABILITY
I. Commercial General Liability	
Policy shall include Bodily injury, Property Damage, Personal Injury and Broad Form Contractual Liability	
Each Occurrence	$1,000,000
General Aggregate Per Occurrence	$2,000,000
Products & Completed Operations Aggregate	$2,000,000
Personal and Advertising Injury	$1,000,000

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Blanket Contractual Liability	$1,000,000
II. Commercial Automobile Liability	
Policy shall include Bodily Injury and Property Damage, for any owned, hired, and/or non-owned vehicles used in performance of the services required under this agreement.	
Combined Single Limit	$1,000,000
III. Worker's Compensation (applicable to the State of Washington)	
Per Occurrence	
Employer's Liability	$1,000,000
Disease Each Employee	$1,000,000
Disease Policy Limit	$1,000,000
Each Claim	$1,000,000
Annual Aggregate	$1,000,000

In addition to the coverage limits listed above the Contractor's insurance must all contain the following:

a. City Listed as an Additional Insured – The City of Vancouver, its Agents, Representatives, Officers, Directors, Elected and Appointed Officials, and Employees must be named as an additional insured. The required Additional Insured endorsements shall be at least as broad as ISO GC 20 10 11 85, or its equivalent CG 20 10 07 04 and CG 20 37 07 04 must be included with the Certificate of Insurance.

b. Either the Commercial General Liability or the Worker's Compensation policy must be endorsed to include "Washington Stop Gap" insurance. The limits and aggregates referenced must be indicated on the certificate.

c. Employment Security – The Contractor shall comply with all employment security laws of the Sate in which services are provided and shall timely make all required payments in connection therewith.

d. The City of Vancouver shall be listed on the Certificate as the Certificate Holder.

e. Coverage Trigger - This insurance must be written on an "occurrence" basis. This must be indicated on the Certificate.

Contractor shall provide evidence of all insurance required, at the City's request, by submitting an insurance certificate to the City on a standard "ACORD" or comparable form.

All policies shall be issued by an insurance company licensed to do business in the State of Washington. The City of Vancouver may inspect all policies and copies shall be provided to the City upon request.

27. NOTICES: All notices which are given or required to be given pursuant to this Agreement shall be hand delivered, mailed postage paid, or sent by electronic mail as follows:

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For the City:
Anna Vogel
City of Vancouver
415 W 6th Street
PO Box 1995
Vancouver, WA 98668-1995
Email: anna.vogel@cityofvancouver.us

For the Contractor:
Brittany Apodaca
TMG Services, Inc.
3216 E Portland Ave
Tacoma, WA 98404
Email: brittany@tmgservices.net

Either Party may change the designated contact or any information listed above by giving advance notice in writing to the other party.

28. **AMENDMENTS**: All changes to this Agreement, including changes to the statement of work and compensation sections, must be made by written amendment and signed by all Parties to this agreement.

29. **SCOPE OF AGREEMENT**: This Agreement incorporates all the agreements, covenants and understanding between the parties hereto and are merged into this written Agreement. No prior agreement or prior understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless set forth in the is Agreement.

30. **RATIFICATION**: Acts pursuant to this Agreement but prior to its effective date are hereby ratified and confirmed.

31. **GOVERNING LAW/VENUE**: This Agreement shall be deemed to have been executed and delivered within the State of Washington, and the rights and obligations of the parties hereunder shall be construed and enforced in accordance with, and governed by, the laws of the State of Washington without regard to the principles of conflict laws. Any action or suit brought in connection with this Agreement shall be brought in the Superior Court of Clark County, Washington.

32. **COOPERATIVE PURCHASING**: The Washington State Interlocal Cooerpation Act, Ch. 39.34 RCW, authorizes public agencies to cooperatively purchase goods and services if all parties agree. By having executed this Agreement, the Contractor agrees that other public agencies may purchase goods and services under this Agreement at their own cost and without the City incurring any financial or legal liability for such purchases. The City agrees to allow other public agencies to purchase goods and services under this solicitation or contract, provided that the City is not held financially or legally liable for purchases and that any public agency purchasing under this Agreement file a copy of this invitation and Agreement in accordance with RCW 39.34.040.

Docusign Envelope ID: 7560FA4D-36F3-4AFC-9C4C-0ACBEC92707D

33. **DEBARMENT**: The Contractor certifies that it is not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from covered transactions by any Federal, State or local department agency.

34. **NONDISCRIMINATION**: During the term of this Agreement, the Contractor agrees as follows: The Contractor will not discriminate against any employee or applicant for employment because of creed, religion, race, color, sex, marital status, sexual orientation, political ideology, ancestry, national origin, or the presence of any sensory, mental or physical handicap, unless based upon a bona fide occupational qualification. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their creed, religion, race, color, sex, national origin, or the presence of any sensory, mental or physical handicap. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment adverting layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

35. **BINDING EFFECT**: The provisions, covenants, and conditions in this Agreement apply to bind the Parties, their legal heirs, representatives, successors, and assigns.

36. **REMEDIES CUMULATIVE**: Remedies under this Agreement are cumulative; the use of one remedy shall not be taken or exclude or waive the right to use another.

37. **SEVERABILITY**: Any invalidity, in whole or in part, of any provision of this Agreement shall not affect the validity of any other of its provisions, unless the result of the same would clearly be contrary to the overall intent of the Parties in entering into this Agreement.

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The undersigned, as authorized representatives of the City and Contractor respectively, agree to all of the terms and conditioned contained in this agreement, as of the dates set forth below.

CITY OF VANCOUVER
A municipal corporation

DocuSigned by:
Anna Vogel
7C05B7FF675849B...
Anna Vogel, Procurement Manager

1/23/2025
Date

Attest:

DocuSigned by:
Natasha Ramras
493E940414AF4BD...
Natasha Ramras, City Clerk

Approved as to form:

Signed by:
Tricia Juettemeyer
E1935B9517E94D2...
Tricia Juettemeyer, Assistant City Attorney

CONTRACTOR:
TMG Services, Inc.

Signed by:
Brittany Apodaca
9CB11441BB184F5...
Signature

Brittany Apodaca — Inside Sales
Printed Name /Title

1/21/2025
Date

Docusign Envelope ID: 7560FA4D-36F3-4AFC-9C4C-0ACBEC92707D

Exhibit A
Pricing

OSEC Systems

Quantity	Description	Price
1	20 pounds free chlorine – OSEC L 20	$60,235
1	40 pounds free chlorine – OSEC L 40	$97,505
1	60 pounds free chlorine – B-Pak 65	$113,095
1	80 pounds free chlorine – B-Pak 130	$122,300
1	100 pounds free chlorine – B-Pak 130	$122,300
1	150 pounds free chlorine – B-Pak 195	$140,080
1	200 pounds free chlorine – B-Pak 260	$157,660

Additional Items

Quantity	Description	Price
1	Electrode Cleaning System – Mobile Acid Cart	$3,590
1	Gas Monitors – ATI Model D12 Digital Gas Transmitter	$4,050
1	Dilution Blowers – B-Pak - Cincinnati Blower	$3,795
1	Dilution Blowers – OSEC L – Cincinnati Blower	$975
1	Training – Classroom & Field (1 day) – Prevailing Wage	$2,700

A RESOLUTION adopting the Clark County Comprehensive Solid Waste Management Plan.

Staff Report: 172-25

To: Mayor and City Council
From: City Manager
Date: August 11, 2025

Subject
Resolution Adopting the Clark County Comprehensive Solid Waste Management Plan

Key Points

- Clark County (County) is the lead agency and is responsible for updating and maintaining a comprehensive solid waste management plan (CSWMP or Plan) for solid waste activities within the region, inclusive of the City of Vancouver (City).
- This plan update and work is required by chapters 70A.205 and 70A.300 RCW with guidance from the Department of Ecology (Ecology).
- City staff and our Solid Waste Advisory Commission (SWAC) representative have been engaged for three years with the County in the process of developing the Plan which establishes a five-year (2025-2030) implementation horizon covering waste reduction, diversion of recycling and organics, collection, transfer & disposal, and household hazardous waste.
- The proposed plan establishes a process for updates that was missing from previous plans.

Strategic Plan Alignment
Housing and Human Needs – meeting basic needs and partnering with organizations to support the community

Climate and Natural Systems – environmental stewardship and efforts to address climate change to ensure a sustainable future

High Performing Government – a government that is reliable, fiscally responsible, equitable, and open to compromise

Present Situation
Background
The County is required to plan for the region's solid waste system pursuant to chapters 70A.205 and 70A.300 RCW with guidance from Ecology.

Pursuant to chapter 70A.205 RCW, county-level solid waste plans require periodic review and adoption. The current plan was adopted in 2015; a complete revision is appropriate to reflect changes in guidance, regulations and new laws since its last adoption. The plan also addresses population and waste tonnage growth and includes new or updated service contracts.

The plan is a key document that provides vision and direction via recommendations regarding the suite of existing urban waste services offered, as well as identifying the needs and gaps for residents,

businesses, and self-haul generators across the region. The plan also provides key recommendations based on future growth, resiliency and fiscal oversight, resulting in continuity in service over the next five years.

The County Council and seven cities/town councils are anticipated to adopt the draft plan and practices as recommended by SWAC. As the lead agency, the Clark County Council will be responsible for guiding solid waste policy during this five-year plan.
A coordinated solid waste planning effort is an efficient way for both the City and County to gain near and long-term solid waste system planning and results in a more convenient and efficient locally managed regional system.

Plan Updates
This draft plan provides the community with goals and policies for implementing, evaluating, and modifying existing or future solid waste management programs. The plan includes updating descriptions of existing facilities, service conditions, and programs to reflect progress and accomplishments over the previous years. It also contains policies and practices reviewed by the SWAC, City staff, and representatives of the seven cities and towns in the region, as well as interested community members, solid waste industry representatives, and other stakeholder groups.

The draft CSWMP covers subjects such as waste reduction, recycling, organics, various waste streams, and collections, as well as functionality areas including enforcement, funding, and finance. The plan also addresses critical items needed for future decision-making on implementing improvements to the solid waste system and recommendations or actions in Clark County. Highlights include:

- **Promotes sustainable practices** for governments, non-governmental organizations, businesses, and residents.
- **Reviews pertinent regulations** and other management plans.
- **Guidelines for the development** of programs, policies, and operating plans.
- **Planning for solid waste infrastructure** and operations, including facility siting criteria and process.
- **Background information to support facility permitting** decisions by Clark County Public Health and other state and local government agencies.
- **Technical support and justification** for grant applications, capital project fund requests, budget planning, and future programs.
- **Identifies opportunities for collaboration** with others in the region for collection, recycling services and potential ownership and operation of transfer facilities.

The SWAC, the Regional Solid Waste System Steering Committee (RSWSSC), and the public were involved through review of draft chapters, public comment periods (August 30, 2024) and presentations to stakeholder groups. This draft plan incorporates feedback from the public comment period and multiple Ecology reviews, the County's Contamination Reduction Outreach Plan and Moderate Hazardous Waste Management Plan, and provides streamlined recommendations and actions for future policies.

Next Steps
City staff recommend City Council approve the proposed resolution adopting the CSWMP. Upon City Council's approval, this draft plan is scheduled to be brought to Clark County Council in September for final review and motion consideration. Upon final approval by the County Council, all resolutions of adoption and the final draft CSWMP must be submitted to Ecology before the plan can be formally

adopted.

Following the adoption of the plan, City staff will focus on updating the existing Interlocal Agreement for Planning, which expires in early 2027.

Advantage(s)

- The plan will guide the work conducted by the County and support the City's Solid Waste program, requiring coordination between the City and regional partners to achieve Plan recommendations and actions.
- This plan adequately addresses city policy, program, and project objectives and desired outcomes in the Climate Action Framework and six-year Strategic Plan.
- Continues a legacy approach for solid waste planning activities led by the County and requires that the County plan for the needs of the entire region, inclusive of all seven incorporated cities, a town, and unincorporated or urban growth areas.
- This Plan fulfills commitments made in the existing interlocal agreement for planning and acts as a connector binding the fourth-largest incorporated city in the state to a County-led CSWMP and allows the County sufficient time to refine and complete a final Plan.

Challenge(s)

By continuing to participate as a regional partner in the County-led planning process, we have limited our options to develop and direct our own independent and separate solid waste system; however, undertaking an independent city-led approach would be more costly and duplicative.

Budget Impact

Adoption of the updated CSWMP and its recommendations does not commit the City to any programs or approaches that are not already included in the City's solid waste program budget for 2025-26.

The County, acting as the lead agency, is required to cover the cost of updating the plan pursuant to the City and County Interlocal Agreement for Solid Waste Planning and the County receives funding from state grant funds and regional solid waste fees for this work.

Prior Council Review

- August 14, 2023 – Workshop
- March 2024 – Consent for ILA for Solid Waste Planning
- August 4, 2025 – Council City Manager Update

Action Requested

On Monday, August 11, 2025, finalize and approve the resolution for the Clark County Comprehensive Solid Waste Management Plan.

Staff Contact

William Elder, Environmental Services Manager, Julie Gilbertson, Solid Waste Supervisor, Will.Elder@cityofvancouver.us, julie.gilbertson@cityofvancouver.us

Attachments:

1. Resolution of Adoption Comprehensive Solid Waste Management Plan - 2025

2. Proposed Comprehensive Solid Waste Management Plan
3. CSWMP August 4, 2025 Memo
4. Interlocal Agreement for Planning

8/11/2025

RESOLUTION NO. M- [Resolution Number]

A RESOLUTION adopting the Clark County Comprehensive Solid Waste Management Plan.

WHEREAS, chapter 70A.205 RCW requires each city and county within the State to prepare and periodically revise a coordinated and comprehensive Solid Waste Management Plan (Plan); and

WHEREAS, the City of Vancouver (City) and other cities and town of Clark County (County) previously adopted similar plans in 1973, 1981, 1985, 1994, 2003, 2008, and 2015; and

WHEREAS, the 2015 Plan must be updated pursuant to chapter 70A.205 RCW to include changes that have occurred within the County, as well as changes to state and federal regulations; and

WHEREAS, in 2023 and 2024, the Cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, and the Town of Yacolt entered into Interlocal Agreements with the County for the purpose of updating the Plan; and

WHEREAS, the City has delegated the preparation of the Plan to the County through the Interlocal Agreement for Planning dated April 2, 2024; and

WHEREAS, the process for updating the Plan complied with chapter 70A.205 RCW, and the terms of the Interlocal Agreement have been fulfilled; and

WHEREAS, the City has been represented throughout the planning process; and

WHEREAS, the Solid Waste Advisory Commission has recommended that the Clark County Council adopt this proposed Plan.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY OF VANCOUVER:

That the City of Vancouver adopts the Clark County Comprehensive Solid Waste Management Plan for the years 2025-2030, and attached as Attachment A.

Section 1. **Findings**. The above recitals are adopted as legislative findings of Vancouver's City Council.

Section 2. City Council adopts Attachment A, the 2025-2030 Comprehensive Solid Waste Management Plan.

Section 3. This Resolution is effective immediately upon adoption.

ADOPTED at a Regular Meeting of the Vancouver City Council this _____, of _____, 20__.

_____
Anne McEnerny-Ogle, Mayor

Attest:

_____
Natasha Ramras, City Clerk

Approved as to form:

_____
Nena Cook, City Attorney

Attachment A
Proposed Comprehensive Solid Waste Management Plan



FOR YEARS
2025–2030

PENDING ADOPTION

COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

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ES

EXECUTIVE SUMMARY

Introduction

The purpose of the solid waste management activities in Clark County is to protect and preserve human health, environmental quality, and natural resources through efficient, cost-effective programs and services. This Comprehensive Solid Waste Management Plan (CSWMP) was prepared to provide a guide for solid waste activities in Clark County. The CSWMP addresses recent changes while also looking forward to the future needs of the county.

The contents of this CSWMP have been prepared in accordance with the requirements and intent of chapter 70A.205 RCW. This plan also incorporates the county's Moderate Risk Waste Management Plan as required by RCW 70A.300.350, and the Contamination Reduction and Outreach Plan (CROP) as required by RCW 70A.205.045. The CSWMP was developed through a team effort by Clark County, the cities and town within Clark County, the Solid Waste Advisory Commission (SWAC), and the Regional Solid Waste System Steering Committee (RSWSSC).

The CSWMP is divided into chapters which discuss the different components of the solid waste system. The chapters contain an assessment of existing conditions and recommended actions. The final chapter of this CSWMP outlines an implementation schedule that lists recommended actions and timeframes for implementation. This CSWMP also coordinates the county's solid waste system and programs with the ***2021 State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics, Use Food Well Washington***, and the ***Washington State Recycling Contamination Reduction and Outreach Plan***.

During development of this plan, the ***hierarchy for solid waste management*** as identified by the United States Environmental Protection Agency (EPA) was referenced. Considering most environmental impacts related to solid waste management and disposal methods occur long before a material's end of life, this version of the Clark County CSWMP places emphasis on priorities which place energy recovery at a higher hierarchy level than the EPA. The county will continue to emphasize "reduce, reuse & recycle" in its programs and messages while emphasizing composting and reducing food waste in accordance with updated legislations. Note at the time of this plan revision, the EPA was in the process of reviewing the waste hierarchy.

Overview of changes

Many of the changes to chapters and recommendations are a result of condensing and streamlining the information in this CSWMP. For example, internet links have been included as references to reduce language and appendices; duplicate recommendations in various chapters have been eliminated; more general recommendations have been removed to focus on recommendations that are action oriented and quantifiable. Many of the recommendations are ongoing.

Some of the changes include:

- The inclusion of Chapter 2: The planning area which was omitted in the previously approved version.
- Organizing the plan to meet current Washington Department of Ecology table of contents structure recommendation to ensure all key topics are covered.
- Expanding Chapter 6: Organics to incorporate the guidance outlined in the Use Food Well Washington Plan of 2021.
- Outlining the need for a fourth transfer station and siting criteria.
- Further discussing ownership options for the three existing transfer stations.
- Creating a separate chapter to consolidate all implementation plans in one section.





1

BACKGROUND AND ADMINISTRATION

1.1 Introduction

The Revised Code of Washington (RCW) 70A.205.045 requires each county within the state of Washington to prepare a coordinated, comprehensive solid waste management plan to arrange for solid waste and materials reduction, collection, and handling as well as management of services and programs throughout the state designed to meet the unique needs of each county. Solid waste includes all putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, and recyclable materials. The Clark County Comprehensive Solid Waste Management Plan (CSWMP) proposes strategies for managing Clark County's solid waste over the next several years, with consideration for what changes may occur over the next 20 years.

City councils throughout Clark County enter into Interlocal Agreements (Appendix D) that identify Clark County as the agency responsible for the coordination and development of the CSWMP as the county works towards maintaining a regional solid waste system. This CSWMP was developed in reference to applicable state and local regulations (Appendix F). The revision process updates were determined under the guidance and recommendations of the Solid Waste Advisory Commission (SWAC), the Regional Solid Waste System Steering Committee (RSWSSC), Washington Department of Ecology (Ecology), representatives of the six cities and one town, interested citizens, solid waste industry representatives, and others.

The CSWMP addresses critical items needed for future decision-making on implementing improvements to the solid waste system in Clark County by:

- Promoting sustainable practices for governments, nongovernmental organizations, businesses, and residents.
- Reviewing pertinent regulations and other management plans.
- Providing guidelines for the development of programs, policies, and operating plans.
- Planning for solid waste infrastructure and operations (including facility siting criteria and process).
- Providing background information to support facility permitting decisions by Clark County Public Health (CCPH) and other state and local government agencies.
- Offering technical support and justification for grant applications, capital project fund requests, budget planning, and future programs.
- Collecting and maintaining system data.
- Serving as education and information to the public.
- Identifying and presenting opportunities for collaboration with statewide agencies and others in the region for collection and recycling services, including potential ownership and operation of facilities.

Clark County Solid Waste and Recycling programs are administered through CCPH and are comprised of Solid Waste Operations (SWO) and Solid Waste Education and Outreach (SWEO). The purpose of solid waste management activities in Clark County is to protect and preserve human health, environmental quality, and natural resources through efficient and effective community-based programs and services.

This CSWMP supersedes all previously adopted solid waste management plans in Clark County. Through adopting this plan, the participating jurisdictions in Clark County guide solid waste policy into the future.

1.2 Principles of the planning vision

The CSWMP intends to establish a viable and functional regional system for the proper management of solid waste in Clark County, both now and in the future. The CSWMP incorporates the following vision, mission, and values:

Vision

A future where less waste is generated.

Mission

To provide equitable services and infrastructure that equip everyone to sustainably manage waste.

Values

- **Community:** We collaborate with community members and partners to educate, inspire, and foster accessible use of the solid waste system.
- **Environment:** We recognize the natural environment is our life support system. Protecting it is critical to our health and resiliency.
- **Equity:** We respect all people and serve with transparency to provide unbiased and fair services.
- **Quality:** We build efficient and effective programs and services using the best available science and research.

1.3 Goals and objectives

Our vision is supported by goals focused on our values including community, environment, equity, and quality services. This collection of vision, values, and goals creates the framework that guides our work. The goals outlined in the CSWMP are to:

Community

- Encourage collaborative and coordinated efforts among government agencies, residents, and the private sector for managing solid wastes.
- Proactively engage and collaborate with impacted community partners (including businesses, residents, and agencies) to make informed decisions and improve our recycling and solid waste system.
- Promote sustainable actions and behaviors that ensure resources and options for future generations.

Environment

- Protect the environment and human health by reducing greenhouse gas emissions and delivering solid waste services.
- Promote source reduction and improve recycling effectiveness.
- Meet goals set by Ecology for food waste management and waste reduction strategies.

Equity

- Make the solid and hazardous waste system more accessible and equitable for all Clark County customers.
- Achieve a reasonable balance among public convenience, public expenses, public health, and the environment.
- Ensure any communications regarding the solid waste management system are clear and accessible to all people.
- Establish meaningful topics of education that enable participants to better understand and engage in the solid and hazardous waste system.

Quality

- Maintain a solid waste system that supports economic vitality while conserving natural and fiscal resources for future generations.
- Maintain accurate waste stream measurement, monitoring, and dissemination to increase transparency.
- Develop plans and contracts for securing adequate funding and resources to build, operate and maintain a solid and hazardous waste management system for the next 20 years.
- Develop systems and strategies for prioritizing what services should be provided, how they are to be funded and resourced, and recognize and respond quickly to rising costs due to unforeseen conditions.
- Regularly assess and identify future system expansion needs including potential future public ownership of the transfer stations, improve services, and address impacts.
- Increase local control of solid waste management.

1.4 Required content

This CSWMP was developed in reference to the ***Guidelines for Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions*** established by Ecology to follow RCW 70A.205.045. Within the guidelines, submittal requirements are outlined including the following:

Interlocal agreements

Interlocal agreements for planning the CSWMP have been approved and signed by all participating jurisdictions in the Clark County regional solid waste system (Appendix D). The interlocal agreements outline the understanding that a regional system is better for the residents of Clark County. Further, the agreements identifies Clark County as the lead agency who is responsible for drafting, coordinating, and distributing the CSWMP.

Resolution of adoption

Prior to submitting the CSWMP to Ecology for final review and approval, it must be adopted by all participating jurisdictions and the planning jurisdiction. The signed resolution for each participating jurisdiction is provided in Appendix E. Note that if a jurisdiction refuses to adopt the plan and all efforts to resolve the conflict are exhausted, the situation must be explained in writing and provided to Ecology with the signed resolutions. For jurisdictions that opt out of the regional plan, they are responsible for developing and adopting their own solid waste management plan and submitting for Ecology approval prior to separating from the regional plan.

Programmatic environmental impact statement

The Washington State Environmental Policy Act (SEPA) process identifies and analyzes environmental impacts that are associated with private projects, constructing public facilities, or adopting regulations, policies, and plans. Determination of non significance has been issued with this CSWMP. The determination of non significance and the SEPA Environmental Checklist for this CSWMP are in Appendix B. This checklist evaluates the environmental impacts associated with implementing the programs or the non-site-specific aspects of the programs and facilities recommended in the plan.

Washington Utilities and Transportation Commission cost assessment questionnaire

A cost assessment has been prepared for submission to the Washington Utilities and Transportation Commission (WUTC) as part of the CSWMP. This cost assessment is required by RCW 70A.205.065 and provides the WUTC with an opportunity to review and comment on the impacts of implementing the CSWMP's programs on solid waste collection rates. The cost assessment is presented in Appendix C.

Involvement of the Solid Waste Advisory Commission

The role of the Solid Waste Advisory Commission (SWAC) is to advise the county council on solid waste matters; to comment on rules, policies, and ordinances; to assist in the development of plan updates; to serve as a means for citizens, industry, or other bodies and individuals to participate in solid waste planning; and to advise on any other solid waste matters, as directed by the county council.

As required by RCW 70A.205.110, the SWAC has reviewed and actively participated in the preparation of the CSWMP. During the most recent revision of the CSWMP, updates, revisions, discussions, and presentations occurred in the meetings held on February 3, May 5, August 4, September 1, September 22, October 6, November 3, and December 2 of 2022 and continued on to April 6, May 4, June 1, August 3, and November 2, of 2023. Additionally, SWAC members were given the opportunity to participate through an initial public commenting period ranging from July 2023 to the end of October 2023. Results of the comments were shared in the November 2023 SWAC meeting. In 2024, significant efforts were made improving the visual design and restructuring of the plan. Updates were provided in the February and May 2024 meetings. SWAC was further invited to participate in the public comment period for the preliminary draft submitted to Ecology. For meeting agendas and minutes, please review the ***Solid Waste Advisory Commission webpage***. Public comments are provided in Appendix S.

Review of pertinent regulations and ordinances

Throughout the chapters of this document, specific relevant regulatory code is discussed. The most pertinent regulations are those governing solid waste itself. In the development of this updated CSWMP, both state and local regulations that specifically address solid waste and recycling facility operation, design and siting were reviewed in the context of the operation of existing facilities and construction of future facilities. Principle rules, statutes and ordinances include:

- ***Chapter 173-350 WAC, Solid Waste Handling Standards***
- ***Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills***
- ***Chapter 70A.205 RCW, Solid Waste Management – Reduction and Recycling***
- ***Chapter 70A.210 RCW, Pollution Control – Municipal Bonding Authority***
- ***Chapter 70A.214 RCW, Waste Reduction***
- ***Chapter 35.21 RCW, Miscellaneous Provisions***
- ***Chapter 36.58 RCW, Solid Waste Disposal***
- ***Chapter 70A.200 RCW, Waste Reduction, Recycling, and Model Litter Control Act***

For a comprehensive list of the regulations that impact solid waste management and planning, refer to Appendix F.

Compliance verification checklist

A checklist has been provided to Ecology that clearly articulates requirements specified by state code (Appendix R). The compliance checklist cites each regulatory requirement and the section in the CSWMP that references it.



1.5 Previous Clark County Solid Waste Management Plans

Solid waste planning in Clark County was initiated in 1967 with the adoption of the county's first *Solid Waste Management Plan*. The county adopted updates to the plan in 1973, 1981, 1985, 1994, 2002, 2008, and 2015. The plan was also amended in 1986, 1988, and 2006 to address focused needs.

In addition to the *Solid Waste Management Plan*, the original *Moderate Risk Waste Management Plan* was prepared for Clark and Skamania counties and was adopted on Dec. 14, 1988. The *Moderate Risk Waste Management Plan* was amended in May 1991, July 1991, July 1992, September 1992, and March 1994. The two counties prepared separate plans when the *Clark County Moderate Risk Waste Plan* was incorporated as a chapter in the *Clark County Solid Waste Management Plan* (2002, 2008, and 2015 updates).

In 2019, the Washington Legislature directed local jurisdictions to develop a plan to reduce recycling contamination. Clark County went through the amendment process, formally adding the *Clark County Contamination Reduction and Outreach Plan* (CROP) as an appendix to the currently adopted plan in 2021. The CROP includes strategies to increase efforts to reduce recycling contamination.

This plan revision incorporates the CROP and *Moderate Risk Waste Management Plan* into the body of the plan, making it a more comprehensive plan. This CSWMP is the most current plan for Clark County's rapidly changing solid waste system and replaces all previous plans.

1.6 Relationship to other plans

State of Washington

Washington State, through Ecology, is required under chapter 70A.205 RCW to develop and maintain a long-range plan for the management of solid waste. The goals and policies expressed in the state plan establish the framework upon which solid waste systems are to be administered and implemented throughout the state. Local plans should be consistent with these goals and policies unless these management approaches are superseded by new state laws, regulations, or plans.

State Solid and Hazardous Waste Plan—Moving Washington Beyond Waste and Toxics, was originally issued in November 2004 and updated in 2009, 2014, and 2021. The vision of the plan outlines the goal of transitioning to a society where waste is viewed as inefficient, and where most wastes and toxic substances have been eliminated. This will contribute to economic, social, and environmental vitality. The state plan challenges programs across the state to target toxins for elimination within one generation. The most recent version maintains a sustainable materials management approach.

Additional state level plans referenced in the development of the updated Clark County CSWMP include the ***Use Food Well Washington*** plan which offers a roadmap to a more resilient food system as well as the ***Washington State Recycling Contamination Reduction and Outreach Plan*** which outlines a statewide action plan to reduce recycling contamination. The vision, goals, and recommendations made in the abovementioned plans are being incorporated into this CSWMP and will be included in program opportunities during the upcoming five years.

Local plans and ordinances

This CSWMP must also be viewed in context of the overall planning process within all jurisdictions in Clark County. As such, it must function in conjunction with various other plans, policy documents, and studies. Included among these are the comprehensive land use plans of each jurisdiction, development codes (zoning), shoreline management regulations, and groundwater plans. Of specific importance are the groundwater or watershed management plans adopted by the county and other jurisdictions that contain specific recommendations for coordinated educational efforts about solid waste, groundwater pollution, and utility support systems. This CSWMP also supports Vancouver's Wastewater Solids Renewal Program Planning activities, to replace the current wastewater solids management system with a potential alternative that could be leveraged to enable more diversion of organics and waste requiring special handling from the landfill.

The CSWMP goals and policies must comply and coordinate with the goals and policies of Clark County and participating jurisdictions including:

- ***Clark County Comprehensive Growth Management Plan***
    - This plan includes the required elements such as rural and natural resource elements (chapter 3), floodplains (chapter 4), capital facilities plan (chapter 6), and the shoreline management plan (chapter 13)
- ***Clark County Comprehensive Emergency Management Plan***
- ***Clark County Stormwater Management Plan***
- ***City of Vancouver Water Resources Protection Ordinance***
- ***Regional Disaster Debris Management Plan***

1.7 Participating jurisdictions

State law assigns solid waste planning authority to individual local governments (RCW 70.205.040) and requires each county in the state to prepare a plan in cooperation with cities and towns within that county.

Cities and towns may choose from the following three options to meet their planning requirements:

- Prepare and deliver to the county auditor of the county in which it is located its plan for its own solid waste management for integration into the comprehensive county plan;
- Enter into an agreement with the county pursuant to which the city shall participate in preparing a joint city-county plan for solid waste management; or
- Authorize the county to prepare a plan for the city's solid waste management for inclusion in the comprehensive county plan.

In Clark County, it is generally agreed that developing, financing, and managing a regional solid waste system, as an independent jurisdiction, benefits the residents of Clark County. Local governments that wish to continue participating in the regional solid waste system and adopt the CSWMP sign interlocal agreements (Appendix D) with Clark County to authorize the county to prepare the plan.

After the preparation of the CSWMP, participating jurisdictions will formally consider the adoption of the CSWMP through local resolutions of adoption. Once adopted, the cities and town continue to review and provide input into county solid waste program annual priorities, project work plans, publications, and proposed annual budgets. The cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, and the town of Yacolt have historically adopted the plan and it is anticipated that the relationship will be maintained with this new revised CSWMP. The city of Woodland, a small portion of which lies in northwest Clark County and the remainder in Cowlitz County, is participating in *Cowlitz County's Comprehensive Solid Waste Management Plan*.

1.8 The Solid Waste Advisory Commission

Clark County's SWAC was originally formed in 1977 by Clark County Ordinance 1977-10-2 and remains an active commission per the provisions of chapter 70A.205 RCW. This ordinance, as modified over time, has been codified as Clark County Code Chapter 24.12.

Clark County's SWAC currently consists of 10 members appointed by the county council and represents the following interests:

- Agriculture
- Business community
- City of Vancouver
- Community at large
- North county
- Public interest groups
- Small cities and towns
- Solid waste management industry
- Southeast county
- Southwest county

The commission advises the county council on solid waste matters including:

- Helping develop programs and policies concerning solid waste handling and disposal and reviewing and commenting on proposed rules, policies, or ordinances prior to adoption.
- Participating in current solid waste planning and development of future Solid Waste Management Plans.
- Investigating new developments in solid waste management practices and recommending further investigation or adoption of the practices, which will improve local solid waste management.
- Recommending to the Clark County Council and CCPH appropriate and necessary solutions to solid waste problems as may be presented by local citizens, private industry, or others.
- Advising CCPH in evaluating applications for permits for solid waste handling facilities and disposal sites.
- Advising the county council or county staff in other specific solid waste matters, such as designing or siting solid waste facilities as directed by the board on a project-by-project basis.
- Maintaining communication with the citizens represented by each member to further public information and citizen input.
- Encouraging, supporting, and promoting the reduction, recovery and reuse of resources contained in solid waste.

For additional information on the SWAC or to see meeting agenda and minutes, please visit the ***Clark County Solid Waste Advisory Commission webpage***. The SWAC bylaws are provided in Appendix P.

1.9 Regional Solid Waste System Steering Committee

Agreements between the county and the cities and town include language outlining the role of the RSWSSC. The role of the RSWSSC is to provide direction to the county concerning the development of the regional solid waste system, its infrastructure, and the implementation of the recommended priorities and programs outlined in the CSWMP. The RSWSSC provides recommendations to the county on matters such as contracts, budgets, resource sharing, system analysis and improvements, and public education, outreach, and marketing. The RSWSSC reviews the priorities for waste reduction and waste recycling outlined in the CSWMP to assure that these priorities are incorporated in the budget proposals and work programs of member organizations, to assess the results of programs and projects, and to assure that future infrastructure needs are addressed through operational practices and procedures. The RSWSSC maintains regular communication with the Clark County SWAC and elected officials. The RSWCC bylaws are provided in Appendix Q.

1.10 Administration

This section looks at the administrative roles of jurisdictions for solid waste management in Clark County. Enforcement related issues, including a review of solid waste regulations which govern local government, the solid waste industry, and solid waste generators, are provided in Chapter 3: Enforcement. Background information for Clark County including demographic and economic information is available in Chapter 2: The planning area.

Regulations governing local government

State of Washington

Washington State law chapter 70A.205 RCW requires counties to prepare and update a 20-year solid waste management plan, including plans for solid waste handling facilities, programs to reduce the amount of waste generated, incentives for source separation, residential recycling collection, education, promotion of waste reduction and recycling, and plans to manage moderate risk waste. Ecology enforces the planning requirement, in part, through the distribution of grant funds for projects which help implement the plan. State laws RCW 36.58, 35.21, and 81.77, regulate how cities and counties contract for solid waste services and how they generate revenues to fund solid waste management activities. Refer to Chapter 11: Funding and financing solid waste infrastructure and operations, to review funding options.

State of Oregon

All out-of-state local government jurisdictions that use Oregon solid waste disposal facilities must comply with Oregon statutes. As users of Oregon facilities, the Clark County regional solid waste system must also meet the applicable Oregon recycling requirements. In 1983, Oregon Revised Statute (ORS 459) required source separated curbside collection for residents. The law was updated in 1991 (ORS 459A) with additional requirements for curbside collection and education, including curbside recycling, the expansion of the promotion/education of recycling programs, and requirements for multi-family facilities to provide recycling options. The law was also amended in 2021 with the passage of the Plastic Pollution and Recycling Modernization Act (Senate Bill 582). The new law became effective on Jan. 1, 2022, and recycling program changes are enforceable July 2025.

Administrative roles

Local governments, collection, disposal and processing companies, regulatory agencies, and a variety of other businesses, agencies, and organizations work together to manage solid waste in Clark County. The administration is a cooperative effort between city and county elected officials, county and municipal staff, and state agencies. A summary of this information is available in Table 1.10.1.

Table 1.10.1 Solid waste roles and responsible agencies

Solid Waste Roles	Responsible Agencies	
Administration	**Primary**	**Secondary**
Regional plan	Clark County	Cities, Ecology, WUTC, SWAC
Regional coordination	Clark County	SWAC, Cities, neighboring jurisdictions
Long-term safe disposal (includes transfer & transport)	Clark County	Ecology, SWAC, Cities
Moderate risk waste collection & disposal	Clark County	
Monitor closed landfills	Clark County	Ecology
Coordinate regional waste reduction education & promotion	Clark County	Cities, neighboring jurisdictions
Regional MRW education	Clark County	Cities
Local education & promotion	Clark County, Cities	
Environmental assistance to businesses	Clark County, Cities	
Garbage collection administration	WUTC, Cities	Clark County
Recycling collection administration	Clark County, Cities, WUTC	
Recyclables processing	Clark County	
Local clean-ups, seasonal collections	Cities, Clark County	
Solid waste management data & reports	Clark County, Cities	Ecology
Development of new solid waste programs	Clark County, Cities	Ecology
Siting of solid waste handling facilities	Clark County, Cities	Ecology
Plans for potential recovery or disposal of disaster-related debris	Clark County, Cities, neighboring agencies (i.e., Metro, DEQ)	

Clark County Public Health Solid Waste Enforcement Program

The Environmental Public Health Division within CCPH carries the responsibility of enforcing many solid waste regulations and programs within Clark County. CCPH is mandated to assure compliance with certain state and local regulations such as Chapter 173-304 WAC, 350, and 351, Clark County Code 24.12, and certain regulations and codes of the county and municipalities.

To meet this mandate, the Solid Waste Enforcement program:

- Administers permit system for solid waste facilities such as landfills and transfer stations.
- Enforces the state's Solid Waste Handling Standards, including handling of municipal and industrial sludges and petroleum-contaminated soils.
- Enforces county code for regulations on solid waste, hazardous waste, and biomedical waste.
- Responds to complaints regarding illegal dumping, burying, and accumulations of waste on private property.
- Contributes updates to the county's CSWMP.



Clark County Public Works Solid Waste and Recycling Programs

The Solid Waste Education and Outreach and Solid Waste Operations programs manage the long-term solid waste planning and facility management within Clark County. Through this authority, the county provides regional coordination, regional services, services to cities, towns, and other agencies, and local services in the unincorporated areas of the county. Until recently, outreach and operations activities were managed under the same Clark County Public Health Department as enforcement activities. In 2025, Clark County began a reorganization process to improve service efficiency. As part of this process, Solid Waste & Recycling programs were moved to the Public Works Department, which is a structure commonly used by other counties. Because this CSWMP was in its final stages at the time of the change, not all pieces of the CSWMP have been adjusted for the updated organizational structure. It is anticipated that the reader will be aware of the new structure through interaction with the county.

Solid Waste Education and Outreach:

- Promotes waste reduction, recycling, and composting through a variety of educational efforts across the county.
- Provides technical assistance and education on proper moderate risk waste management and related topics to residents, businesses, and schools throughout the county.
- Tailors outreach campaigns and educational information through the Composter Recycler, Green Business, Green Neighbors, and Green Schools programs.
- Provides contract administration services.
- Partners with City of Vancouver and Waste Connections to deliver messaging countywide.
- Contributes waste reduction, education, and promotion updates for the county's CSWMP.

Solid Waste Operations:

- Prepares and updates the county's CSWMP.
- Works with over 30 public and private agencies to coordinate solid waste management activities, including the SWAC and RSWSSC.
- Contracts for long-term disposal of waste generated throughout the county and for household hazardous waste collection and disposal.
- Oversees, monitors, and negotiates the contract with Columbia Resource Company (CRC) to operate transfer stations and the materials recovery facility (MRF).
- Supervises maintenance and monitoring of two closed landfills in Clark County.
- Contracts for recycling collection programs in unincorporated areas, including residential curbside and multi-family recycling collection, and yard debris collection.
- Plans for potential recovery or disposal of disaster-related debris.

Southwest Washington Clean Air Agency

The Southwest Washington Clean Air Agency (SWCAA) is responsible for enforcing federal, state, and local outdoor air quality standards and regulations in Clark, Skamania, Lewis, Wahkiakum, and Cowlitz counties. SWCAA is delegated by EPA Region 10 to implement and enforces EPA's Sewage Sludge Incinerator Emissions Rule under 40 CFR Part 62 Subpart LLL. SWCAA also delegated by EPA Region 10 to implement and enforce EPA's 40 CFR Part 503 Biosolids Rule related to sewage sludge incineration.

Washington State Department of Ecology

Ecology is the state agency responsible for oversight of solid waste management. Since the passage of the first Solid Waste Management Act in 1969, the focus of solid waste laws and regulations in the state has evolved from the closing of open burning dumps to the current implementation of a comprehensive statewide management plan, ***The State Solid and Hazardous Waste Plan – Moving Washington Beyond Waste and Toxics***, that relies on sophisticated management strategies. The state retains authority for setting standards for solid waste handling systems, while operations and management responsibilities are delegated to local governments. Ecology controls compliance with chapter 70A.205 RCW and WAC 173-304 and 173-350 through its review and approval of solid waste management plans and facility permits. Regulatory authority over permitted solid waste handling facilities is delegated by the state to local jurisdictional health departments. Ecology retains statutory enforcement jurisdiction for conditionally exempt solid waste handling facilities. Additionally, the management of sewage sludge at Westside Wastewater Treatment Facility's incinerator is permitted under Department of Ecology's General Statewide Biosolids Permit and regulated in WAC 173-308. Issuance of permits or of permit renewals by local health departments may be appealed by Ecology to the Washington Pollution Control Hearings Board.

Washington Utilities and Transportation Commission

The WUTC regulates solid waste rates and services under chapter 81.77 RCW through the issuance of certificates entitling private or investor-owned companies to provide solid waste collection services of a certain type — garbage, refuse, and demolition

waste — within specified geographic areas of the state. Under chapter 81.77 RWC, the authority of the WUTC is limited to the collection of solid waste from generators and does not extend directly to the regulation of hauling solid waste from transfer stations.

The WUTC also regulates the collection of source separated recyclable materials from residences if the local government does not contract for that service. The Washington state solid waste statutes do not give the WUTC the authority to regulate the collection or transportation of recyclable materials from drop boxes or buy-back centers, nor do the statutes provide authority for regulating the collection of recyclables from commercial or industrial generators. Transportation of these materials is regulated under chapter 81.80 RCW or is taken on by the cities. Although the WUTC does have the authority to regulate this transportation, this authority is not exclusive.

System-related contracts

The county and cities have entered into long-term contracts with private service providers for solid waste related services. The contract between Clark County, the City of Vancouver, and Columbia Resource Company (CRC) gives CRC responsibility for developing and operating transfer stations and a recycling processing facility. The contract is for the processing and marketing of residentially collected recyclables and transfer, transport, and landfill disposal of wastes at the Finley Buttes and Wasco Landfills in Eastern Oregon. CRC is a wholly owned subsidiary of Waste Connections of Washington (Waste Connections). More information about this contract is available in Chapter 9: Solid waste collection as well as Chapter 10: Transfer and disposal.



The county and the cities and town have entered other contracts with Waste Connections for the collection of residential recyclable materials and yard debris. Some cities contract for garbage collection if this is not done through municipal crews or state franchises. Additional contracts have been entered into for the recycling and disposal of household hazardous waste (HHW). More information about these contracts is available in Chapter 7: Moderate risk waste.

Post-closure agreements

Closed and abandoned landfills are present throughout the state and pose potential risks to human health and the environment. In Clark County, closed landfills are managed through post-closure agreements that are specific to the location.

The Disposal Agreement: An agreement between Clark County, the City of Vancouver, and the Leichner Brothers Land Reclamation Corporation establishes responsibilities for closure, post-closure maintenance, and groundwater remediation of the closed Leichner Landfill.

The Settlement Agreement: An agreement between Clark County, the City of Vancouver, Clark County Disposal Group companies, and WUTC. The agreement establishes funding channels for closure, post-closure maintenance, and remediation activities at the Leichner Landfill.

Other Closed and Decommissioned Landfills: The county contracts for landfill gas monitoring and groundwater monitoring at the closed English Pit Landfill. The Rufener Landfill has been inactive for more than a decade and has been closed and decommissioned.

For more information on closed and abandoned landfills in Clark County, refer to Appendix G.

1.11 Process of updating the plan

Plan amendments and revision

RCW 70A.205.075 requires all counties in the state to prepare a 20-year comprehensive solid waste management plan. This CSWMP is prepared per the requirements and intent of chapter 70A.205 RCW and Ecology's ***Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions***. As required, this CSWMP has been developed in association with cities and towns located in the county. The CSWMP is required to be reviewed at least every five years to assess if the plan reflects the current state of the local solid waste system, including long-range handling and financing needs. Keeping the plan updated helps ensure that permits, grants, and services can be administered effectively. Near the end of the five-year period, or when

Ecology deems an update is necessary, it should be determined whether an amendment or a revision is appropriate. A brief description, examples, and the process for these two types of updates are outlined below.

Amendments

Participating cities and towns and/or the county may elect to amend the CSWMP prior to a full plan update. Amendments are additions to an existing program or changes that implement a new program rather than a redefinition of the planning vision. Consequently, amendments do not need to undergo as extensive of a review and adoption process.

Examples of reasons for a plan amendment include:

- Changing the designated recyclables list.
- Adjusting implementation schedules.
- Changing the priority of alternative strategies and/or projects.
- Making changes to levels of service that do not significantly affect the cost to collect and dispose of solid waste.
- Updating the priorities of the plan based on the results of a previously pending feasibility study.
- Major residential or commercial development or the emergence of a new major industry.

The process to amend this CSWMP is initiated when a city, town, or the county requests an amendment to the existing plan. The Clark County Solid Waste Operations program manager will receive the request and make the decision to move forward with the amendment. The program manager will bring the amendment to SWAC and RSWSSC for consideration. SWAC will at that time determine with a vote if the changes will be implemented and decide through consensus if the change is minor or if it will require a formal amendment process. Minor changes that may occur in the solid waste management system, whether due to internal decisions or external factors, can be adopted without the need to go through a formal amendment process.

If the decision to move forward with a formal amendment is deemed necessary and approved, the amendment will be drafted and move through a formal resolution of adoption process with councils of each participating jurisdiction. Once ratified, the amendment must be submitted to Ecology within 45 days for approval.

Plan revisions

Plan revisions, such as those that undertake actions outside of the five- or 20-year plans or alter the goals of the CSWMP, go through a full approval process (all cities and towns, Ecology, and county council) and require a new or revised Washington Utilities and Transportation Commission (WUTC) cost assessment.

Examples of situations requiring a plan revision include:

- A major shift in the level of service in a program that is not specified in the plan, such as the addition or subtraction of curbside collections.
- Closure of a local landfill and a transition to long haul.
- Development of a new public or private transfer or disposal facility.
- Regionalization between previously independent planning entities.

When the current plan receives final approval from Ecology (projected to be in 2025 for this plan) that begins the five-year period before another required review. This CSWMP should be reviewed again in 2027 to allow time for a revision, if necessary, with a goal of adopting an updated plan by 2030.

Plan development and adoption process

The Clark County CSWMP ongoing planning process incorporates the Ecology recommended phased approach. This process includes plan review, development of scope of work and definition of responsibilities, involvement of SWAC and RSWSSC, development of a preliminary draft, public comment and Ecology review, response to public comments and completion of the SEPA, adoption of the CSWMP and final Ecology review, approval and implementation, and maintenance of the CSWMP.

During the current revision, additional steps were added by providing draft chapter documents to SWAC and RSWSSC for initial review prior to developing the preliminary draft. Once comments were received, reviewed, and incorporated where applicable, draft chapters were compiled into a preliminary draft for formal SWAC and RSWSSC review. The final preliminary draft was then completed and submitted for Ecology review and available for public comment.

The preliminary draft plan is also submitted to the WUTC for evaluation for collection rate-making purposes within WUTC garbage certificated areas. When applicable, revisions are made to the CSWMP to reflect comments received from the WUTC.

The CSWMP is then reviewed and adopted in public meetings by the participating cities/town per the interlocal agreements with those jurisdictions. The CSWMP is then adopted by the county council in a public hearing.

1.12 Planning issues

What opportunities exist for statewide collaboration?

As part of a statewide effort, Clark County will work with Ecology and other partners to explore strategies and solutions in addition to education and outreach. These could address regional planning, operations and collection, contracting, incentives, pricing, policies, mandates, and enhanced data collection. Based on this evaluation, Clark County Solid Waste and Recycling will identify and pursue the most promising initiatives.

These options may include, but are not limited to:

- Regional planning and aligned or joint contracting for services to harmonize messaging, lower program costs, and improve program performance.
- Evaluating the costs and benefits of operational changes, including collection frequency, level of source separation at the curb, and innovative drop-off container designs on contamination levels and overall program performance.
- Product bans or restrictions.
- Strengthening contracts with haulers and MRFs to include provisions focused on reducing contamination, collecting, and reporting data on program performance, and ensuring materials on the accepted materials list are responsibly recycled.



1.13 Organization of the plan

Chapters of this plan include a common structure:

Introduction

Background information to provide readers with a foundation of knowledge to better understand topics discussed throughout the chapter.

Conditions assessment

An assessment of the existing conditions, organization, infrastructure, and programs that support existing solid and hazardous waste system functions.

Existing programs

Descriptions of the existing programs that support the focus outlined in the chapter including updates to ongoing programs and identified gaps.

Planning issues

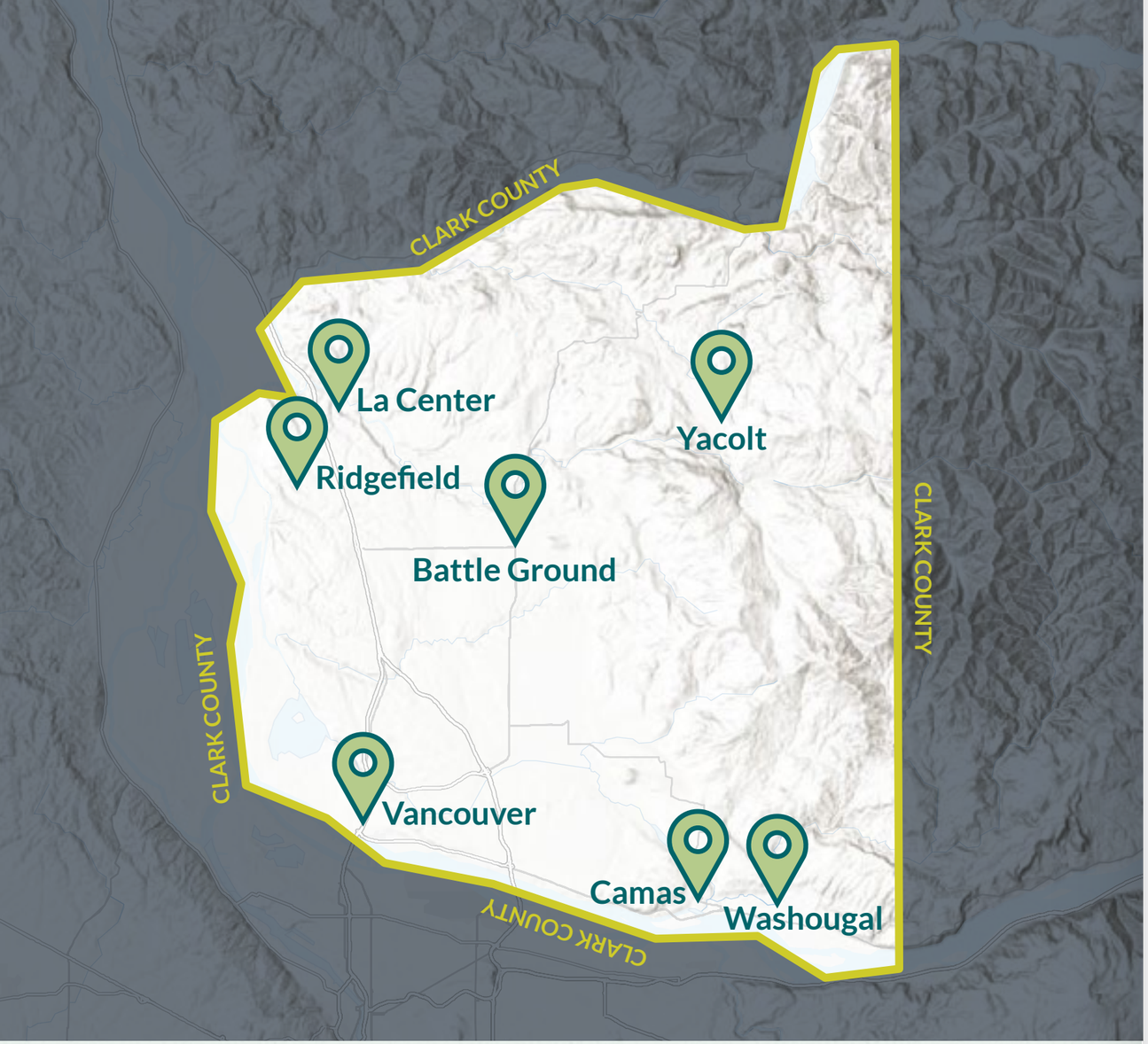
Issues and policies that were considered in defining the actions and recommendations for each element of the solid and hazardous waste system. Planning issues are framed as questions, many of which will continue to be relevant and evolve over the lifespan of this plan, informing ongoing deliberation and adaptation. Note that some chapters also explore alternatives related to these planning issues and/or recommended actions.





2

THE PLANNING AREA



2.1 Introduction

This chapter discusses basic information on the geography and demographics as well as the amount and composition of solid waste in Clark County. The planning area includes the incorporated and unincorporated areas of the county. This includes the cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, and the town of Yacolt.

2.2 Description of the planning area

General information

Clark County, with an estimated 2023 population of 527,400, is the southernmost county in the state of Washington. The county lies within a geographic basin created by the Cascade and Pacific Coast mountain ranges. The Cascade Range makes up the eastern boundary with the Lewis River to the north and the Columbia River making the western and southern border. The climate in the county is influenced by this geography which produces mild wet winters and moderately dry summers. Annual rainfall averages 41.3 inches a year with about 70 percent of the annual precipitation between the months of November and March. The average high temperature in July is 79.9°F and the average low temperature in January is 33.7°F. The marine influence of the Pacific Ocean contributes much to the temperate climate.

The area is physically compact, measuring approximately 25 miles across in either direction encompassing 656 square miles. The county is made up of six cities and one town with areas that remain unincorporated. When defining the planning area, note that while Woodland crosses into the Clark County boundary, it is not included in the planning area as Woodland is incorporated into the Cowlitz County solid waste management system. More information about Clark County can be found at the ***Clark County GIS website***.

Population demographics

The region's six cities and one town account for an estimated 54.8% of the population in 2024 while the remaining 45.2% remains unincorporated. Population data for the cities, town, and unincorporated areas of Clark County are provided in Tables 2.2.1, and 2.2.2.

Table 2.2.1: Population estimates per city/town

Year	2020 Census	2021 Estimate	2022 Estimate	2023 Estimate	2024 Estimate	2024% Total
Battle Ground	20,743	21,160	21,780	21,910	22,429	4.2%
Camas	26,065	26,870	27,250	27,420	28,013	5.2%
La Center	3,424	3,605	3,835	3,890	4,096	0.8%
Ridgefield	10,325	11,910	13,640	15,180	16,838	3.1%
Vancouver	190,915	194,400	197,600	199,600	202,943	37.8%
Washougal	17,039	17,200	17,390	17,490	17,666	3.3%
Woodland (part)	84	85	85	85	86	0.0%
Yacolt	1,668	1,670	1,670	1,670	1,671	0.3%
Unincorporated	**233,048**	**236,200**	**237,650**	**240,155**	**242,456**	**45.2%**
Incorporated	**270,263**	**276,900**	**283,250**	**287,245**	**293,739**	**54.8%**
Clark County	**503,311**	**513,100**	**520,900**	**527,400**	**536,194.5**	**100%**

Washington State Office of Financial Management
https://ofm.wa.gov/sites/default/files/public/dataresearch/pop/april1/ofm_april1_population_final.pdf

Table 2.2.2: Population density estimates per city/town

	Persons per square mile				
Year	2020	2021	2022	2023	2024
Battle Ground	2,428	2,477	2,549	2,565	2,625
Camas	1,852	1,909	1,936	1,948	1,990
La Center	1,321	1,391	1,480	1,501	1,580
Ridgefield	1,403	1,618	1,854	2,063	2,288
Vancouver	3,917	3,989	4,054	4,095	4,164
Washougal	2,864	2,891	2,923	2,940	2,969
Woodland (part)	1,588	1,607	1,607	1,607	1,616
Yacolt	2,903	2,907	2,907	2,907	2,908
Unincorporated	**432**	**437**	**440**	**445**	**449**
Incorporated	**3,075**	**3,151**	**3,223**	**3,268**	**3,342**
Clark County	**801.6**	**817.2**	**829.6**	**839.9**	**853.9**

Washington State Office of Financial Management
https://ofm.wa.gov/sites/default/files/public/dataresearch/pop/april1/ofm_april1_population_final.pdf

Current population and demographic information for the county is maintained on the ***Clark County Demographics data story map*** including race, ethnicity, age, language spoken, disabilities, and housing. This data is analyzed to inform programmatic efforts and needs to ensure equitable access to programs and services.

Population and waste generation projections

In addition to population demographics, population growth estimates are considered when looking forward to the next 20 years of service needs. As part of the Regional Solid Waste Systems Study (see section 2.3 below), population growth in the county was evaluated. The anticipated growth projects for a notable increase in the amount of solid waste generated and received at the transfer stations. Forecasts for the population growth by region and associated amount of waste generated was included in chapter 2 of the Regional Solid Waste System Study (Appendix I).

2.3 Regional Solid Waste System Study (Regional System Study)

In 2019, the county engaged an independent consultant team to conduct a comprehensive review of the regional solid waste system. This team, working with county staff, the cities and town within Clark County, Solid Waste Advisory Commission (SWAC), and the Regional Solid Waste System Steering Committe (RSWSSC), assessed the conditions of existing facilities, established needs and opportunities to improve current operations, and identified the improvements necessary to serve the county for the next 20 years. The study and report occurred over multiple phases.



Phase 1, completed in October 2021, provided a comprehensive assessment of the Clark County transfer stations and recycling infrastructure. It identified improvements needed in the current infrastructure and investments necessary to provide the capacity to manage waste over the next 20 years. It also included an evaluation of alternatives for serving fast growing areas of the county, a feasibility analysis for a new materials recovery facility, and thorough financial analysis of the current cost of services.

Phase 2, completed in July 2023, completed facilities planning to determine investments needed and prepare a plan for capital improvements to the system. The phase 2 report (Appendix I) included updates to population data and projections, considerations for new laws (e.g., HB 1799 concerning organic management), and further details on the options, recommendations, and decisions around addressing the identified needs.

Evaluation of ownership

One element of this study, completed in conjunction with phase 2, focused on future ownership of existing solid waste transfer facilities, which consists of three transfer stations and one material recovery facility at this time. The long-term operation contract with Columbia Resource Company included a condition that the county, working in concert with the cities and town, could purchase the West Vancouver and Central Transfer and Recycling transfer stations in the future for one dollar per location. The purchase option for the Washougal Transfer Station is located in Washougal's transfer and disposal contract, which is managed by the City of Washougal. The consultant team evaluated several options for public and private ownership and operations, listing the advantages and disadvantages of each, for consideration by the county, cities, and town. The findings were consolidated into a separate ***ownership report***.

The following list identifies the options for establishing a multi-jurisdictional organization that can manage solid waste services and the related codes.

- Interlocal Cooperation Act (ICA) — RCW 39.34
- Joint Municipality Utility Services (JMUS) — RCW 39.106
- Metropolitan Municipal Cooperation (MMC) — RCW 35.58
- Disposal District — RCW 36.58

At the time this CSWMP was submitted for approval, the county, cities, and town are still evaluating their options for determining whether public ownership is the best alternative, and if so, which strategy meets their long-term needs for managing solid waste and recycling services in the future. A decision on this issue is expected within the next five years. Therefore, certain recommendations have been adopted as part of this CSWMP as detailed in the following chapters.

2.4 Quantity and characterization of solid waste

The quantity and characterization of solid waste can be impacted by various factors including population growth and urbanization, consumption patterns, education and outreach programs, waste management practices and services, and changes to regulations. The impact of these factors creates challenges to data collection, interpretation, and application of the data collected.

In addition to the extraneous variables, data changes frequently and seasonally. During this revision of the CSWMP, it has been decided that data will be limited within the body of the plan while trends will be provided for analysis. Considering the length of time it takes for a plan to move from revision to adoption, the most current data on tonnage and projections will be provided in an appendix for reference to prevent delays in adoption. Refer to Appendix N: Clark County municipal solid waste data.

Clark County Solid Waste and Recycling programs are working on updating our data reporting requirements through contract negotiations as well as managing contracts for residual waste studies and waste characterization studies. Additionally, as the agency identified to lead the planning process, the county will put forth efforts to create a system for increased data accessibility and transparency over the next planning period.





3

ENFORCEMENT

3.1 Introduction

Enforcement activities support the implementation of policies developed and documented in the CSWMP. This chapter reviews solid waste regulations, which oversee local governmental programs, the solid waste industry, and solid waste generators in Clark County.

The enforcement goals of Clark County's solid waste programs are:

- To ensure **Clark County continues to be a healthy, clean, and livable community** by promoting proper storage, transfer, and disposal of solid waste by both public and private sectors through education and, if necessary, enforcement.
- To **maintain an institutional framework** that delineates the roles and responsibilities of the various enforcement agencies and ensures that the framework facilitates interjurisdictional cooperation, communication, and the orderly, cost-effective, and environmentally sound management of the solid waste system.
- To ensure agencies with the authority to implement solid waste rules and regulations **function responsibly and efficiently**.
- To ensure **adequate monitoring and proper handling procedures** are in place for managing various types of solid waste materials generated in Clark County.
- To ensure agencies charged with implementing and enforcing solid waste rules and regulations are **staffed, funded, and managed cost-effectively**.



3.2 Regulating agencies

Several entities are responsible for surveillance and enforcement of solid waste management requirements within Clark County including Clark County Public Health (CCPH), Clark County Code Enforcement, the cities and towns of Clark County, Ecology, SWCAA, and WUTC.

The following sections present the authorities of the regulating agencies and the regulations which apply. Table 3.2.1 provides a summary of regulating agencies and the regulated parties including references the related regulations. Cities and counties must set local requirements that are at least as strict as state standards. Appendix F offers a comprehensive list of regulations that impact the management of solid waste.

Table 3.2.1: Solid Waste Enforcement Roles in Clark County

Regulated parties	Regulations	Enforcement agencies
Solid waste industry		
Collection	RCW 81.77, WAC 480-70, City & County Contracts & Ordinances	WUTC, County, Vancouver, Camas, Washougal, Ridgefield, Battle Ground
Handling Operations & Facilities (disposal/transport)	County & City land use regulations WAC 173-350, WAC 173-351	County, Cities, Ecology
Waste generators		
	City "mandatory solid waste" and recycling ordinances	Cities
	County & Cities ordinances	County, Cities
	Burn ban	SWCAA, Fire Marshalls
	Hazardous material handling	Ecology
	Industrial waste regulations	Ecology
	Biomedical Waste Regulations	Ecology
	RCRA Subtitle D	EPA

Clark County

Code Enforcement: The Code Enforcement division within Clark County Community Development enforces Title 9.24 of Clark County Code which specifically outlines public nuisances in the urban and rural areas of unincorporated Clark County.

- **Nuisance complaints.** Code Enforcement receives and investigates complaints regarding the outside accumulation of trash, junk, debris, abandoned or unused materials, objects, or equipment when visible from a public roadway or adjacent property. Offending property owners can be issued a Notice & Order which carry daily penalties for non-compliance.

Public Health Solid Waste Enforcement: The Environmental Public Health Division within CCPH carries the responsibility of enforcing many solid waste regulations and programs within Clark County. CCPH is mandated to assure compliance with certain state and local regulations such as WAC 173-304, 350, and 351 as well as Clark County Code (CCC) 24.12 and certain regulations and codes of the county and municipalities.

CCPH's enforcement responsibilities extend to the following areas of solid waste management:

- **Solid waste nuisance complaints:** CCPH receives and investigates public concerns regarding improper storage of solid waste visible from public access right of way. They have the authority to issue Notice of Violations and Notice & Orders to obtain compliance in the appropriate jurisdiction.
- **Solid waste facilities:** CCPH issues, renews, and when necessary, suspends or revokes solid waste handling permits and conducts routine inspections of both permitted and conditionally exempt solid waste handling facilities. Inspections ensure that facilities meet permit requirements and do not create public health problems, nuisances, or environmental contamination. Schedules for corrective or remediation actions are established by CCPH for those facilities which are not in compliance. All permits must conform to the Clark County CSWMP and the state's Solid Waste Handling Standards (WAC 173-304 and 173-350).
- **Landfills:** CCPH's responsibilities for processing and evaluating permits for solid waste disposal facilities are defined in RCW 70A.205.130. This statute requires jurisdictional health departments to evaluate solid waste permit applications for their compliance with all existing laws and regulations and their conformance with the CSWMP and all zoning requirements. Ecology's review and appeal process for a permit issued by CCPH is explained in RCW 70A.205.130. CCPH inspects all (active and closed) landfills in Clark County at least twice a year for compliance with state (chapter 173-304 WAC and 173-350), local and county regulations.
- **Special wastes:** CCPH assures compliance with state, local, and county regulations on handling, storage, transport, and disposal of biomedical wastes, moderate risk waste (MRW) including waste oil, and other waste requiring special handling.

Cities and towns

The six cities and one town within Clark County have varying administrative roles. Cities can manage their own collection contracts or can join either the Clark County residential yard debris or recycle collection contracts. Cities that manage their own contracts are responsible for enforcing compliance with their collection regulations by all residential and commercial collectors operating within the city. Clark County manages contracts for cities that participate in a shared contract. Some cities include mandatory garbage ordinances in which all residents are required to pay for solid waste collection services, whether they use solid waste collection services or not. In each jurisdiction, the city's code compliance staff enforces against solid waste nuisance violations. All jurisdictions hold periodic cleanup events within their borders.

Table 3.2.2: Cities and town administrative roles for residential collection services

	Battle Ground	Camas	La Center	Ridgefield	Vancouver	Washougal	Yacolt
Local SW collection ordinances							
Mandatory or subscription-based garbage	S	M	S	M	M	M	S
Collection service contracts							
Garbage	W	C	W	C	C	C	W
Recycling	C	C	CC	C	C	C	CC
Yard debris	CC	C	CC	-	-	C	CC
Organics	-	-	-	C	C	-	-

S Subscription-based garbage collection M Mandatory garbage collection

CC Provided by Clark County W Provided by WUTC C Provided by city/town

State and regional authorities

Southwest Clean Air Agency: SWCAA has the responsibility of monitoring the emission of air contaminants from sources in Clark County. In terms of solid waste management, this agency monitors emissions from landfills (including some closed landfills), recycling/transfer facilities, composting sites, and contaminated soil sites. SWCAA also issues air permits for equipment (crushers/grinders) that are utilized at conditionally exempt solid waste handling facilities that process inert materials on-site. Additionally, SWCAA regulates friable asbestos handling and open burning in the County.

Washington State Department of Ecology: RCW 70A.205 gives Ecology the authority to promulgate solid waste regulations, review and appeal facility permits, and approve solid waste management plans. Facility permitting regulations are outlined in WAC 173-350, Solid Waste Handling Standards. WAC 173-350 specifies that certain solid waste facilities are exempt from solid waste permitting if they meet requirements and operating procedures as identified in the rule. These facilities include recycling, materials recovery, composting, inert wood waste, and some moderate risk waste handling activities. Ecology is the lead regulatory agency for conditionally exempt solid waste handling facilities. Municipal solid waste regulations are found in WAC 173-351, Criteria for Municipal Solid Waste Landfills. Jurisdictional health agencies have the authority to permit solid waste handling facilities that are designated in county solid waste management plans.

Washington Utilities and Transportation Commission: The WUTC regulates the collection and transport of solid waste in all unincorporated areas throughout the state and within incorporated areas that do not assume jurisdiction for the regulation of solid waste. Certificates are issued by the WUTC allowing private or investor-owned collection companies to operate in a specified area, at a set rate or tariff for various services, and under certain service conditions. The WUTC's enforcement mechanisms include fines and the revoking of a private collector's right to collect solid waste. The WUTC also enforces against companies that illegally provide solid waste collection services without a certificate. Solid waste collection is regulated under RCW Chapter 81.77.

3.3 Regulated parties

Regulations governing solid waste management in Clark County apply to the solid waste industry and individual generators. This section briefly summarizes the regulations pertaining to each of these segments and notes which agencies are currently enforcing the regulations. Additional information on many of the following regulations can be found in later chapters.

Regulations governing the solid waste collection industry

RCW 81.77 and chapter 480-70 WAC authorize WUTC to regulate solid waste collection. There are two exceptions to WUTC regulation that apply in Clark County. Collection within those cities that have assumed jurisdictions for the regulation of solid waste (Vancouver, Camas, Washougal, and Ridgefield), and within counties or cities that have assumed jurisdiction for the regulation of residential recycling collection.

Clark County has assumed jurisdiction for such regulations and contracts with Waste Connections for residential recycling and yard waste collection. The state regulates rates, services, and reporting. Haulers that collect within the cities of Vancouver, Washougal, and Ridgefield are regulated through collection contracts and ordinances maintained by those cities. City and county contracts address similar issues as well as how and where to deliver the collected waste. Camas is the only city providing municipal garbage collections services. The City of Vancouver licenses commercial recycling services providers pursuant to ***VMC 5.62***.



Designated disposal sites

The county is authorized by RCW 36.58 to designate disposal sites for all solid waste collected in the unincorporated area of the county. Chapter 9.32 of the Clark County code recognizes this authority, and the CSWMP designates the three transfer stations in the county as disposal sites, with the Finley Buttes Landfill and Wasco Landfill (on a limited basis) being the final disposal sites. The county's recycling, transfer, transport, and out-of-county disposal contract with Columbia Resource Company (CRC), a wholly owned subsidiary of Waste Connections, states that waste collected by Waste Connections or an affiliate within Clark County will be delivered to the designated facilities.

The county has also entered interlocal agreements with the cities and town which include provisions that waste will be delivered to the designated facilities.

The only exception to this is the waste collected by Waste Control, Inc. in northwest Clark County. County solid waste regulations recognize that self-hauled wastes, recyclable materials, and non-residential generated recyclable materials are exempt from being directed to the designated disposal site (exempted by RCW 81.77).

Illegal hauling

Solid waste hauling is regulated by either the WUTC or by the cities and town that have assumed jurisdiction. Enforcement of these hauling regulations is performed by the respective entities. Solid waste within our solid waste system should be hauled by Waste Connections or Camas and should be taken to county designated transfer facilities and consistent with authorities granted by either the WUTC or incorporated cities. Exemptions to these regulations are loads that are self-hauled or classified as occasional/incidental transport. Recovered or recycled materials can be hauled by a registered recycling hauler and must be taken to a facility where the materials are recovered.

Regulations governing solid waste handling operations and facilities

Solid waste facilities and operators are subject to the state's Solid Waste Handling Standards, WAC 173-350, which are enforced by local public health agencies through a solid waste handling facility permit system. Facility siting is regulated by both state siting standards and county or city land use ordinances, which may require conditional use permits for solid waste facilities. Disposal facilities are subject to additional regulations, including long-term monitoring (WAC 173-350 & 351). The state solid waste regulations that Ecology enforces result from state legislation, RCW 70A.205, and federal laws, such as the Resource Conservation and Recovery Act (RCRA), the Clean Water Act, the Clean Air Act, and others.

Regulations governing waste generators

The following outline specific activities that are regulated in Clark County.

Burial of waste: CCC code and some city codes may allow for the burial of select wastes, which were generated on-site. This includes solid waste resulting from residential or agricultural activities as well as non-putrescible commercial or industrial waste. On-site burial of regulated waste such as hazardous waste, toxic waste, biomedical waste, and certain types of special waste is prohibited.

The ability to bury certain solid waste on-site results in problems such as health and sanitation problems, contamination of soils and/ or water, the attraction of vectors, settling of land into depressions, the discovery of unwanted buried material, and subsequent removal of wastes by new property owners.

Illegal dumping and abatement: Counties, cities, and towns conduct illegal dumping enforcement and abatement activities within their boundaries, including cleaning up dump sites, identifying offenders, and enforcing municipal codes on illegal dumping and private accumulations of materials. Illegal dump sites on public property are managed by the agency owning the property. Illegal dump sites on private property (including forestland) are the responsibility of the owner.

Litter control: To prevent littering, Clark County Code Chapter 9.32 Solid Waste Disposal requires all waste haulers, individuals, and businesses to cover waste being transported to county solid waste facilities. A surcharge can be levied for non-compliance. Ecology supports outreach efforts through the distribution of tarps and informational material at the transfer stations through the ***Secure Your Load campaign***.

Several cities, including the City of Vancouver, have ordinances that require residential generators to have garbage and recycling services, and all generators must comply with city codes (e.g., applicable Vancouver codes are VMC 6.12 and 5.62). This allows the city to resolve hauling compliance issues by enforcing requirements for hauling garbage and/or recyclables or on the generator that is contracting with the hauler. While not often utilized, it is an additional tool for the city.

Litter cleanup activities are also conducted by the Clark County Jail Services (Community Restitution Crews), and municipalities such as Vancouver's grant with Share for Talkin' Trash services, Ecology programs, and volunteer groups such as adopt a road, adopt a park and Litter Stewards.

Moderate and hazardous risk waste discharge: The county also regulates discharges of moderate and hazardous risk wastes through the National Pollutant Discharge Elimination System (NPDES) permit administered through the Clark County Clean Water Program. The water quality ordinance Chapter 13.26A prohibits the discharge of contaminants to storm drains, surface water, and groundwater. Prohibited discharges include spills of waste materials. The water quality ordinance also includes requirements for businesses and government agencies to use source control practices to prevent and control spills. Additionally, Vancouver's chapter 14.26 contains water resource protection provisions that prohibit discharges of any potentially harmful material (including waste) into water resources (surface water, stormwater, or groundwater).

Open burning: Open burning of waste is permanently banned within areas of Clark County. Permits are required for the open burning of the natural vegetation on the property outside of the no-burn area. SWCAA is responsible for regulating and enforcement burn bans in Clark County. In Vancouver, the Vancouver Fire Marshal's Office also enforces burning within City limits.





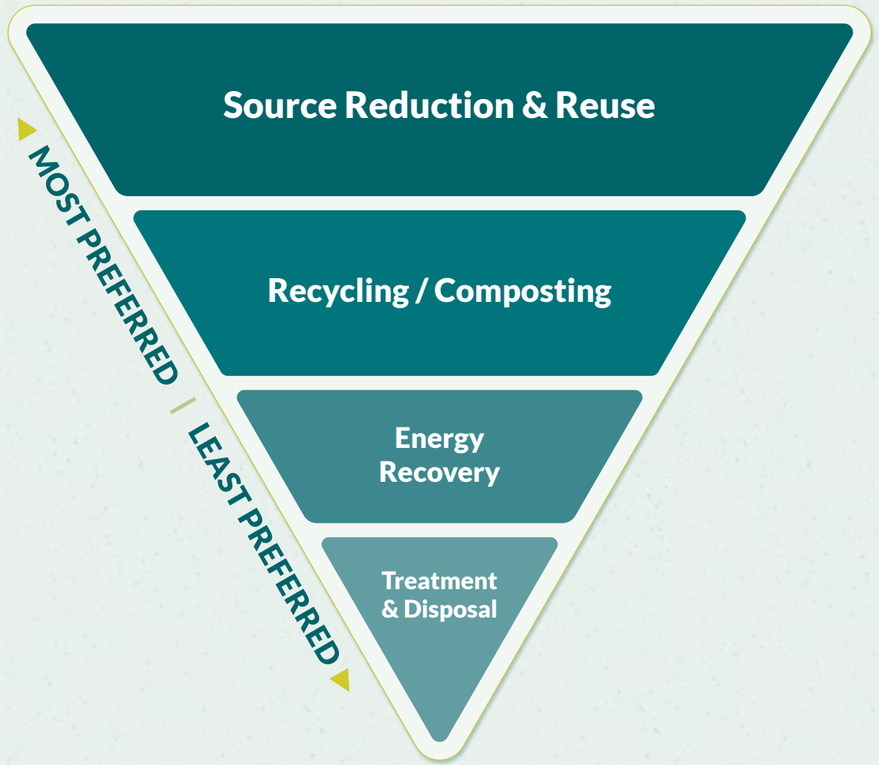
4

WASTE REDUCTION

4.1 Introduction

Waste reduction is defined as actions taken to either reduce or completely prevent the generation of waste before it happens. Waste reduction is recognized as the most environmentally preferred strategy in the EPA waste management hierarchy (Figure 4.1.1) as it has the greatest potential impact. It is preferred over recycling and composting because the social, environmental, and economic costs are typically lower for waste reduction. The state of Washington also identifies source reduction of waste as a fundamental strategy and a top priority for the solid waste management. As a result, chapter 70A.205 RCW states that waste reduction must become a fundamental strategy of solid waste management and is required to be included in all plan revisions.

Figure 4.1.1 EPA Waste Management Hierarchy



There are two primary reasons for promoting waste reduction: toxicity reduction and volume reduction. Reducing the toxicity of solid waste makes all solid waste management methods safer and helps develop public confidence in waste management methods. Volume reduction extends the useful life of existing and future facilities and conserves natural resources. There is also significant economic value to the avoided cost of disposal. From a waste management perspective, waste reduction is one of the most effective ways to address waste issues as reducing the amount of waste generated can lead to a decrease in costly disposal and recycling facilities, as well as collection programs to divert toxic or specialty materials.

This chapter on waste reduction and the following chapters on recycling and organics describe existing programs and plans for activities that reduce the amount of solid waste being generated or disposed of as municipal solid waste in Clark County. Chapter 4 discusses waste reduction methods that reduce the amount of waste being generated to begin with, while Chapters 5 and 6 discuss methods that reduce the amounts being disposed of at landfills.

4.2 Conditions assessment

In Clark County, there has been a continued trend in focusing and supporting waste and pollution prevention. The county, cities, and town continue to promote the concepts of reducing and reusing as primary actions to achieve the goal of waste reduction, especially given the difficulties in reducing waste through recycling alone.

Historically, waste reduction practices tend to place responsibility on individual actions by consumers. Campaigns like bringing your own shopping bag to the store have an impact, however, do not influence systemic change. Waste reduction is important in manufacturing and can be done by implementing extended producer responsibility principles into business models. Extended producer responsibility is an approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle. This is characterized by shifting the responsibility (physically and/or economically; fully or partially) upstream toward the producer and away from municipalities. This may include providing incentives to producers to consider environmental impacts when designing their products. Methods such as reducing packaging, redesigning products, and reducing toxicity can be utilized to reduce the amount of waste being generated. Lightweighting of packaging, reuse, and remanufacturing are all becoming more popular business trends.

Additionally, legislation focusing on waste reduction can significantly impact consumer waste. For example, Senate Bill 5022 which was codified in 2021 as Chapter 70A.245 RCW Recycling, Waste, and Litter Reduction sets the following notable requirements:

- Minimum post-consumer recycled content (PCR) requirements for plastic beverage containers, trash bags, and household cleaning and personal care product containers.
- Prohibition of selling or distributing three types of expanded polystyrene products.
- Requiring single-use utensils, straws, condiment packaging, and beverage cup lids only be provided after the customer wants the product.

Regulations such as these prevent these items from entering the system and becoming waste.

Waste reduction at the consumer level can take many different forms including reusing or donating items, buying in bulk, and product stewardship. Purchasing products that incorporate these features supports source reduction. The county also recognizes that at the individual consumer level, pursuing a low-waste lifestyle as a consumer comes with many challenges and economic hardships. The current system encourages unnecessary consumption and then leaves responsible disposal up to the individual with little to no direction.

Solid waste outreach and education programs

A major function of the Clark County regional solid waste system is to provide education and coordinate outreach efforts to the residents, organizations, businesses, and schools in Clark County. This work is key to waste reduction and protecting the environment and public health, which are primary goals of the county's solid waste programs. Clark County Solid Waste Education and Outreach (SWEO) program staff work to educate the public on effective methods to reduce waste and recycle properly in Clark County. Specific information about recycling, organics, moderate risk waste, and miscellaneous materials will be discussed in Chapters 5, 6, 7, and 8.

Program development

When developing targeted outreach and education programs, the following considerations are made:

- Objectives of the program
- Demographics of the region
- Target audiences, especially in relation to types of programs to be implemented



Clark County outreach program staff and resources are organized by intended audiences (residents, schools, and businesses). When possible, existing resources and established relationships with community groups and partners will be utilized to ensure cost effective and meaningful program outcomes.

Below are examples of the methods that education and outreach staff use to deliver information and interact with the community.

Community classes and workshops: Offering virtual, hybrid, and in-person formats, Clark County Solid Waste and Recycling and partners offer educational opportunities covering a wider range of topics including our Composter Recycler workshop series and supporting Recycling 101 and 201 classes.

Events and tabling: Staff and Composter Recycler volunteers promote recycling and waste reduction by having a booth at community events such as farmer's markets. These events build relationships, connect the community with resources, and help advertise the programs being highlighted.

Green Awards: The Green Awards honor leaders in environmental protection, education, and sustainable practices and recognize the positive impact individuals and businesses are having on our community and our planet. Presenting these awards offers the opportunity to increase awareness about our programs, share success stories with the community, and recognize leaders. Green Awards are earned through the Green Schools and Green Business programs.

Printed and digital materials: The distribution of information is key to all education and outreach campaigns. Green Business, Green Schools, and Green Neighbors programs establish a regular frequency of electronic newsletters. These communications provide education, event information, and share success stories relevant to their intended audience.

For campaigns, existing free and customizable resources will be utilized as available. If current resources are not identified, staff will work with the Clark County communications team and partners to create materials needed to support the campaign.

Social media and online resources: Programs utilize social media accounts to amplify campaign messages and promote events. All outreach programs have a presence on at least one social media platform as well as utilizing the CCPH social media accounts.

In addition to social media campaigns, programs have current and engaging websites that act as hubs for all digital information and campaign information. The sites house blogs, newsletters, campaign activities, and provide up-to-date calendars for events.

Each program has its own website as well as hosting information on the Clark County website. The county website offers links to the individual Green Program pages as well as linking community members to service information, solid waste management planning, and operations information.

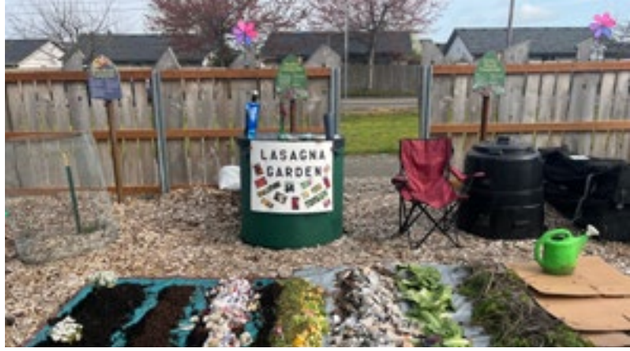
Videos: The delivery of education and outreach programs changed dramatically because of COVID-19. During the period when in-person activities and services could not be provided, outreach programs increasingly produced videos to share information in the community. For example, Green Neighbors created a story map to replace the in-person Natural Garden Tour that included video interviews with home gardeners. Feedback from that project included praise from people who cannot attend this type of event in-person.

4.3 Existing waste reduction education and outreach programs

Waste reduction is embedded into most programmatic work and outreach campaigns. Below are examples of campaigns that specifically target waste reduction. For more examples of education and outreach programs in Clark County, refer to Appendix O.

Holiday waste reduction campaigns: Green Neighbors offers year-round tips on holiday waste reduction with a focused campaign around the winter holidays. Outreach topics focus on sustainable gift giving (reusable wrapping methods, shopping second hand, only buying what is asked for, gifting experiences), using reusable cooking







supplies and table settings, as well as overall waste reduction through energy and water conservation. Outreach methods include social media, blogs, newsletters, and website updates as well as print and digital campaign advertisements through the Columbian newspaper.

WasteBusters: The 21-day WasteBusters Challenge is a pledge-based event hosted by Green Neighbors. The challenge is open to people who live or work in the county. The WasteBusters Challenge aims to educate residents through fun, interactive and engaging activities about the importance of reducing waste at home. Target areas of waste reduction include food waste, household hazardous waste, and single use plastics. The challenge provides opportunities to attend virtual events, complete weekly tasks, and answer prompts to share ideas with the community. Participants earn points for participating in activities and those points earn them tickets into drawings for prizes.

Green cleaning workshop: The Composter Recycler program hosts a workshop series which includes a class specifically designed to educate on reducing toxins in your home through using alternative cleaning methods. The course includes information on what is in conventional cleaners, how to read labels to make safer choices, and discusses the risks of stockpiling cleaning chemicals. In a post-COVID world, sanitizing has been brought into the spotlight. This course includes public health information and educates on the difference between cleaning, sanitizing, and disinfecting, including when each level is necessary for health.

4.4 Planning issues

How can we ensure that our messaging is sensitive and inclusive to all Clark County?

Development of the Equity Assessment and Action Plan

The Equity Assessment and Action Plan was written in 2024 and provides an assessment of solid waste program services and communications, with a lens on diversity and inclusion. The assessment identifies various actions that the department will use to provide sensitive and equitable messaging, including the following:

- Use Government Alliance on Race and Equity (GARE) resources for using inclusive and common language
- Write messaging in multiple languages
- Recognize different disabilities in the community and provide accessible media
- Improve our understanding of customer demographics to provide culturally sensitive messaging and reach more diverse audiences
- Engage with local organizations and community groups

Refer to Appendix J: Equity Assessment and Action Plan for additional details.

Developing materials in multiple languages

Part of the equity assessment included researching what languages are spoken in Clark County and creating a baseline on what languages we have translations for. Currently, the community has access to a variety of online and printed resources to learn topics of waste reduction, reuse, recycling, and disposal in Clark County. Some resources are available in multiple languages, though currently, not all resources are translated. Translations are completed through a contractor for translation services.

The programs produce various printed educational materials. Printed materials are typically offered in English only. All materials printed by Clark County include contact information for accessing the Americans with Disabilities Act (ADA) relay service. Materials may be translated upon request.

How do we identify and address data gaps regarding waste reduction?

Transitioning measurement methods away from diversion toward reduction

Historically, the impact of a program has been measured by changes in the quantity of waste moving through the waste system and diversion of waste already in the waste stream. Using a metric that measures the impact of reduction before items enter the waste stream have not been identified. To ensure we are aligned with reduction over diversion priorities, efforts should be made to research and identify new metrics that will inform our efforts going forward.

Business outreach

A study of the business community composition by sector would provide a better understanding of commercial enterprises in Clark County. Except for having access to the number and type of food services that are permitted in Clark County, very little analysis has been completed to understand the types and quantities of businesses by sector. This information could inform future commercial outreach campaigns related to waste reduction and recycling or to provide outreach to small quantity generators of dangerous waste.

How can we best support changes to ensure that manufacturers are held responsible for the waste they create?

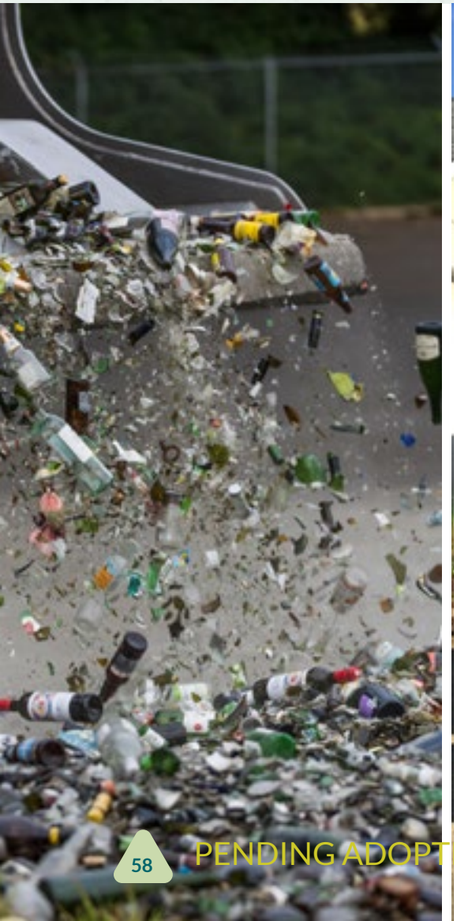
As local government entities, Clark County and the cities and town within the county are limited in how representatives can interact with the legislative process, but they can still evaluate legislation to prepare for how it may impact the community and operations or align with broader organizational goals. Our first responsibility is to our residents and customers. It is important to consider how legislation at any level could impact operations or the services our customers receive. Clark County is an active member of the ***Washington State Association of Counties*** and affiliate groups including ***Washington Association of County Solid Waste Managers***.

5
RECYCLING

5.1 Introduction

Recycling is second in the hierarchy of solid waste, and therefore is the second preference for solid waste diversion after waste reduction. Recycling happens when material is collected, sorted, and sold to reliable, consistent markets. For an item to be truly recycled, it must be remanufactured into a new product. Many items that are technically "recyclable" are not recycled for a variety of reasons: collection may be too complicated or expensive; sorting the material accurately with the existing processing technology might not be feasible; there may not be viable markets for the material; or the value of the material may not justify its collection and processing costs. The decision to recycle a material must consider economic, environmental, and societal impacts.

In recent years, Clark County and the six cities and one town within the county lines have worked together to develop and support a regional solid waste system that offers consistency and unified messaging. Efforts have been made with the goal of providing a consistent menu of services which includes commingled recycling containers, access to recycling events, and offering outreach and education to all residents.





5.2 Conditions assessment

Collection and processing

Local government jurisdictions, including both counties and cities, have the option to either contract directly with a private collection company to provide residential recyclable materials collection services, or to delegate the responsibility to the WUTC. If the local government contracts directly with a collection company then it thereby regulates collection activities and the WUTC is not involved. However, if the authority is delegated to the WUTC, then the WUTC-certificated collection company would provide the collection service, with the WUTC regulating the activity as previously described in Chapter 3. The county has contracted Waste Connections on behalf of the City of La Center and the Town of Yacolt to provide residential recycling collection services (both single-family and multifamily) within those boundaries and in the unincorporated areas of Clark County. The cities of Battle Ground, Camas, Ridgefield, Vancouver, and Washougal have separate contracts with Waste Connections to collect recyclable materials from both single-family and multifamily residences within their jurisdictions.

Residential customers in all areas of Clark County have a roll cart-based collection system for single-family residences. Multifamily residences may have container or cart service. The recycle carts /containers are for commingled paper, plastic, and metal recyclables; glass bottles and jars are collected separately. For single-family residences only, used motor oil, antifreeze, and household batteries are also collected next to the cart. These items are not collected at multifamily complexes; otherwise, materials collected, and sorting requirements are the same for all residents. Region wide, the multifamily collection service programs provide each complex with 64- or 96 gallon collection carts and offers signage for the central collection areas as well as in-home containers for storing and transporting materials to the central collection areas. Multifamily collection schedules are set to meet the requirements of each complex.





Commercial customers benefit from a competitive commercial recycling environment, with commercial recycling services provided by a variety of service providers. Some operators specialize in paper fibers such as office papers, corrugated cardboard, or wood wastes, while others offer a full array of services for most commodities. The county actively supports commercial recycling through technical assistance programs and promotional educational materials. For commercial recycling, the degree of source separation required varies by vendor. The City of Vancouver coordinates with their collection contractor to provide businesses in Vancouver reduced cost for basic commingle and glass recycling service for all commercial customers within city limits. The Vancouver Recycles! Pilot Program provides mixed recycling can be placed in either 96-gallon carts or containers ranging in size from 1-yard to 3-yards. Glass recycling is offered in 64-gallon carts. Additional containers and pickup frequencies are available to businesses for an additional cost.



A city can contract with any private collection company for residential and nonresidential collection services within all or part of its incorporated area. Thus, a city can control collection activities without operating its own municipal collection utility. This is the only avenue for non-certificated private collection companies to become involved in collection services in the State of Washington. The service areas for these private collection companies would be limited to the contracted municipal boundaries and would not be subject to regulation by the WUTC.

There is one Material Recovery Facility (MRF) in Clark County. Recyclable materials collected through curbside services and self-hauled to the two transfer stations are then transported to the West Vancouver MRF (West Van) for processing. Additional information on the collection and processing of the materials for recycling is provided in Chapter 9: Solid waste collection.

Waste characterization

Identifying local trends to determine what is entering the waste stream is essential to effectively design and implement programs that emphasize diversion. Waste characterization is an important starting point for solid waste management as it can help define the untapped local recycling and diversion potential. A waste characterization study examines the quantity and composition by sampling the municipal solid waste from predefined waste generating groups (e.g. single-family, multifamily, commercial) to determine the material components. In 2012, Clark County worked with a consultant team to conduct the most recently published local Waste Characterization Report. Since the drafting of this report in 2012, waste streams have changed as well as markets for recyclable materials. Additionally, significant changes have been implemented in the regulations concerning solid waste management. As part of the updated management planning process, conducting an updated waste characterization study in Clark County has been identified as a priority action item.

The study will incorporate the municipal solid waste at the three in-county transfer stations with the goals of:

- Identifying and evaluating trends in the local solid waste system
- Supporting decisions on rate setting
- Improving transparency with policy makers, community partners, and the public at large
- Evaluating the effectiveness of existing recycling education programs
- Identifying future waste prevention and recycling programming opportunities

While waiting for updated regional data, planning and programmatic decisions were informed by Ecology's 2020-2021 Washington Statewide Waste Characterization Study. The waste was evaluated on a regional basis, with samples collected from West Van in Clark County. For results covering the southwest region of Washington, refer to Appendix N: Clark County municipal solid waste data.

Waste diversion

Once components of the waste stream are identified, the fate of that waste can be explored to determine infrastructure needs. Although some of the collected materials will inevitably be landfilled, most can be reduced, reused, recycled, or otherwise diverted from disposal. Waste diversion includes all materials diverted from landfills through recycling or recovery operations. The recycling rate is the percentage of all waste generated by residents and businesses that is recycled and manufactured into new products. Clark County and its cities and town are committed to achieving a minimum recycling rate of 50% of the waste stream through a combination of public and private recycling activities.

Waste recovery rate data is provided by Ecology and includes information from both the residential and commercial sectors. It represents only reported collection activities; it does not count internal recycling programs in which retailers return recyclables to distribution centers outside of the county, material collected by non-reporting collectors, or individual efforts such as backyard composting. Recovery data for 2021 show Clark County with a recovery rate of 50.6% compared to Washington with a recovery rate of 49.1%.

The composition of the county's waste has undergone substantial change during the past decade because of economics (e.g., recession or economic downturn), technological impacts, and shifts in the products being manufactured and consumed. For example, residents rely on online news sources, and newspapers' printed content is shrinking. There has also been a shift by product manufacturers toward using more plastic containers and fewer glass or metal containers. The shift in waste composition both confirms the success of existing source separation programs and identifies opportunities for additional recovery.

Residual studies

To evaluate the success of diversion efforts and material recovery infrastructure, a periodic study of residual waste is conducted at the West Van MRF. This study is conducted to meet a contractual requirement between Clark County, Vancouver, and CRC.

A residual study evaluates the waste left over at the end of processing and determines the makeup of what is left to be disposed of at the landfill. This includes items that remain at the end of the processing line, other pulled items that are targeted for removal (e.g. broken glass, bagged materials, bulky materials), and trimmings (materials that became tangled in the screens and were then cut off). There is emphasis put on the percent of waste that is lost recyclable materials, either through contamination or missed in the sorting process, as well the types of recyclable materials being found. The types of residuals help identify gaps in the sorting process that can be evaluated for improvement as well as education and outreach opportunities.

The residual studies use multiple sources and compare results to inform area specific or source location opportunities for outreach and education programs. For example, the 2023 residual study examined waste from four sources within Clark County including:

- Single-family homes in the City of Vancouver.
- Single-family homes in Clark County, including Ridgefield but excluding Camas, Battle Ground, and Washougal.
- Single-family homes in unincorporated suburban areas of Clark County that constitute the Urban Growth Area.
- Apartment complexes, condominiums, and other buildings with multiple dwelling units in Vancouver and Clark County.



This study offers a point-in-time glimpse how well the MRF sorting process is managing the acceptable materials that are delivered to the MRF for processing. Results from the study vary year by year, aiding in the identification of trends and impact of programmatic efforts. Key findings from the 2023 study are as follows:

- 30% of materials collected were removed as residuals. Combining all routes, 44% of residuals were lost recyclables, and 17.6% of the total amount processed was unacceptable materials or contamination.
- Residuals from all streams showed an overall increase from previous years in the amount of acceptable plastics (15.6%) and non-recyclable “other” plastics (7.9%), while there was a decrease in plastic packaging (5.5%) and loose plastic bags (0.8%).
- Residuals showed an increase in non-recyclable paper from previous years, at 14.4% across all routes. Much of the composition of unacceptable paper was beverage and frozen food boxes (i.e., wet-strength paperboard) which are the target of Waste Connections outreach. Continued outreach efforts will be needed to inform residents about which types of cardboard are recyclable or changes could be made in identifying a recycler of wet-strength paperboard.
- Residuals from multifamily sources had higher amounts of contamination overall and, specifically, more bagged garbage (3.7%), than other streams. This may be indicative of a lack of capacity in garbage carts and containers at multifamily residences and/or consistent education and signage from property managers.
- While contamination overall was higher in multifamily sources, a notable exception was the higher percentage of non-recyclable paper (15.6%) in the combined single-family sources.
- Trimmings cut from screens had high quantities of textiles (15.9% average) from all streams. Despite their low volume by weight, the presence of these materials has a high impact on MRF machinery.

Waste allocation study

CRC conducts an allocation study to determine the composition of recyclables from single-family and multifamily recycling collection annually to account for changes in composition of the recycling stream by material type and volume, and to inform the recycling revenue share agreement between CRC, Clark County and Vancouver and separate hauling contracts. Materials from geographically specific residential sources are processed separately from other sources to determine the amounts of various recyclable and non-recyclable materials that are being set out for recycling in different areas of Clark County. Data from this study includes separation of materials by type at both single-family and multifamily homes and identifies contamination levels based on the service area. This information is used to identify gaps that can be targeted for

outreach and education programs as well as illustrate potential impact of outreach efforts. Notable to the 2023 study, contamination levels were down almost 10% to 24% and as low as 20% in some areas, although a causal connection cannot be made as to why with confounding variables.

5.3 Designated recyclable material list

The Washington State Association of Counties Solid Waste Managers Affiliate, the Washington State Refuse and Recycling Association, and Ecology have supported the establishment of regional, and if possible, statewide uniformity in what materials are accepted for recycling and how they should be prepared. More harmonization across programs reduces customer confusion and contamination.

To that end, they identified these four priority materials for statewide recovery:

- Paper (such as office and notebook paper, newspaper, mail, catalogs, magazines, and cereal or cracker boxes)
- Cardboard
- Plastic bottles and jugs (clear, colored, and natural)
- Steel and aluminum cans

Locally, the county and cities/town operate under the belief that a consistent residential recyclable materials lists results in a reduction in contamination. The ***Clark County Public Works website*** includes a thorough list of materials that can be recycled countywide. Clark County recycling collection programs can now be considered mature, and the following materials are considered "designated residential recyclables" for residential and commercial services:

- Aluminum cans and foil
- Aseptic containers
- Corrugated cardboard
- Glass jars and bottles
- Household batteries (separated)
- Mixed paper
- Motor oil and antifreeze
- Newspaper
- Organic materials/food (see Chapter 6: Organics)
- Plastic bottles, tubs, jugs, and buckets
- Scrap metal
- Steel cans

As noted above, some of these items are not available for multifamily services. For residents who do not have access to curbside services for specific items or who prefer to transport their recyclable materials directly, public drop-off centers are available at the transfer stations as well as options for private buy-back recyclers or drop-off containers. For more detailed information on the designated recyclable list including a breakdown of collection method and customers served, see Appendix L.

Note that while curbside battery recycling is offered, the safety risks associated with this method of collection are significant. Messaging at the time this current plan was being drafted emphasizes utilizing the battery drop-off locations. Additional information concerning battery disposal is available in Chapter 7: Moderate risk waste as well as in the ***Recycling A–Z Directory***.

Process for modifying the designated recyclables list

Criteria for evaluating modifications in the designated recyclables list include the potential for waste diversion; updated technologies; collection efficiencies; processing requirements; market conditions; market volatility; local market availability; continuity with existing programs; legislative mandates; and Oregon recycling certification requirements.

Any proposed changes to the designated recyclables list will be subject to the amendment process. Changes must be brought forth by the Clark County Public Health Director or designee as the lead planning agency. The proposal will be taken to SWAC and RSWSSC for review and consultation. SWAC will ultimately make the final recommendation on whether to add or remove the material from the designated recyclables list. Once a decision has been reached, SWAC's recommendation will be brought before the Clark County Council or designee for their review and signature. If approved, the designated recyclables list will be updated and submitted to Ecology for their review and approval.

Description of markets

Materials that typically have stable statewide markets include newsprint, corrugated containers, high-grade paper, PETE and HDPE plastic bottles, tin cans, metals, and aluminum cans.

Actions are being taken at the state level by the Ecology to increase participation at the manufacturing level through the expansion of extended producer responsibility, also called product stewardship. The idea is that producers need to fund management of their product material, not just at the manufacturing stage, but also at the end of its useful life. Examples of successful programs in Washington include E-Cycle Washington, PaintCare, and LightRecycle in which items are taken back, recycled for useable parts, and components that are not reuseable are then safely disposed of. Additional information can be found on the ***Ecology recycling programs website***.

5.4 Contamination reduction and outreach

Commingled recycling has boosted participation in the recycling system. However, this service makes it easier to misuse and improperly recycle materials. Contamination leads to higher processing costs for recycling facilities and causes material to be landfilled that would normally be recycled. Contamination occurs when people try to recycle non-recyclable materials, recyclable items not accepted by their recycling service, and materials soiled by food or liquid.

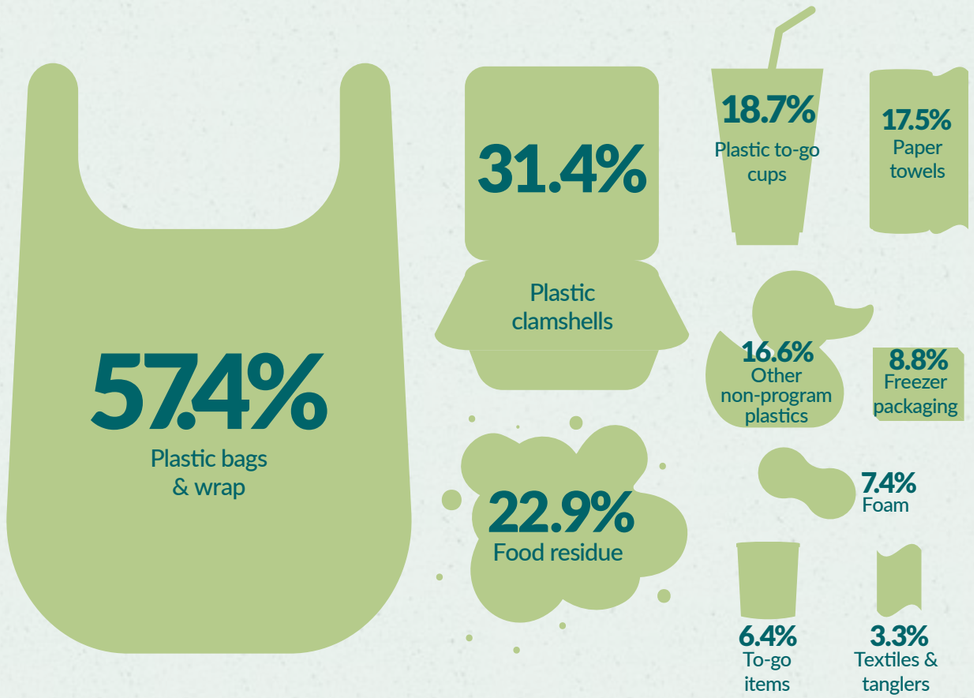
To address the high levels of contamination in Washington's recycling stream, a 2019 legislative directive, now incorporated into RCW 70A.205.045(10), outlines a requirement to include a plan to reduce contamination and provide education and outreach to the public.

The goal of the Clark County Recycling Contamination Reduction and Outreach Plan (CROP) is to reduce contamination of the materials collected in Clark County's single-family, multifamily, drop box, and commercial recycling programs. This, in turn, helps Clark County more fully realize the economic, environmental, social, and public health benefits of these programs. The CROP does not specifically include strategies to reduce contamination of other material streams such as organics or construction and demolition debris. However, many of the same strategies apply to these streams and may be included in future updates.

CROP requirements

Clark County's CROP has been designed per the requirements outlined in RCW 70A.205.045(10), which states a local jurisdiction's CROP must include the following elements:

- A list of key contaminants identified by the jurisdiction or Ecology.
- A discussion of problem contaminants and their impact on the collection system.
- An analysis of the costs and other impacts on the recycling system from contamination.
- A list of actions to reduce contamination in existing recycling programs for single-family and multifamily residences, commercial locations, and drop boxes.
- An implementation schedule and details on conducting outreach. Contamination reduction outreach may include sharing community-wide messaging through newsletters, articles, mailers, social media, websites, community events, educating drop box customers about contamination, and improving signage.



Key contaminants

Waste Connections staff collected data through their Recycle Right program in which recycling advocates perform lid-lift checks on recycling carts to identify visible contamination. City of Vancouver's contract includes a CROP and recycling advocate position to perform this contamination outreach work within city limits. In 2023, 37% of carts in City of Vancouver and 35.1% of carts in the urban growth area (UGA) had contamination visible upon a lid-lift inspection.

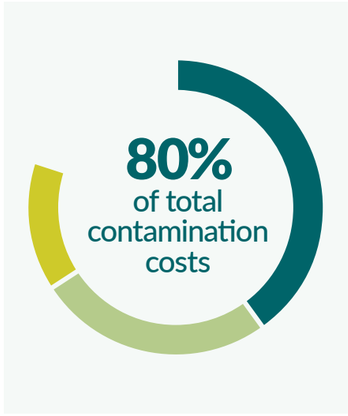
The 10 most prevalent contaminants found include:

1. Plastic bags and wrap (57.4%)
2. Plastic clamshells (31.4%)
3. Food residue (22.9%)
4. Plastic to-go cups (18.7%)
5. Paper towels (17.5%)
6. Other non-program plastics (16.6%)
7. Freezer packaging (8.8%)
8. Foam (7.4%)
9. To-go items (6.4%)
10. Textiles and tanglers (Both at 3.3%)

While not identified above as a prevalent contaminant during lid-lifts, there is an increased concern in the handling of lithium-ion batteries and the significant fire risk they pose during transport, at the transfer stations, and at the landfill. Using the lid-lift method for evaluating contaminants has potential to underestimate the amount of battery contamination as batteries are small and heavy, leading to them falling out of

view in the cart. While single-use alkaline and non-lithium rechargeable batteries can be recycled curbside, specific preparation is required to prevent sparks. To prepare the batteries, ends should be taped or individually bagged, and the prepared batteries are then placed in plastic bags on top of the recycling cart for truck drivers to pick up by hand and put in the designated section of the truck. In 2021, out of 163 curbside battery setouts examined, 85.9% were incorrectly prepared to prevent the chance of sparking a fire. In the more recent 2023 survey, 42 total setouts were evaluated with 81% incorrectly prepared. Note this only includes batteries set out appropriately on top of the recycling cart, not those that were potentially contaminating the commingled recycling cart.

Problem contaminants impacts and cost analysis



Contaminants are problematic as they can slow down the sorting and processing of materials, reduce the quality and value of secondary material feedstocks, result in costly shutdowns, damage collection, processing, and remanufacturing equipment, and cause serious injuries to collection and processing facility staff. According to The Recycling Partnership, the greatest costs associated with managing a contaminated recycling stream at MRFs nationally come from the following and represent 80% of total contamination-related costs:

- 40% for disposal of residuals
- 26% in value lost from contaminated recyclables
- 14% in labor to remove contamination from sorting equipment

For more localized information, MRFs throughout Washington were included in a ***2019 survey conducted by The Recycling Partnership***. The results identified the following recycling contaminants as the most problematic and costly to manage:

- Plastic bags and film
- Tanglers including rope, cords, chains, and hoses
- Food and liquids
- Shredded paper
- Bagged garbage
- Non-program plastics including clamshells and polystyrene foam
- Hypodermic needles

Plastic bags and films as well as tanglers are problematic for many MRFs as they wrap around the sorting equipment and prevent the equipment from sorting materials properly. Recycling lines are shut down to cut the bags off the equipment, costing time and equipment maintenance as well as posing a safety risk to workers. Needles also pose a serious threat to worker safety at MRFs. The other contaminants cause MRF equipment to run less efficiently and create more residual waste for the MRF. These factors put a strain on the recycling system and contribute to costs that may need to be passed down to haulers, communities, and residents.



Programs to reduce recycling contamination

Contamination reduction outreach may include sharing community-wide messaging through newsletters, articles, mailers, social media, websites, community events, educating drop box customers about contamination, and improving signage. Actions and programs have been developed to specifically target messages for single-family and multifamily residences, commercial locations, and drop boxes. Where possible, free and customizable resources are utilized, including ***Ecology's Recycle Right*** campaign materials and ***The Recycling Partnership's Anti-Contamination Kit***. ***Ecology's Contamination Reduction Best Management Practices & Resources*** document and ***Resource Library*** have examples of successful anticontamination programs. Additional details for local programmatic work related to recycling and contamination reduction is included in section 5.5 Existing recycling outreach and education programs and Appendix O.

Implementation actions and schedule

To meet the requirements of RCW 70A.205.045(10), an implementation schedule and details on conducting outreach addressing contamination has been included in Chapter 12: Implementation schedule.

In addition to implementation, Clark County will conduct periodic assessments on the effectiveness of recycling contamination reduction programs and strategies and share the results with key partners and the public. The assessment results inform the county of what is working and what adjustments will need to be made for better results. This includes reducing contamination in other recycling programs that were not a focus during the initial CROP implementation.

5.5 Existing recycling education and outreach programs

The following are examples of programs that aim to support recycling education, increase participation in recycling programs, and to reduce contamination of recyclable materials. An overview of delivery methods was provided in Chapter 4: Waste reduction. For more examples of education and outreach programs, refer to Appendix O.



Recycling A-Z Directory and RecycleRight app: While a variety of items can be recycled at the curb, many items cannot be. However, some items can be recycled or reused in other ways at locations throughout the region, including Oregon. Clark County, City of Vancouver, Columbia Resource Company, and Waste Connections financially support the maintenance of an up-to-date directory that connects residents with options for reuse and proper disposal. The Recycling A-Z Directory can be accessed online and is highlighted on the Clark County, Waste Connections, and City of Vancouver webpages. As an additional resource, the A-Z directory also can be viewed through the free ***RecycleRight App***.



Residential battery recycling drop-off campaign: As outlined above, batteries being improperly prepared prior to curbside pickup or contaminating commingled curbside carts may lead to fire, injury, and contamination of recyclable materials. Clark County Solid Waste and Recycling has partnered with Waste Connections to provide residents with convenient drop-off locations for no-cost battery recycling with a goal of reducing the amount of batteries that end up on the curb to begin with. Battery disposal sites accept lithium-ion (Li-Ion), nickel cadmium (Ni-Cd), nickel metal hydride (Ni-MH), nickel zinc (Ni-Zn), small-sealed lead acid under 5 pounds (SSLA/Pb), lithium primary, alkaline, carbon zinc, heavy duty, button and coin cell batteries, and all cellphones regardless of size, make, model or age. The outreach campaign includes toolkits for the drop-off location and staff, social media campaigns, webpage highlights, advertisement in the Columbian, and printed materials for distribution. Participating businesses are advertised on the Clark County website as well as being incorporated into the Recycling A-Z Directory and RecycleRight app.

Residential curbside contamination outreach: As part of the county's recycling collection contract and Vancouver's comprehensive contract, Waste Connections implements their ***Recycling Done Right Clean Cart Program***. The program goal is to educate and empower customers to generate high-quality and clean recyclables. This year-round program allows for visual lid-lift inspections of residential recycling carts and containers. If recycling advocates identify a contaminant, they are able to provide customer specific contamination feedback through the issuance of Oops tags.

Residential Outreach Work Group: Clark County solid waste planning and programs are a cooperative effort of Clark County, Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, and Yacolt. A Residential Outreach Work Group (ROW) meets monthly to discuss recycling outreach and education including contamination. Members consist of management and staff from Clark County Public Health, City of Vancouver Solid Waste, and the Waste Connections Education Team. Program materials including recycling and garbage signage is created by the local waste hauler with input from the ROW members.

The ROW meets to:

- Maintain consistency in accepted recyclable materials and key contaminants lists.
- Review recycling outreach materials to provide consistent messaging to customers to reduce recycling contamination.
- Coordinate resources and advertising efforts to optimize results, minimize customer costs, and improve end-user marketability.

5.6 Planning issues

How can we respond efficiently and effectively to fluctuating markets?

Recycling is based on fluctuating commodity markets. Despite these changes, effort is made to keep the items accepted for recycling as consistent as possible to reduce confusion among residents. For this reason, only items with reliable markets are accepted so there is always a buyer for our collected materials.

Even with this effort, changes may still impact the services able to be provided. To address this, awareness and outreach concerning market trends, emerging technologies, and upcoming regulation changes will continue to be a focal point to ensure partners are aware of potential changes.

How can we address the growing lack of community trust in recycling programs?

In recent years, changes in the markets and media coverage have led to an increase in conversations about recycling dependability, plastic pollution, and other similar topics. Consumers have expressed a loss of trust in the recycling system as news reports and statistics became available showing the possible reality of some recycling systems. Rebuilding this trust is vital to the sustainability of recycling programs. In an effort to regain trust, emphasis should be put on transparency by providing updated and relevant information to the public. In addition to continuing established outreach and education programs, county staff are developing resources discussing the recycling process and where our materials are being sent.

What intervention points exist that can be addressed to decrease contamination while increasing participation in residential recycling programs?

Clark County, Waste Connections, and the cities and town in Clark County work together to ensure targeted education and outreach campaigns exist to decrease contamination in the curbside recycling cart.

Key contaminants of concern remain plastic bags and other films due to the cost and safety concerns associated with managing films entering the sorting equipment. Current messaging includes presentations, annual mailer, social media posts, and other resources.

In addition to local education and outreach efforts, legislative updates support contamination reduction. For example, during the 2020 legislative session, the Legislature passed RCW 70A.530 creating a statewide ban on single-use plastic bags in an effort to reduce plastic pollution, litter, and waste. This ban will benefit the state's recycling system on several fronts:

- Reducing contamination in the recycling and compost systems
- Promoting reuse and recycled content
- Building consistency in policy and enforcement across the state
- Supporting the recycled paper industry

Clark County Solid Waste staff and regional partners participate in similar rule making through participating in rule making work groups as well as public commenting periods.

How can we increase recycling participation?

At this time, recycling is not mandatory in all areas of Clark County. Making it mandatory to subscribe to recycling services can help increase participation by making recycling more accessible and integrated into the weekly/every other week service. Additionally, efforts can continue to be made to make recycling the easier and more cost-effective option, increasing the appeal of participating.





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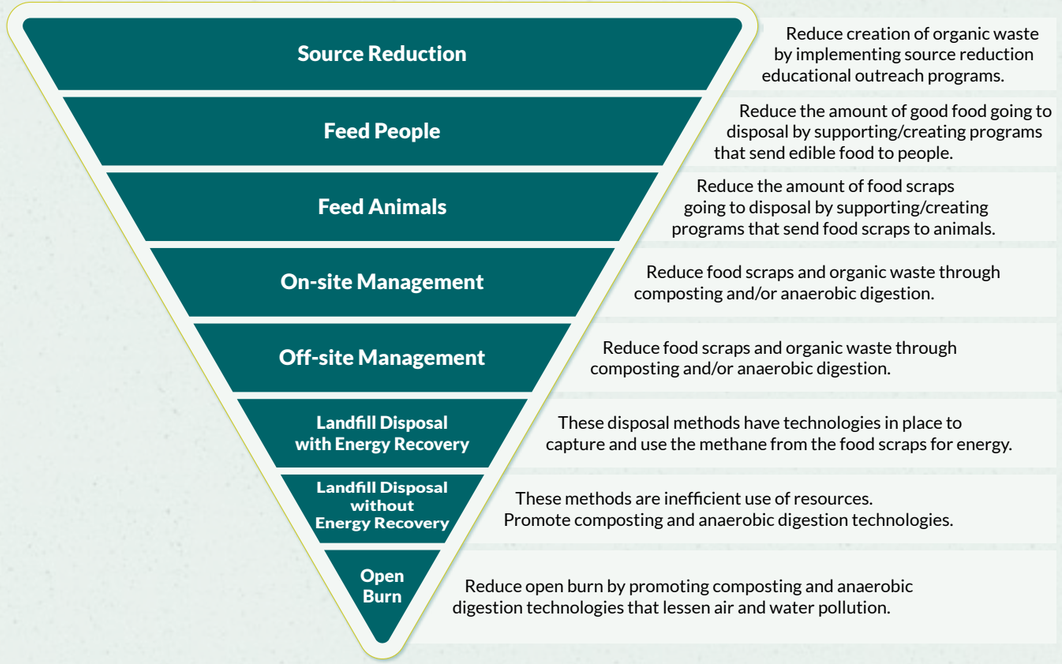
ORGANICS

6.1 Introduction

Significant diversion of waste is commonly accomplished through the composting of organic materials. Chapter 70A.205 RCW defines organic materials as any solid waste that is a biological substance of plant or animal origin capable of microbial degradation. Within this definition, organic materials include, but are not limited to, yard debris, food waste, food processing waste, manure, wood waste, and garden waste. Organic materials do not include any materials contaminated by herbicides, pesticides, pests, or other sources of chemical or biological contamination that would render a finished product unsuitable for use by the public or for agricultural purposes. In the ***2020-2021 Washington Statewide Waste Characterization Study***, organic materials comprise one of the largest recyclable components of the disposed waste stream.

Washington State's preferred organics management hierarchy (Figure 6.1.1) highlights the importance of locally based solutions as a priority over large-scale regional solutions. Anaerobic digestion and bioconversion systems come in varied sizes as well. This chapter addresses issues of scale and community benefits when considering recommendations for food waste reduction and recovery as well as the regional plan of implementing legislative requirement outlined in the ***Organics Management Law — Washington State Department of Ecology***. The two least preferred options are not addressed in this chapter as landfill disposal without energy recovery is limited to garbage from the Washougal Transfer Station (WTS) trucked to the Wasco Landfill in Wasco County, OR which is not equipped with a methane collection system and open burn is illegal in WA state.

Figure 6.1.1 Preferred Organics Management Hierarchy



Adapted from the Washington State's Preferred Organics Management Hierarchy, 2016.

6.2 Conditions assessment

At the time this CSWMP was drafted, yard debris remains an optional program that is available to single-family residences, multifamily complexes, and commercial businesses in Clark County on an every-other-week basis. Customers in Battle Ground, La Center, Yacolt, and urban areas of Clark County have the option to sign up for on-call yard debris service. On-call customers pay a monthly rental fee for the cart and are only charged for the pickups they request.

Businesses throughout Clark County and residents within the city limits of Vancouver and Ridgefield have the option of adding food scraps to their curbside service. Residents in these areas can simply add food scraps to their existing teal or green organics carts. The yard debris and food scraps collected from homes and businesses are taken to West Van MRF where it is reloaded and trucked to Dirt Hugger, a commercial composting facility in Dallesport, WA. Additional information on the collection and processing of the materials for yard debris and food waste is provided in Chapter 9: Solid waste collection.

Curbside organic materials services

Yard debris

Curbside collection of yard debris includes the following accepted materials:

- Brush
- Leaves
- Weeds
- Grass clippings
- Branches up to 4 inches in diameter and 5 feet in length



Determining what is accepted and what is not accepted is based on the current system for processing waste. Contamination of yard debris/organics carts can inhibit the effective production of compost or lead to pollution in the compost itself.

Materials that **cannot** be placed in curbside yard debris carts include:

- Food, including fruit or vegetables (unless within the Vancouver or Ridgefield city limits)
- Household hazardous waste
- Garbage
- Paper or plastic bags
- Compostable plastic
- Pet waste
- Construction debris
- Sawdust or bark dust
- Dirt, rocks, or sod
- Branches over 4 inches in diameter and 5 feet in length

Food waste

According to a 2023 report by the EPA, ***Quantifying Methane Emissions from Landfilled Food Waste***, it is estimated that wasted food causes 58% of all methane emissions from municipal solid waste landfills. This is in part due to the rapid breakdown of food which occurs before landfill gas collections systems are in place. However, when food scraps are collected and sent to a compost facility, they become a valuable soil amendment that will return nutrients back to the environment.

Organics (yard debris + food scraps) is an optional service that is currently available for residents within the city limits of Vancouver and Ridgefield. Residents who already have yard debris service simply add food scraps to their existing cart.

Accepted food scraps include:

- Cooked or raw meat
- Seafood
- Bones
- Cheese
- Eggshells
- Vegetables
- Baked goods
- Grains
- Fruit
- Coffee grounds

Some items are not accepted as food scraps. The decision to exclude certain items is due to processing infrastructure and ensuring the highest quality of uncontaminated soil is created.

The following items are **not accepted** as part of the food scrap collection program:

- Grease
- Compostable or biodegradable service ware
- Paper towels or plates
- Glass
- Foam
- Pet waste
- Plastic bags including compostable liners and bags.

Residential food waste

Results from the ***2020-2021 Washington Stateside Waste Characterization Study*** indicate that 22.8% of the statewide disposed waste stream intended for landfill is organic materials, with vegetative edible food waste being identified as the most prevalent material type in all categories at 6.4%. When broken down by sectors, 33.1% of all residential waste is organic materials with edible and inedible food waste making up a combined 13.8%. of the waste stream. This portion of the waste stream includes vegetative food waste and all other food including meats/fats/oils. Categories are sorted by edible and inedible. Food waste categories will be included in the 2025 Clark County Waste Characterization Study for more localized data.

Table 6.2.1: Statewide residential food waste in disposed waste stream 2020-2021

Organic material	Est %	Est tons
Edible food waste—vegetative	6.4%	26847
Inedible food waste—vegetative	4.8%	20136
Edible food waste—Meats/fats/oils	2.1%	8809
Inedible food waste—Meats/fats/oils	0.5%	2097
Total	**13.8%**	**57889**

Source: Washington State 2020-21 Statewide Waste Characterization Study
https://apps.ecology.wa.gov/publications/documents/2107026.pdf







Home composting

Some residents compost food scraps using worm bins, backyard compost bins, or incorporating the food waste directly into trenches in their gardens. Composting avoids the economic and environmental costs and risks of operating collection and transport systems and centralized processing facilities. The county actively promotes composting at home as a waste reduction method through outreach and education programs. Not all residents, however, have the ability or desire to compost their yard debris and/or other organics at home. For those residents, collection services are important.

Commercial food waste

Food waste collection is an optional service for businesses in Vancouver. Businesses are provided 64-gallon carts that can be serviced up to 5x weekly. Some businesses such as grocery stores may be interested in a 15-yard or 20-yard container that would be serviced weekly. Different drop box or compactor services may be offered to commercial food waste generators within City of Vancouver limits. With future transfer or third-party processing capacity to handle food waste, Vancouver will explore additional services and rates for commercial food waste collection in dumpsters. At this time, while the local waste hauler is able to provide food waste collection services, it is not available to all businesses in the county due to capacity constraints.

The accepted and not accepted list is similar to residential food waste as both sources of food scraps are brought to the same commercial composting facility for processing. To support program participation a waste reduction specialist is available to set up an effective system.

In addition to food waste pick up services, outreach efforts are being developed to focus on donation of foods that are still edible. The EPA Waste Food Scale (Figure 6.2.2) puts emphasis on the donation of upcycling of edible foods before composting. Clark County Food Bank partners with may local agencies to help serve food that is no longer useful for the business to families in the community.

Figure 6.2.2: EPA Wasted Food Scale



Construction and demolition compostable materials

Construction and demolition may also contain organic materials that can be separated and recycled. Commercial collection providers offer services that include the rental of drop boxes for construction sites for all cities and areas of Clark County. Drop box options include source separated dirt, sod, and yard debris as well as untreated dimensional wood. Additionally, untreated wood may be collected using a comingled drop box along with paper and cardboard.

6.3 Organics management law

The U.S. Department of Agriculture estimates that over one-third of the food produced in the United States is never eaten, wasting the resources used to produce, transport, process, and distribute it. When that organic material is sent to landfills, it breaks down and generates methane, a powerful greenhouse gas, making this waste stream a high priority for climate initiatives. In 2022 and 2024, the Washington State Legislature passed organics management laws that aim to divert organic materials away from landfills through prevention, food rescue, and organics management facilities. These actions will help Washington achieve its 2030 goal to reduce organic material in

the landfill by 75%. These laws have been passed utilizing a phased approach to implementation, allowing local jurisdictions time to plan for the requirements.

Washington's organics management laws have three sections that apply to jurisdictions in the state based on criteria such as population or services availability:

- Compost Procurement Ordinance and Report: A plan to purchase and use local compost in public projects with an annual report of results.
- Business Organics Management: Businesses that create certain amounts of organic waste must sign-up for collection service. Nearly all businesses will be required to subscribe to service by 2026.
- Residential Collection Requirements: Local governments must provide organic collection service to all single-family residents by April 30, 2030.

Compost procurement ordinance

The county has a yard debris collection contract that provides every-other-week yard debris service to the UGA. When parts of the UGA are annexed, the county will work with the hauler to switch to green or brown carts or lids. Having provided every other-week yard debris collection service prior to January 1, 2024, it is anticipated that organics collection services will be provided at least 26 weeks per year. The county and/ or the city will expand organics service to all UGA residents once additional organics receiving/reload capacity constraints are fixed.

Reporting requirements

Cities and the county with compost procurement ordinances are required to submit annual reports to Ecology by March 31 the following year. The following data points are outlined by Ecology as ***required reporting criteria***:

- Total tons of organic material diverted from landfills and collected.
- The facility or facilities used for processing this organic material.
- The volume and cost of compost purchased directly by the city, county, or your contractors.
- The source or sources of the compost purchased.

Additionally, the county has an obligation to inform residents concerning the value of compost and how the jurisdiction uses the compost in its operations. This information will be made available on our website as well as through presentations showcasing the county's compliance with organics management law and efforts being taken to reduce greenhouse gas emissions.

Business Organics Management

RCW 70A.205.545 outlines requirements for businesses located in a Business Organics Management Area (BOMA). Businesses within a BOMA are required to arrange for organics management services to reduce their organic material waste. A BOMA represents parts of the state that meet both the following conditions:

- Businesses have access to year-round curbside food waste and organic materials collection, and these materials are delivered to an organics management facility such as a compost facility or anaerobic digester for processing.
- Capacity exists at these facilities to accept increased volumes of organic materials from businesses.

Ecology is responsible for making the determination and maintaining the ***BOMA map*** as a reference for jurisdictions.

Timeline for BOMA requirements

BOMA requirements are being implemented in a phased approach.

- **Jan. 1, 2024** – Businesses generating at least eight cubic yards of organic material waste per week must arrange for organic materials management service.
- **Jan. 1, 2025** – Businesses generating at least four cubic yards of organic material waste per week must arrange for organic materials management service.
- **Jan. 1, 2026** – Businesses generating at least 96 gallons of organic material waste per week must arrange for organic materials management service.

These requirements also apply to businesses arranging for gardening and landscape work. Following the schedule above, businesses must ensure that an organics management facility will process the organic materials taken off site.

BOMA exclusion requests

Jurisdictions may submit a request to Ecology for an exclusion from the BOMA requirements with supporting evidence. Exclusion requests are subject to approval and must be submitted annually. Once approved, the exclusions will remain in place through the end of the BOMA determination period (July 1 – June 30).

In 2023 and 2024, Clark County submitted a formal request to Ecology, along with supporting justification, seeking a countywide exemption from the BOMA regulations. The request highlighted the limited capacity of the local solid waste reload facility, which made it difficult for businesses that collect and deliver organic materials to economically and feasibly transport these materials from the jurisdiction. Ecology reviewed and approved the request.

Clark County intends to provide a written request with detailed justification for BOMA exclusion annually until concerns of capacity are addressed. Issues of capacity are discussed later in this chapter.

Organics Recycling Collection Areas (ORCA)

Starting April 1, 2027, all single-family residential customers and nonresidential customers producing .25 cubic yards of organic materials per week within a designated organic recycling collection area (ORCA) must have access to year-round source-separated organic solid waste collection services. By April 1, 2030, this requirement expands to all impacted customers on a non-elective basis. The collection service must accept food waste and collect organic waste separately from garbage and recycling.

Multifamily residential housing is exempt from the collection requirements. For the purposes of the organics management law, multifamily is defined as any structure housing two or more dwelling units per RCW 70A.205.015.

To determine the impacted areas, Ecology uses data from the Office of Financial Management's annual population estimates and Small Area Estimates Program as well as census tract data from the US Census Bureau. Ecology is responsible for making the determination and maintaining the ***ORCA map*** as a reference for jurisdictions. In 2024, Ecology identified the cities of Vancouver and Camas and the Clark County urban growth area (UGA) as ORCAs. The ORCA boundaries are adjusted or updated by Ecology.

ORCA exclusion requests

As determined by Ecology, jurisdictions may apply for waiver(s) to cover the ORCAs and delay the start of residential and nonresidential organics service if needed. Due to limited organics receiving/reload capacity at the West Vancouver Transfer Station (West Van), it is possible that Clark County will apply for this waiver once the process is established. However, efforts are in place to increase capacity before 2027 through the removal of the recycling processing equipment to expand tip floor space. This process is anticipated to take four or more years, and after the completion of expanding floor space for organics, the waste haulers, county and municipalities will work together to strive to meet the 2030 requirements for nonelective service for single-family and impacted nonresidential customers.

Mechanisms to satisfy the organics collection requirements for 2027 and 2030

- **Designated recyclables list**—The county and its municipalities will encourage haulers to comply will the law for providing organics collection services to commercial entities by referring to Appendix L. Organic materials defined within Appendix L serve as a method to dictate G-certified hauler compliance.
- **Organics recycling ordinance**—The county and its municipalities have the option to create organics recycling ordinances to further support these requirements.
- **Jurisdictionally-led residential exemption waiver for alternative organic materials management**—There are a variety of organics collection programs and residential diversion practices in Clark County. Ecology will be creating a baseline exemption process. The county, jurisdictions and haulers will work to adapt the exemption waiver process to meet the needs Clark County residents who manage organic material through alternative mechanisms such as on-site composting, diversion of organic materials to animal feed, self-haul organic materials to a facility or other means of beneficially managing unwanted organic materials.
- **Nonresidential organics services**—Education and outreach programs in Clark County offer nonresidential organics assistance through its Green Business program. While encouraged through such programs, organics collection services cannot be mandated for nonresidential customers as it is protected in three identical RCWs that span cities, counties, and the UTC (RCWs 35.21.158, 36.58.160, and 81.77.140, respectively).



Implementing organics services to identified ORCAs

Camas
The city of Camas, contracts with a waste hauler to provide an optional every-other-week yard debris service. The county will work with Camas to advise switching to green or brown carts or lids. Having provided every-other-week yard debris collection service prior to January 1, 2024, it is anticipated that they will provide organics (food scraps + yard debris) collection services at least 26 weeks per year once additional organics capacity is available. Once capacity constraints are addressed, Camas will be required to expand organics service to all impacted residents and nonresidential customers.

Urban Growth Area
The county has a yard debris collection contract that provides every-other-week yard debris service to the UGA. When parts of the UGA are annexed, the county will work with the hauler to switch to green or brown carts or lids. Having provided every-other-week yard debris collection service prior to January 1, 2024, Approving hauling operations plans that include switching to green or brown carts or lids and offering organics services for customers within the implementation timeline. The county and/or the city will expand organics service to all UGA residents once additional organics receiving/reload capacity constraints are fixed.

Vancouver
In the fall of 2019, the City of Vancouver transitioned from curbside yard debris service to curbside organics (food scraps + yard debris) service as an optional service for residents within the Vancouver City limits. Vancouver provides every-other-week organics service with green or teal carts and is the only municipality within the ORCAs that currently has this service. Vancouver, having every-other-week organics collection service prior to January 1, 2024, will continue to provide service at least 26 weeks per year. Vancouver will expand its organics service to all impacted residents and nonresidential customers once additional organics receiving/reload capacity constraints are addressed.

Ridgefield
While not identified as an ORCA, the City of Ridgefield provides optional organics service that is currently available for residents within the city limits. This service is provided every-other-week in which residents can simply add food waste to their current yard debris carts. At this time, Ridgefield plans to continue to provide this service at least 26 weeks per year. Expansion of services will be evaluated as the ORCA boundaries are adjusted to include Ridgefield.

Planning for changing ORCA obligations

As part of ORCA planning, this CSWMP has added yard debris/food to the designated recyclables list (See Chapter 5: Recycling). Note that designating an item as recyclable is not the same as requiring it to be collected in some or all of our planning area. However, it does identify this material may be collected by g-certified haulers and transporters of recyclable materials.

Efforts will be made toward increasing areas that provide curbside organics services across the county by:

- Implementing ordinances for organics collection service.
- Amending the county's yard debris collection contract to include food waste.
- Approving hauling operations plans that include switching to green or brown carts or lids and offering organics services for customers within the implementation timeline.
- Promoting education and outreach on food waste prevention and reduction and the addition of food waste into the yard debris carts.
- Referring to the Designated Recyclables List for the private industry and G-certified haulers to provide organics services where applicable.
- Planning and communicating with haulers on the municipal-led wavier process for single-family residents that managed their own organic material, self-haul organic materials or other organics materials management methods. Local jurisdictions who grant the exemption, must track the exemptions.

As part of the ORCA planning, it is anticipated that the ORCA designated areas will change. Based on projected growth, population increases are likely to happen in the cities of Battle Ground, Ridgefield and Washougal. Additionally, city annexation is occurring throughout the county. The county will provide service to the UGAs surrounding cities until annexation occurs, at which point the new city limits will impact the ORCA boundaries. The county, as the lead planning agency, will monitor the ORCA map and workbook annually and bring any new areas into compliance in a timely manner.

Volumetric need for organic material management

The required volumetric capacity at organic waste management facilities to achieve the state's goal of diverting 75% of organic materials from landfills by 2030 has been determined based on benchmarks established in 2015. In 2015, Clark County landfilled 287,307 tons of waste. Using the Ecology provided 2015 data for the Southwest Waste Generated Areas, it is assumed that 29% of waste sent to landfills in the southwest

region is organic material. Thus, it is estimated that 29%, or 83,319 tons, of organic material was landfilled in 2015. By law, our county aims to now manage at least 75% of this material, equivalent to 62,489 tons or 78,112 cubic yards, through organic and food waste prevention or via methods other than sending organics to the landfill.

Current diversion capacity

Clark County residents have access to either curbside yard debris services or curbside organics services. Yard debris material collected curbside is delivered to either Triangle Resources and turned into hog fuel for energy recovery, or H & H Wood Recycler's and then transferred to Beaver Bark for composting. The total annual diversion is approximately 20,030 tons or 25,037 cubic yards. For residents within the city limits of Vancouver and Ridgefield, organics curbside services are available. Organics materials are delivered to West Van for processing. Organics tons processed in 2024 totaled 13,787 tons or 17,233 cubic yards.

Residents may also elect to self-haul their yard debris to West Van or to Central Recycling and Transfer Station (CTR). Note that yard debris waste is not accepted at WTS. Of this material, 5,488 tons or 6,860 cubic yards are taken to Triangle Resources to be turned into hog fuel for alternative energy recovery.

West Van is the only facility that is permitted to accept food waste in Clark County and has the capacity to accept 15,000 tons or 18,750 cubic yards annually of mixed food scraps and yard debris material.

This equates to the current operational capacity of 39,305 tons or 49,131 cubic yards diverted from landfill each year. While the number of tons per year diverted by these methods will fluctuate year-to-year, a yearly average over the planning period has been provided. This results in the need to create capacity for an additional 23,184 tons or 28,980 cubic yards per year.

Strategies to improve capacity

To create capacity for processing organics at West Van, the current recycling processing equipment will be removed by the end of 2027. This is anticipated to increase the organics capacity at the West Van to 50,000 tons or 62,500 cubic yards each year. With the addition of the H & H Wood Recycler's capacity to receive 16,935 tons or 21,168 cubic yards, this additional space allows for the capacity of 66,935 tons or 83,668 cubic yards annually, exceeding the required goal of 62,489 tons or 78,112 cubic yards.

To create additional capacity, Clark County will be including considerations for the processing of organic materials in the future transfer station study, which is outlined in detail in Chapter 10: Transfer and disposal.

It is also the intention of the regional solid waste system to look into alternative approaches to reuse organic materials beyond processing curbside and self-haul materials. For example, Vancouver's wastewater utility collects and treats wastewater from its sewerage service area. The wastewater contains both liquids and solids from residential and nonresidential sources. At present, Vancouver's wastewater solids are processed at its Westside Treatment Facility. Currently these wastewater solids are separated from liquids and incinerated, and the resulting ash is sent to a landfill. However, major components of Vancouver's current wastewater solids management system are nearing the end of their useful life. The city has assessed how it manages wastewater solids and has decided to transition from incineration to resource recovery. The Wastewater Solids Renewal Program is currently assessing options for biosolids future options that could include anaerobic digestion or combined with composting. This could provide different options and opportunities for the processing of organics materials from curbside services. The status of this program will be updated in future amendments.

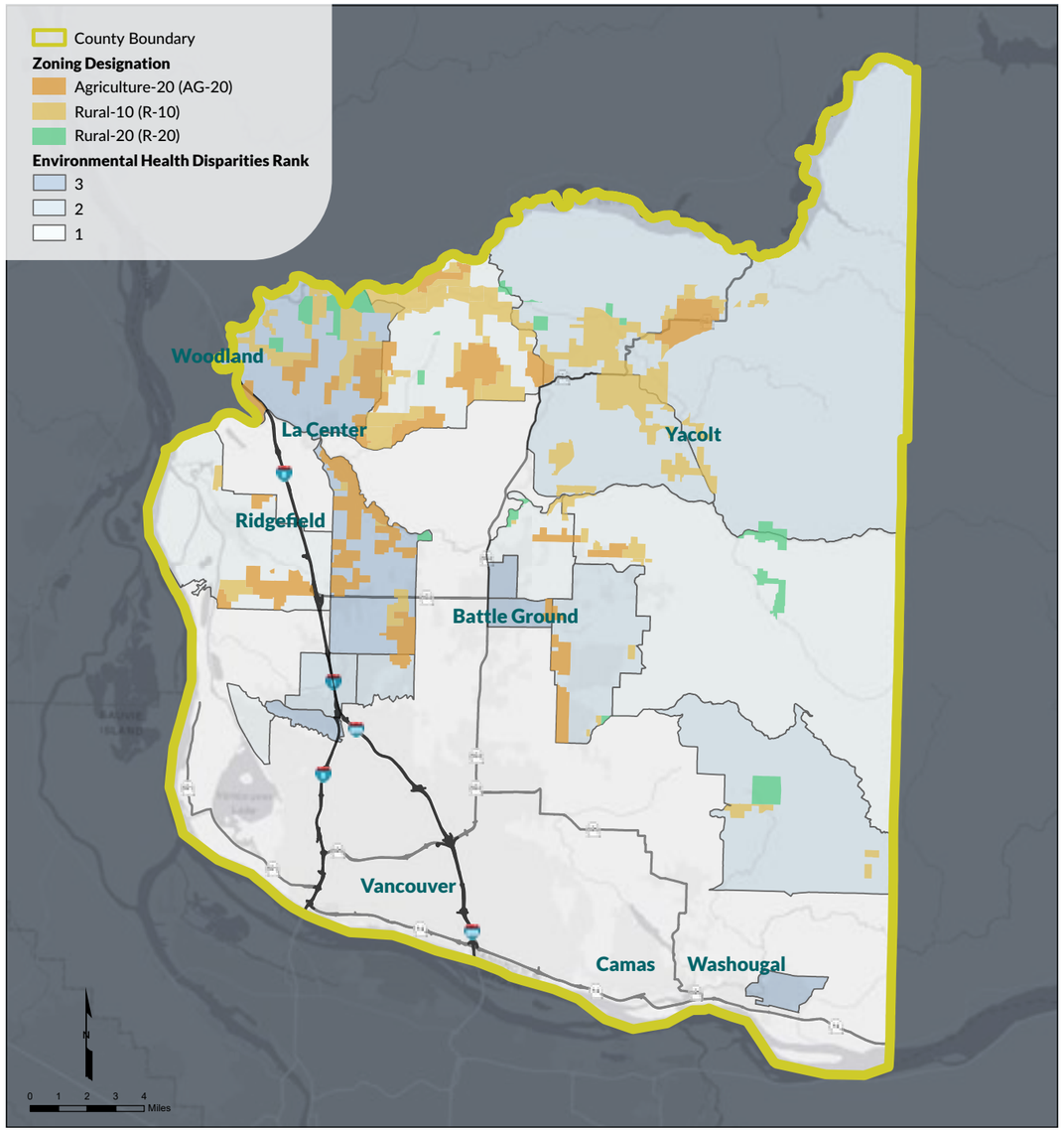
Organics facility priority areas

To increase diversion rates for organic materials over the next several years, the county has identified priority areas for siting organics material management facilities. The priority areas include zones identified as low impact in the ***Washington Environmental Health Disparities Map*** (scores 1 to 3), to not impact overburdened communities. Potential areas identified are near heavy traffic roadways and have low diesel exhaust PM2.5 emissions and low toxic releases from facilities. Additionally, priority areas are focused in industrial, agricultural, or rural zones to minimize impact to residential areas. The priority areas identified in the map below provide visual representation of the priority areas for an organics management facility.

Clark County faces limitations in finding suitable space for an organics management facility based on the criteria outlined above. However, the northern areas of the county, just outside La Center and east of Battle Ground, have been identified as potential sites. These locations are within agricultural and rural zoning areas, are not in overburdened communities, and are accessible to major highways and transit routes. A potential concern, however, is traffic congestion if the facility is located outside of Battle Ground, as there are no major highways that would allow trucks to easily navigate the area. The fourth transfer station siting study includes a component that will consider organic materials management in the design and location of the site.



Figure 6.3.1: 2025 Siting of Organic Materials Management Facilities in Clark County



Communication with planning departments

RCWs 36.70.330, 36.70A.142, 35.63.290, 35A.63.310 require development regulations to implement comprehensive plans developed, updated and amended after January 1, 2025 to allow for siting of organics management facilities to the extent of the volume needed. To ensure organics management is included in Clark County Comprehensive Plans, Solid Waste program staff have sent notification of the intent to site organics management facilities as well as provided the map above to the to Clark County planning department as well as the planning department for partner cities.

6.4 Existing organics management education and outreach programs

With a significant increase in attention to organics management, several of the goals and objectives outlined in this CSWMP focus on managing organics, in particular a growing emphasis on food waste. Food waste reduction campaign studies have indicated that while consumers understand the importance of food waste reduction, they do not recognize their role in solving the problem. The programs outlined below are examples of efforts to address organic materials in the waste stream, including management of food waste, in Clark County. For a more comprehensive list of education and outreach programs, refer to Appendix O.

Composter Recycler Program: The Composter Recycler Program educates the community on waste reduction and recycling with an emphasis on organic materials. This program trains volunteers at no cost through a robust training series that focuses on backyard composting, vermicomposting, recycling, food waste prevention, sustainable living, green cleaning, and more. Certified Composter Recyclers "pay back" their training with volunteer community service hours representing the program at tabling events such as fairs and farmers markets; growing redworms for worm shops; maintaining compost demonstration sites; and sharing their knowledge with neighbors and community groups.

The Composter Recycler Program also educates residents on proper use and distributes worm bins in Clark County. There are currently 350 worm bins in operation throughout the county diverting 31.5 tons of food waste annually with each bin diverting 180 pounds of food waste per year. In addition, community backyard compost bins are sold at cost through the Composter Recycler Program with each bin diverting 380 pounds of organics.

Residential curbside organics contamination outreach: Expanding on their ***Recycling Done Right Clean Cart Program***, Waste Connections recycling advocates do visual lid-lifts on yard debris/organics carts to identify contaminates. If recycling advocates identify a contamination, they provide customer specific contamination feedback through the issuance of the Organics Oops tags. 2023 results indicated that organics total cart contamination was 7.2%.

Community hub composting: Clark County partners with faith-based organizations, large employers, and other sites to offer food waste drop-off locations for residents with limited access to composting services, such as those living in apartments and condos, or living outside of residential curbside organics service areas.

School cafeteria share tables: Clark County partners with public and private schools across the county to provide technical assistance and resources for students and

kitchen staff to sort waste in cafeterias and school kitchens. Often many items going into the trash or compost could have been rescued as edible food. Share tables allow students to share unwanted food to other students that may want more food or have foods collected and distributed through the school resource centers. An estimated 65 schools are using share tables. Based on 100 pounds of food put on share tables each week, and 36 weeks of school, 234,000 pounds of food is placed on share tables over the school year.

Compost demonstration sites: Clark County hosts workshops and educates the community about composting techniques at the 78th Street Heritage Farm and the Center for Agriculture Science and Environmental Education. Students participate in field trips to the site for garden and composting lessons.

6.5 Planning issues

How can Clark County increase participation in commercial composting?

Section RCW 70A.205.545 outlines the requirements and timeline for implementing the collection and processing of food waste and other organic material wastes generated by businesses.

The county is currently implementing strategies to target food service businesses through marketing and outreach to source separate food scraps for a 12-month period. Participants receive assistance and support from Clark County, including a food waste tracking sheet, buckets, signage, and support for training employees.

In partnership with Waste Connections, participating businesses receive a monthly contact to check in about their collection programs and troubleshoot issues as they arise. Food waste prevention education is given to owners, managers, and chefs to encourage food waste prevention practices in both the back of house and front of house settings. Information on the Clark County Green Business website will provide background information and videos to offer tips and opportunities for food waste prevention.

What data is available concerning food waste and how can Clark County use it to improve programs?

In the 2022 Organics Management Law, the Washington Center for Sustainable Food Management was authorized with the task of supporting and tracking progress towards Washington's food waste reduction goals. Their work will be supported by ongoing research that increases our understanding of available data and establishes how to incentivize voluntary data reporting.

The more we know about food flows, the better we can target and manage them. A better understanding of food and wasted food flows will help meet the State's 2030 food waste reduction goals including:

- Increasing voluntary food waste tracking and analytic efforts.
- Connecting food waste tracking to funding mechanisms and incentives.

Advanced data tracking will inform food waste reduction opportunities. Clark County Solid Waste & Recycling programs will continue to monitor the available data and identify intervention points for further organic material waste diversion.

What are upcoming technologies to be monitoring and researching?

Technology and efficiencies in small-scale anaerobic digesters are evolving rapidly. Small-scale anaerobic digesters have demonstrated cost savings and environmental benefits, including the production of valuable digestate, bioenergy, and educational opportunities. Capital costs, technical assistance, and financial support are the largest barriers to small-scale anaerobic digesters development. Key actions to increase small-scale anaerobic digesters development include:

- Securing state-level funding, incentives, and programs for small-scale anaerobic digesters projects.
- Provide pilot project funding and support for farm to school and school to farm projects integrating STEM and climate curriculum.
- Partner with Vancouver's Solid Waste and Wastewater Treatment Departments to explore feasibility of potential food waste or organic streams for local processing capacity needs.

What can be done to reduce contamination of composted organic materials?

The presence of physical and chemical contaminants is a major issue for the collection and processing of organics. Plastic, glass, and metal clogs machinery and makes the sale of compost more difficult when contaminants are visible in the finished product. Chemical contaminants create additional concerns and are not as visible as physical contaminants. Studies on sources and impacts of chemical contaminants are ongoing. While a lot remains unknown, reducing contamination should be a focus to ensure success of the yard debris and food waste collection programs.

7

MODERATE RISK WASTE

7.1 Introduction

Moderate risk waste (MRW) includes hazardous waste (toxic, corrosive, flammable, or reactive) produced by households and businesses generating limited amounts of hazardous waste, often referred to as small quantity generators (SQGs). Common examples of MRW include paints, pesticides, solvents, antifreeze, cleaners, drain openers, and hobby chemicals. MRW can be hazardous to human health, wildlife, or the environment, but it is conditionally (or categorically) exempt from the state's Dangerous Waste Management Regulations, chapter 173-303 WAC.

The first Moderate Risk Waste Management Plan for Clark County was developed in 1988 in response to State Hazardous Waste Management Act (recodified to RCW 70A.300), requiring all local governments to implement MRW plans. This law mandates that local governments develop and implement MRW plans.

RCW 70A.300.350 outlines the requirement for local government to prepare and implement a plan for the management of hazardous waste, including specific elements for collections, public education, and data collection. This chapter stands as Clark County's hazardous waste management plan and describes current collections, applicable legislation, outreach strategies, challenges, future opportunities, and recommendations to guide Clark County Solid Waste and Recycling programs.

Through public education initiatives, permanent MRW collection services, technical assistance, and compliance programs, many of these goals originally identified in 1988 were achieved and are established services we see today. This CSWMP will continue to prioritize the goals of waste reduction through reducing toxics from entering the waste stream. For MRW that is generated, the CSWMP will continue to support recycling and proper disposal of MRW through education and collection events.

Washington state uses the term "dangerous waste" in legislation to differentiate state regulations from federal regulations, which use the term "hazardous waste." Washington rules are typically more protective of the environment than federal rules. For the purposes of this plan, dangerous waste and hazardous waste are used synonymously.

7.2 Conditions assessment

Hazardous waste can come from households, businesses, schools, nonprofit organizations, and community or religious centers. Mismanagement of hazardous materials has the potential to cause serious injury, illness, damage to property, and harm to the environment. Safe and accessible disposal of hazardous waste is essential to protect public health and the environment from harm.

Legal authority

Household Hazardous Waste (HHW) and Small Quantity Generator (SQG) wastes are conditionally exempt from Washington's hazardous waste regulations. Ecology regulations give authority to local jurisdictions to oversee the management of hazardous waste produced in small quantities by residents and SQG businesses. HHW generated by residents is exempt from state and federal regulations due to its relatively small volume compared to commercial waste. Meanwhile, businesses are regulated based on the quantity and types of hazardous waste they generate and store.

Designation of types of hazardous waste generators

To qualify as an SQG, a business must first determine if it meets the state's quantity exclusion limit (QEL). If the QEL is met, then a business is an SQG and is regulated by a set of reduced dangerous waste regulations, designed to make hazardous waste management more accessible to small generators. Refer to figure 7.2.1 for the waste generator designation monthly limits as defined by Ecology.

Figure 7.2.1: Waste generator designation limits

	Small Quantity Generator (SQG)	Medium Quantity Generator (MQG)	Large Quantity Generator (LQG)
Dangerous Waste	≤ 220 lbs	221–2,199 lbs	≥ 2,200 lbs
	&	**&**	**OR**
Toxic EHW and AHW*	≤ 2.2 lbs	≤ 2.2 lbs	> 2.2 lbs
	&	**&**	**OR**
Spills of Toxic EHW and AHW	≤ 220 lbs	≤ 220 lbs	> 220 lbs

**EHW: Extremely Hazardous Waste; AHW: Acutely Hazardous Waste*

The health or environmental risks involved with MRW are not compared any less to fully regulated sources of hazardous waste, but they are referred to as moderate risk because the waste is produced in small quantities. They have a smaller impact compared to waste generated in large quantities. Fully regulated businesses are required to register for an EPA/State ID number and may be subject to inspections from Ecology staff. SQGs do not need a permit with Ecology, and they are the only generator of commercial dangerous waste that can self-haul dangerous waste to a certified disposal facility. HHW may be self-hauled by residents to a disposal facility.

Universal waste is a unique type of hazardous waste that has less stringent management regulations than typical hazardous waste. Universal waste will not count toward a business's QEL when responsibly recycled. In Washington, the defined list of universal wastes includes batteries, lights, lamps, light bulbs, light tubes, mercury-containing thermometers, mercury-containing thermostats, and mercury-containing switches and relays. The federal list of universal waste includes pesticides and aerosol cans, though Washington rules are more protective and do not include these among universal wastes. Hazardous materials being managed through universal waste rules, product stewardship, and/or recycling laws in Washington are described in section 7.3 Expanded recycling or disposal options.

A list of existing generators of hazardous waste in Clark County is provided in Appendix M.

Household hazardous waste

Collection services and self-haul options

Limited curbside collection of HHW is available to residents subscribed to single-family curbside recycling. Motor oil and antifreeze can be recycled by being placed in clear and labeled gallon jugs placed next to the blue recycling cart. Small batteries can be recycled by bagging and taping the ends of the batteries and placing them on top of the blue recycling cart. As discussed previously, batteries pose a fire risk when not properly prepared prior to placing them on the blue recycling cart. Utilizing a ***drop-off location*** is preferred to ensure the safety of haulers and transfer station staff.

Residents can self-haul their hazardous waste for free disposal at any of the three contracted transfer stations in Clark County including West Vancouver Materials Recovery Center (West Van), Central Transfer and Recycling (CTR), and Washougal Transfer Station (WTS). Hours vary at the three locations. More information can be found at the ***Waste Connections HHW website***. This service is contractually funded by Columbia Resource Company (CRC), including all costs of operations, maintenance, transportation, recycling, and disposal of HHW. Additional information on funding can be found in Chapter 11: Funding and financing.









In addition to the permanent facilities, Clark County Solid Waste and Recycling team coordinates annual HHW events in northern Clark County, allowing residents to drop off HHW at a temporary location in the region. This increases accessibility to those residents who live farthest from the permanent facilities. At the time of this revision, events are held in Ridgefield, La Center, and Yacolt.

Final disposal methods

Once collected, HHW is safely sorted and packaged by qualified technicians. Packaged materials are transported to their appropriate end-processing facility. Depending on the material, HHW is recycled, used as an alternative fuel, incinerated, treated in a wastewater treatment facility, or disposed of in a hazardous waste landfill.

Incineration is a disposal method where waste is burned to ensure safe destruction. Incinerated HHWs may include aerosols, pesticides, medications, sharps, chemical solids that are dangerous when wet, oxidizers, flammable solids, light ballasts containing polychlorinated biphenyls and others. Some HHWs including acids and bases can be chemically neutralized at a wastewater treatment facility operating with appropriate water quality permits. Once the chemicals are treated, they are discharged from the facility with treated wastewater.

Some hazardous materials require disposal at specially designed hazardous waste landfills. HHW disposed of in a landfill may include smoke detectors, lab-packed oxidizers, and contaminated soil or debris. Some items disposed of at hazardous waste landfills are miscellaneous wastes including asbestos-contaminated debris and chemically treated wood. All recycling, energy-production, incineration, wastewater treatment, and landfill facilities must comply with regulations and permitting requirements to prevent harm and pollution.

For a list of facilities managing hazardous waste within Clark County, refer to Table 7.2.1

Table 7.2.1: Facilities managing hazardous waste

Name / RCRA Handler ID	Treatment Storage Disposal Activity	Recycles Waste From Other Sites	LQG Consolidator	Transfer Facility	Transfer Facility for Used Oil
US DOE BPA Ross Complex WA1891406349	Yes	No	No	No	No
Veolia ES Technical Solutions LLC Vancouver WAH000057685	No	No	No	Yes	Yes
Tidewater Environmental Services Inc WAH000053774	No	No	No	Yes	Yes
Burlington Environmental LLC Washougal WAD092300250	No	No	No	Yes	Yes
Emerald Services Inc Vancouver WAD068794387	No	No	No	Yes	Yes
Evoqua Water Technologies LLC WAH000042616	No	No	No	Yes	No

Source: Department of Ecology

HHW trends

Increasing costs, safety risks, and relatively stable collection rates since the peak of 3,207,386 pounds in 2017 keep HHW as a focal point in solid waste planning. Clark County continues to prioritize projects including hazardous waste reduction education, facilitation of reuse methods, expansion of HHW facility operations, and facilitating or advocating the use of safer alternatives to hazardous materials.

Table 7.2.2: HHW participation at the CRC transfer stations

	2017	2018	2019	2020	2021*	2022	2023	6 yr avg
Pounds	3,207,386	3,112,806	2,894,074	2,312,382	2,181,443	2,400,759	2,572,858	2,668,815.43
Vehicle count	18,119	18,954	18,825	19,065	18,985	16,571	17,408	18,275.29

*in April of 2021, the PaintCare program came into effect. Paint dropped off at PaintCare locations is not being captured.

Source: CRC HHW Activity Reports

Commercial dangerous waste

Clark County HHW facilities do not accept dangerous waste from businesses. Businesses are responsible for managing their hazardous waste through a certified hazardous waste management company. As of 2024, there are approximately 65 businesses registered with Ecology as medium or large quantity generators in Clark County (Appendix M). These businesses are regulated by Ecology and include manufacturers, health care facilities, grocery stores, automotive repair shops, high schools, and more.

It is difficult to quantify the number of SQG businesses in a region as they are exempt from reporting, though some report voluntarily, including approximately 85 Clark County SQGs in 2024. Ecology estimates that SQGs outnumber MQGs and LQGs, collectively producing a significant amount of MRW.

Businesses in Clark County that qualify as SQG have limited options for managing their dangerous waste. Though SQGs may legally self-haul their waste for disposal, there are limited public or private facilities in Clark County accepting drop-offs of SQG dangerous waste as of 2024. The alternative is to have dangerous waste collected directly onsite by a hazardous waste company. Local options are available on the ***Clark County website***. Onsite collection is more expensive and less convenient than self-haul, creating barriers for small businesses trying to responsibly dispose of hazardous material. Due to the cost and inconvenience of hazardous waste disposal, there is concern that SQG businesses claim their dangerous waste as HHW and use the free HHW facilities for disposal.

WAC 173-303-171(1)(e)(v) states that a SQG may dispose of their dangerous waste at a municipal solid waste landfill. While legal, Ecology discourages the disposal of SQG in landfill due to the dangerous nature of the waste. The 2020-2021 statewide waste characterization study completed by Ecology and Cascadia Consulting Group estimated that statewide commercial municipal solid waste contained 3.1% hazardous and miscellaneous waste by weight on average, totaling an estimated 46,364 tons of hazardous waste being disposed of in municipal solid waste each year. Common hazardous materials found included medical waste, personal care products (e.g. soaps, cosmetics, shampoos, nail polish, nail polish remover, and other items), water-based paint, solvents, oil filters, and other potentially hazardous wastes.

On occasions when MRW is found at CRC transfer stations in municipal solid waste or recycling, operations pause to allow employees to collect the dangerous materials. Commercial transactions are closely monitored so a business that improperly disposes of its dangerous waste can usually be identified and sent an invoice for the cost of handling and disposal. Materials often found are paint and mercury-containing lamps that could harm facility staff, equipment, and the environment.

7.3 Expanded recycling or disposal options

To improve the safe disposal of common MRWs and universal waste, various product stewardship, extended producer responsibility, and recycling programs have been established through state and federal legislation. These programs require specific products, usually hazardous products, to have a recycling or disposal system in place when products reach their end-of-life. Product stewardship programs may be funded by a fee added to the new sale of products, placing the cost on the consumer. Sometimes this fee is a rebate to be returned to the consumer upon safe disposal. In cases of extended producer responsibility laws, the producer or manufacturer must directly fund the disposal system, placing the cost on the producer. Product stewardship and extended producer responsibility programs lift the burden of waste management from hazardous waste collection programs, and generally result in increased capture of the hazardous products.

Antifreeze

Antifreeze is a liquid that is made from ethylene glycol or propylene glycol and is used to control the temperature in internal combustion engines. Ethylene glycol and propylene glycol are made using ethylene and propene by-products of oil refining and natural gas processing. Antifreeze accumulates contaminants from use in engines and must be replaced when there is too much contamination. Antifreeze is a uniquely recyclable material as it can be filtered and distilled to remove contaminants, allowing the remaining antifreeze to be reused.

Along with drop-off at the HHW facilities, single-family residences subscribed to recycling service from the county's contracted hauler, Waste Connections, have the option to recycle used antifreeze at the curb. Residents may put used antifreeze into tightly sealed, clear, one-gallon containers at the curb alongside their recycling carts. The container must be clear so the driver can visually confirm the contents. Recycling drivers collect the jugs by hand and place them into a tray on the side of the recycling truck, designed specifically for one-gallon jugs. Antifreeze is bulked at West Van and recycled.

Batteries

Most batteries meet the definition of hazardous waste, and in Washington, are managed as universal waste. Some batteries contain harmful chemicals and can start fires. In 2023, chapter 70A.555 RCW was signed into law, establishing an extended producer responsibility program for batteries. The program will establish drop-off options for batteries at volunteer retail sites and solid waste facilities, starting in 2027.

Collections will accept batteries from residents, businesses, nonprofit organizations, and government organizations. Portable battery collections begin July 1, 2027, and medium format battery collections begin July 1, 2029. Portable batteries are defined as primary batteries weighing no more than 4.4 pounds, and rechargeable batteries weighing no more than 11 pounds with a rating of no more than 300 watt-hours. Medium format batteries are defined as primary batteries weighing between 4.4 and 25 pounds, and rechargeable batteries between 11 and 25 pounds, or with a rating between 300 and 2,000 watt-hours.

Ecology is required to complete an assessment on large format batteries, battery-powered medical devices, lead acid batteries, and battery containing products by July 1, 2027. Large format batteries are defined as primary batteries weighing over 25 pounds, and rechargeable batteries weighing more than 25 pounds or with a rating over 2,000 watt-hours. Electric vehicle batteries are to be assessed independently, and Ecology must report recommendations to the legislature. The law also includes requirements for battery labeling to begin January 1, 2030.

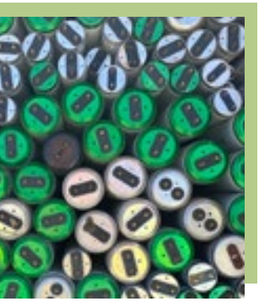
Electronics

Electronics are considered MRW because they contain hazardous components, including metals and flame retardants, that can be harmful to health. ***E-Cycle Washington*** is a stewardship program that was signed into law in Washington in 2006 that allows Washington residents and small businesses (fewer than 50 employees) to recycle specific electronics for free at various locations across the state. The program is funded by electronics manufacturers and is directed by Ecology. As of 2024, covered products include televisions, computers, laptops, monitors, tablets, e-readers, and portable DVD players.

Lead-acid vehicle batteries



Large lead-acid batteries used in vehicles contain harmful lead and sulfuric acid and are considered dangerous waste. Due to their prevalence and toxicity, vehicle battery recycling legislation was passed in 1989 and was codified in Washington as part of Chapter 70A.205 RCW. The regulations made improper lead-acid battery disposal illegal, established a core charge on new battery sales, and created a recycling system where customers may recycle automotive lead-acid batteries at the point of sale for a rebate of the core charge. The core charge incentivized lead-acid battery recycling and has been very successful, with the EPA reporting a 99% recycling rate.



Lights

Millions of mercury-containing lights are sold every year in Washington State. Because of their potential for harm, mercury-containing lights are regulated as universal waste to increase accessibility to safe recycling. The Mercury-Containing Lights Proper Disposal law (Chapter 70A.505 RCW) was signed into law in 2010, which led to the development of the ***LightRecycle Washington*** program. Since then, several amendments have been made into law including in 2014 which created an environmental handling charge as the funding mechanism and in 2017 which changed the financial audit cycle as well as funding parameters to Ecology for administrative and enforcement costs.

In 2024, HB1185 brought additional changes. Starting in 2025, the per-day-bulb-limits that a person can deliver have been updated as follows:

- Unlimited screw base compact fluorescent lamps.
- 15 pin-based compact or linear fluorescent lamps.
- Two high intensity discharge lamps.

In 2029, HB 1185 removes the environmental handling charge as well as begins the ban of the sale of mercury-containing lights. Additional changes include the removal of the sunset provision and extension of the program until 2035 (unless a cost-benefit analysis points to ending the program earlier).

Medications

Unwanted and expired medications are considered hazardous waste because they can have a wide variety of harmful effects on people and the environment. Businesses producing pharmaceutical waste must manage it through a hazardous waste disposal company, but residents have free, safe options for disposing of controlled and non-controlled medications, inhalers, and pre-filled injectables through a statewide product stewardship program. Chapter 69.48 RCW established Washington's Safe Medication Return program, requiring medication manufacturers to fund a disposal program that began operations in 2020.

Washington Department of Health designated MED-Project and Inmar Intelligence as two independent operators of this program. Operators have installed disposal kiosks at participating pharmacies and police departments where residents can drop off medications for secure disposal. Residents can also request free, pre-paid envelopes to mail medication for disposal. Mail-in options are also available for inhalers and pre-filled injectables. All medications collected in this program are tracked by the US Drug Enforcement Administration (DEA) and sent to incinerators. Take-back events are also organized by program operators and the DEA to service regions that have limited kiosk options.

Motor Oil

Used motor oil is a common MRW produced from crude oil that has a high potential to pollute. Oil is damaging and persistent in water and soil because it is insoluble and carries chemical and metal contaminants acquired from engines. Used motor oil is uniquely recyclable because it can be re-refined and reused many times. And when oil prices are high, used oil can be a marketable commodity for recyclers, reducing HHW disposal costs. There are many opportunities for residents and businesses to safely recycle used motor oil in Clark County.

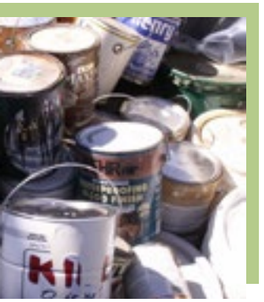
Clark County's contracted recycling hauler, Waste Connections, collects used motor oil alongside curbside recycling for single-family recycling customers. Residents are directed to put their used motor oil in clear, one-gallon plastic jugs with screw-top lids to place on the curb alongside their recycling cart. The recycling drivers collect the jugs by hand and place them in a sealed tray on the side of the recycling truck that is designed to carry the one-gallon jugs. This curbside option greatly increases accessibility to motor oil recycling. The transfer stations also accept drop-offs of motor oil during all operational hours. In 2023, approximately 280 tons of motor oil were recycled through curbside collections and drop-offs at the transfer stations.

If oil is spilled during used oil collections, staff use adsorbent desiccant on the spill and will dispose of the used desiccant as hazardous waste. Secondary containment is used at the transfer stations to prevent any release of oil or other hazardous material into the environment. To prevent polychlorinated biphenyl contamination in used oil bulking tanks, testing is completed on each tank before being collected by the vendor for disposal. Contamination testing is also completed for halogens that may be present from consumers mixing oil with solvent. Levels are noted on invoices, and separate trucks are dispatched for tanks with contamination levels exceeding the safety thresholds. Material exceeding safety thresholds is managed according to the Federal Toxic Substances Control Act. These best management practices as well as others are found through EPA's ***Preventing and Detecting PCB Contamination in Used Oil*** guidance.

Recycling access for used oil is widely available for residents in Clark County at the HHW facilities, curbside collections, and private retail drop-offs. Dozens of private automotive stores accept small quantities of motor oil for free from residents and businesses, alongside other recyclable automotive waste such as lead-acid batteries. Retailers that sell over a specified quantity of motor oil are required to have recycling signs onsite and must sell containers and spill kits that allow safe capture and containment of used oil during oil changes.

Clark County Solid Waste and Recycling programs collaborate with regional partners to educate the community on motor oil recycling, contamination reduction, and spill prevention. A recycling guide is mailed to Clark County residents annually,

including guidance on how to safely capture, store, and recycle used oil through public collections. Recycling locations are also listed on a local, searchable directory of recycling and disposal options, referred to as the ***Recycling A-Z directory***. It is updated frequently, available on various regional solid waste websites, and is also available in the free RecycleRight app. Additional education may occur at the curb, with Waste Connections recycling advocates and drivers leaving educational tags to correct mistakes observed at the curb, such as the use of incorrect containers for used oil.



Paint

Oil-based paint is a common dangerous waste due to its flammability and volatile compounds. Latex paint is safer than oil paint, though it can contain metals and plastics that are harmful to the environment if improperly disposed of. When recycled, leftover latex paint can be mixed to create new paint, and oil-based paints can be used for energy production. From 2005 to April 2021, Clark County, CRC, and Waste Connections managed a Paint Take Back program collecting oil-based, latex, and aerosol paints, and other paint-related materials from residents at participating paint stores throughout Clark County. In April 2021, a statewide paint recycling program known as PaintCare began operating, taking the place of the local Paint Take Back program.

PaintCare is the nonprofit coordinator of Washington's paint recycling program that was signed into law in 2019. The program allows residents and businesses to recycle paint and paint-related material at over 150 locations in the state. All residents and businesses can recycle latex and water-based paints through PaintCare, but oil-based paint recycling is only available to residents and SQG businesses due to their regulatory exemption statuses. Products accepted through PaintCare include interior and exterior architectural paints, deck coatings, floor paints, primers, stains, and more. PaintCare sites do not accept aerosol coatings, solvents, and products designed and labeled to be used for industrial or non-architectural use.

PaintCare is funded by a fee added to the sale of new paint in Washington, charged based on the size of the paint container. Dozens of retail stores and the three transfer stations in Clark County are operating as collection locations for PaintCare paint recycling. Before PaintCare, paint recycled through the HHW facilities, and the locally organized Paint Take Back program made up 42% of HHW disposal costs in 2020. PaintCare reduces this cost from HHW facility operations. Aerosol paint is not a covered product under PaintCare and will be a continued cost incurred at the HHW facilities. For updated information, PaintCare maintains ***a webpage of what products are and are not accepted***.



Photovoltaic modules

Solar panels used to generate electricity are composed of small, indivisible photovoltaic cells, which are made using hazardous chemicals, hazardous metals, and rare minerals. A product stewardship program for photovoltaic modules was signed into law in 2017 and requires manufacturers to fund and manage a recycling program for all modules purchased in Washington after July 1, 2017 (chapter 70A.510 RCW). Covered products include solar modules used on or in buildings; freestanding off-grid power generation systems such as water pumping stations; electric vehicle charging stations; solar fencing; solar-powered signs; and solar-powered streetlights. Ecology anticipates the recycling program to begin July 1, 2025.

7.4 Existing MRW education and outreach programs

RCW 70A.300.350(b) requires local governments to plan for MRW management, handling, and public education. MRW programs in Clark County have taken a variety of forms since the original MRW plan was implemented. Some activities have been combined with solid waste information programs, such as general waste management publications and handouts. Other activities have specifically targeted MRW from households and SQGs. Below are examples of current campaigns focusing on MRW. For a more comprehensive list of education and outreach programs, refer to Appendix O.

Battery drop-off location campaign: To reduce the risk of fire caused by inappropriately disposed of batteries, Clark County has partnered with Waste Connections to provide residents with convenient drop-off locations for no cost household battery recycling. Participating businesses are given the materials needed for collection free of charge including disposal boxes and bags for separating the batteries as well as signage and promotional materials that can include the business branding. Businesses are listed on the county website as well as listed in the RecycleRight app. The program is further advertised through social media, newspapers, press releases, and newsletters.

Battery disposal sites accept lithium-ion (Li-Ion), nickel cadmium (Ni-Cd), nickel metal hydride (Ni-MH), nickel zinc (Ni-Zn), small-sealed lead acid under 5 pounds (SSLA/Pb), lithium primary, alkaline, carbon zinc, heavy duty, button and coin cell batteries, and all cellphones regardless of size, make, model or age. There is a limit of 10 batteries per person per day. Larger quantities can be dropped off at the HHW facilities (see above).

Recycling 201: In partnership with Waste Connections, the City of Vancouver, and the Clark County Solid Waste and Recycling team, the Recycling Beyond the Curb workshop is a free class offered to Clark County residents. The Recycling 201 workshop outlines the risks associated with HHW as well as how to dispose of a variety of items safely and responsibly. Classes are offered monthly in both virtual and in-person formats.

Green cleaning education: Cleaning products are often overlooked as a hazardous waste item, however they meet the definition and require safe disposal. In an effort to reduce amount of toxic products used and entering our waste stream, a portion of the ***Composter Recycler workshops*** focus on recycling and proper disposal of HHW. Course topics include batteries, green cleaning for reducing HHW in your home, and other topics on reducing hazardous waste in your homes. Courses are taught in person with recorded options available on the Composter Recycler website.

Additionally, in collaboration with the Green Schools program and school partners, the Composter Recycler green cleaning curriculum was brought to Spanish speaking residents within the Evergreen Public Schools boundaries. Materials were translated into Spanish and an interpreter was present to relay the information and facilitate questions and answers. The success of this partnership illustrates an opportunity to continue to reach Clark County residents who prefer to receive their information in languages other than English.

Pollution Prevention Assistance: In 2007, Ecology established the Pollution Prevention Assistance (PPA) program to improve the state's water quality by preventing pollution from SQG businesses. Through this program, local governments may provide non-regulatory technical assistance to businesses and schools within the county, teaching best practices to prevent stormwater pollution. Clark County Public Health has two PPA specialists, and Public Works has one PPA specialist working in unincorporated areas of the county as well as the cities of Camas, Washougal, and Battle Ground which have entered into PPA/Source Control interlocal agreement with the county. The City of Vancouver has three PPA specialists who operate from the city's Public Works department. These specialists teach SQGs the best dangerous waste management practices, dangerous waste rules, spill prevention, spill response, proper storage of hazardous waste, waste reduction, and stormwater protection. Through this program, Ecology funds a product replacement program to assist businesses to transition toxic business operations to less-toxic alternatives.

Additionally, the City of Vancouver Stormwater / Water resources Protection group provided SWAC with information about its EPA grant funded Waste Incentive Network (WIN) pilot project. The project website ***Pollution Prevention for Businesses*** provides an overview about the offerings for businesses to manage their hazardous waste, which includes school districts.

7.5 Planning issues

Is it feasible to extend the hours of operation at the HHW facilities to address access concerns, traffic impacts, and customer wait times?

As of 2024, the HHW facilities have limited hours of operation. West Van HHW operates Fridays and Saturdays, 8 am to 4 pm. CTR HHW operates Fridays–Sundays, 8 am to 4 pm. WTS HHW operates on the third Saturday of each month from 8 am to 4 pm. The facilities close or have reduced hours for select holidays including Thanksgiving, Christmas Eve, Christmas, New Year's Eve, and New Year's Day. Operating on different schedules at each facility, and only on Fridays–Sundays reduces the HHW facilities' accessibility. Residents who work on weekends are nearly unable to use the facilities. Expanding days of operation provides the public more flexibility in disposing of their HHW.

Expanding HHW hours offers extra benefits to operations. A regional study of Clark County's solid waste system identified significant traffic concerns at the transfer stations and expanding HHW hours is one method to reduce traffic on peak traffic days. Additionally, Clark County Public Health inspections of the HHW facilities have identified reoccurring crowding issues for HHW processed at each of the facilities. Extra days of operation at the facilities provide technicians more time to organize the material, thereby improving safety conditions. Changes in HHW operational days may be flexible and planned to meet the needs of all partners.

How can the options for SQG disposal of dangerous waste be expanded?

Businesses in Clark County that qualify as SQG have limited options for managing their dangerous waste. At the time of this revision, limited local facilities accept self-hauled SQG waste leaving SQGs with the more expensive option of having waste picked up onsite. Self-hauling waste reduces handling costs and is generally more convenient for small businesses with small quantities of waste. Mail-in disposal options exist for some specific types of dangerous waste such as aerosols, sharps, electronics, batteries, lights, some medical wastes, and mercury-containing equipment. While mail-in options are convenient for small businesses, they are limited to specific materials deemed safe to transport as mail by the U.S. Department of Transportation.

Since HHW and SQG dangerous waste are both classified as MRW and have the same collection regulations, it is possible to collect SQG and HHW together. In Washington, 21 counties accept SQG dangerous waste alongside HHW, with at least two additional counties considering adding SQG service, based on 2021 updates to Spokane and Adams counties' solid waste management plans. Clark County small businesses would greatly benefit from adding SQG collections at the HHW facilities, joining the 21 more comprehensive solid waste programs in the state. Collecting SQG dangerous waste with HHW would have a long-term positive impact on how businesses manage dangerous waste in the county. It would lessen the burden of dangerous waste management on Clark County's schools, small businesses, and nonprofit organizations. Providing this service at any of the three HHW facilities would increase convenience and access to responsible SQG dangerous waste disposal, maximizing MRW collections in the region. Adding SQG service would also contribute toward wider regional goals to protect public health and the environment from dangerous materials.

Options to consider include:

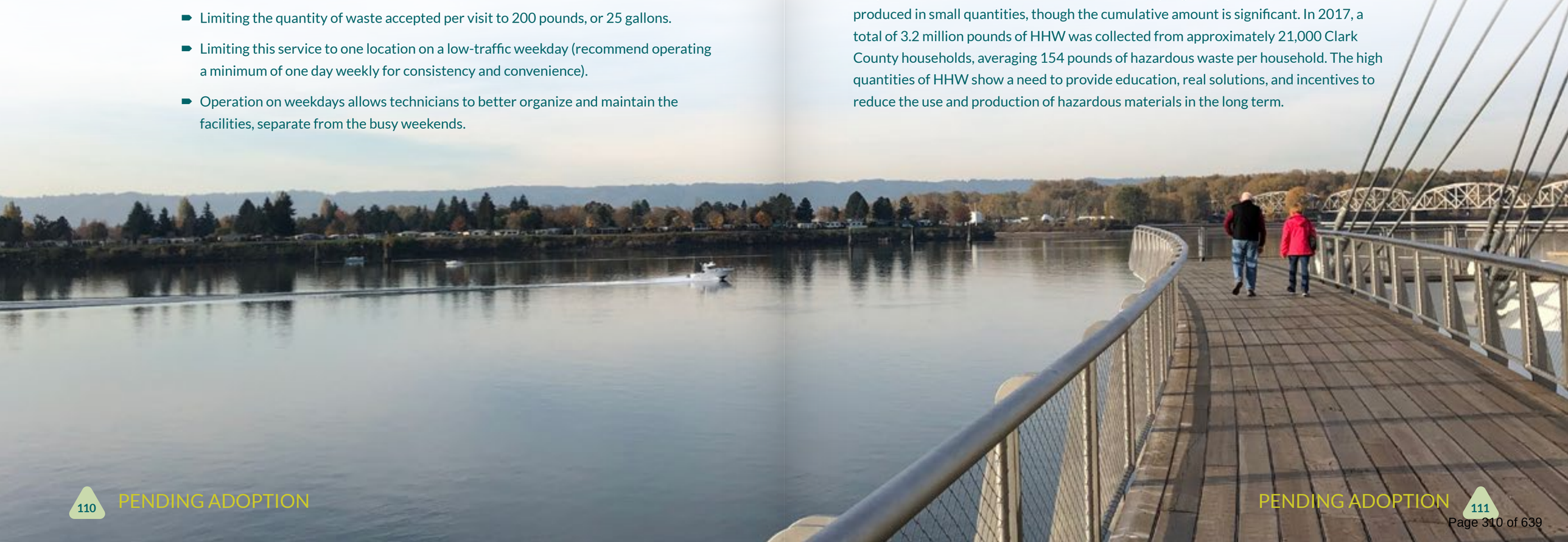
- Requiring SQGs to schedule an appointment for drop-off.
- Requiring businesses to submit a hazardous waste inventory for each drop-off.
- Limiting the number of drop-offs per year from each business.
- Limiting the quantity of waste accepted per visit to 200 pounds, or 25 gallons.
- Limiting this service to one location on a low-traffic weekday (recommend operating a minimum of one day weekly for consistency and convenience).
- Operation on weekdays allows technicians to better organize and maintain the facilities, separate from the busy weekends.

What data is available to ensure equity in access and service levels throughout Clark County?

To best serve everyone in the community, there is a need to collect data on who is using the HHW facilities to determine what populations are being underserved. A study by the Product Stewardship Institute found that the average resident needs to dispose of HHW once every 7.4 years. To meet this need, HHW collections should be serving at least 13.5% of their region's households each year. Clark County served 12% of households in 2020. This shows a need to increase participation by 1.5% or approximately 6,500 households per year. Studying participation at the HHW facilities would help identify barriers for residents not using the HHW facilities. This could include barriers such as distance to travel to the facilities, use of public transportation, racial inequities, disabilities, age, language barriers, and more that may prevent trips to the HHW facilities. Identifying barriers would allow targeted expansion of services, accessibility, and engagement to better serve all community members.

What waste reduction interventions can be implemented?

Hazardous waste is dangerous and has a high potential to harm public health and the environment. To create a healthier society and planet, there is a need to reduce the production of hazardous waste at its source. By regulatory standards, HHW is produced in small quantities, though the cumulative amount is significant. In 2017, a total of 3.2 million pounds of HHW was collected from approximately 21,000 Clark County households, averaging 154 pounds of hazardous waste per household. The high quantities of HHW show a need to provide education, real solutions, and incentives to reduce the use and production of hazardous materials in the long term.





8

MISCELLANEOUS WASTE

8.1 Introduction

Miscellaneous wastes include solid waste with special collection, handling, and disposal requirements not generally included as part of the mixed municipal solid waste stream. Miscellaneous waste is a catch-all category used to describe dangerous hard-to-handle materials. While some miscellaneous waste can be managed at the same permitted disposal facilities as other wastes, special processes are required to ensure they are handled appropriately. The following sections outline miscellaneous wastes managed in the Clark County regional solid wase system.

8.2 Types of miscellaneous waste

Agriculture wastes

As defined in WAC 173-350, agricultural wastes are wastes generated from farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, livestock manure, animal bedding, and carcasses of dead animals. Agriculture wastes consist of two general types of wastes: crop wastes and livestock wastes. Crop wastes include residues from grain, hay, vegetables, seed crop production, and trimmings from fruit trees. Livestock wastes include manure and animal carcasses.

Disposal

Most agriculture waste generated in Clark County never enters the municipal solid waste stream. Instead, this waste is most often disposed on-site. The three principal methods for disposing of agricultural wastes on-site are:

- Land application or composting (manure and crop residue);
- Burning (trimmings and crop residue); or,
- Use as animal feed (crop residue).

The agricultural wastes that typically enter the municipal solid waste stream are small animal carcasses and some minor amounts of crop residue and tree trimmings. These wastes are typically landfilled or composted.

Animal carcasses

Animal carcasses more than 15 pounds are considered agricultural wastes. WAC 246-203-121 Disposal of dead animals and chapter 16.68 RCW Disposal of dead animals address the minimum requirements for this miscellaneous waste.

Disposal

While these rules allow for burial of animal carcasses with a minimum of three feet of cover and 100 feet from any well or surface water, this CSWMP recommends against this practice unless an emergency or disease outbreak occurs, whereby disposal by means of burial is deemed essential to prevent the spread of disease and authorized by the health officer. In these rare instances, the minimum requirement of three feet of cover and 100 feet distance from any well or surface water would apply.

The following practices for disposal of dead animals in Clark County are recommended. All carcasses must be transported to the disposal site within 24 hours.

- Rendering by a licensed rendering company;
- Incineration at a permitted facility suited for this waste type;
- Composting following the Washington State Department of Agriculture's current best management practices.
- Disposal at a CRC transfer station.

Animal feeding operations should incorporate best management practices for managing animal carcasses generated from ongoing operations.

Asbestos

Asbestos is a naturally occurring group of heat-resistant and fibrous minerals. Asbestos was historically used for insulation, fire-resistant coatings, automotive brakes, adhesives, roofing, drywall, ceilings, and thousands of other building materials and products. Asbestos is now considered a dangerous material because repeated inhalation of asbestos can result in lung damage and cancer. Cases of repeated exposure may lead to mesothelioma and death. Specific uses of asbestos have been restricted through regulations passed by the EPA from 1970 to 2019, though most uses of asbestos are now banned. In 2024, the EPA announced a final rule to prohibit ongoing uses of chrysotile asbestos, which is the only known form of asbestos currently used in or imported to the United States.

Regardless of a new ban, it remains common for buildings constructed up until the late 1990s to contain asbestos in levels requiring special handling and disposal during construction and demolition projects. Environmental pollution from asbestos is dangerous mainly due to the risk of human exposure to the material. Asbestos does not decompose and can remain a threat for long periods of time.

Disposal

All waste materials that may contain asbestos must have testing completed prior to disposal, including interior walls and ceilings, exterior walls, flooring, insulation, fireproofing material, heating system components, gaskets, roofing material, electrical material, and other miscellaneous items such as adhesives, caulks, patching, and window glazing. Prior to disposing of asbestos containing materials, CRC must be contacted to obtain disposal forms and packing instructions. Disposal for materials that have tested positive for asbestos is available at CTR and West Van transfer stations.

Asbestos-containing materials disposed at CTR and West Van are carefully bagged and transported in uncompacted roll-off containers for special disposal at the Wasco County Landfill in Oregon. Staff at Wasco County Landfill have a separate designated area of the landfill where asbestos is safely buried. Protective measures are used to prevent asbestos material from being released into the air.

Ash

Ash is generally defined as residue including any air pollution flue dusts from combustion or incineration of material including solid wastes, biomass, and fuels. Ash from municipal solid waste incineration is regulated under chapter 70A.315 RCW and chapter 173-306 WAC Special incinerator ash management standards. Ash from other forms of incineration, such as sludge or wood waste incineration, is regulated under chapter 173-303 WAC Dangerous waste regulations or 173-350 Solid waste handling standards, depending on the characteristics of the ash. In Oregon, municipal solid waste ash is regulated by Department of Environmental Quality under OAR 340-93-190.

Disposal

The City of Vancouver's Westside Wastewater Treatment Facility combines wastewater solids from both Westside and Marine Park Wastewater Treatment Facility and currently incinerates its de-watered sewage sludge, generating ash in need of disposal. The incinerator ash and grit is transported to Finley Buttes Landfill through the West Van transfer station. The City of Vancouver is investigating options to utilize the ash as an additive to construction or building materials.

The Georgia-Pacific mill located in Camas generates ash from burning hog fuel to power the boiler. The mill indicates that the annual amount of hog fuel boiler ash it has generated and landfilled has varied considerably from year to year. For more information on disposal, refer to Paper and mill wastes below.

Biomedical waste

Biomedical waste (also referred to as "red bag," infectious, or biohazardous wastes) is generally defined as infectious and injurious waste originating from a hospital, medical office, veterinary, or hospice care facility. A uniform statewide definition for medical waste is provided in RCW 70A.228.010, which outlines specific items. There are federal and Washington state regulations directed specifically at the storage, transport, and disposal of biomedical wastes. Washington Utilities and Transportation Commission (WUTC) regulates the hauling of medical wastes under its "G-certificates," issued under chapter 81.77 RCW authority. Rules relating to the safe transportation of biohazardous or biomedical waste are found in chapter 480-70 WAC and Title 49, Code of Federal Regulation, Parts 170-189. Incinerator burn requirements are found in 70A.205.605.

In addition, the Oregon medical waste requirements must be observed by Clark County as a community exporting waste to Oregon landfills. Oregon requirements apply to medical waste generated from medical facilities and residences. State of Oregon regulations ORS 459.386 through 459.405 and OAR 340-93 establish general rules pertaining to the management of infectious wastes in Oregon.

Clark County Solid Waste Code (Chapter 24.12) contains infectious waste segregation requirements for generators, requirements and standards for transporters, requirements and standards for storage/treatment facilities and biomedical waste disposal requirements.

The amount of biomedical waste generated annually in Clark County is estimated to be several hundred tons. This volume is expected to increase in the future due to continued population growth, as well as increased biomedical waste segregation by smaller generators. Some smaller generators may still be disposing biomedical waste with their general solid waste. However, an increased level of awareness, liability, and the availability of collection services for smaller generators has likely reduced illegal and improper disposal.

Currently, many large- and small-quantity medical waste generators in Clark County appear to be properly informed and knowledgeable about proper biomedical wastes practices. Clark County provides education about correct management practices for residential generators. The community education program targets residential generators who produce small quantities of sharps. Residential sharps generators are provided education about correct containers and the collection opportunities afforded them by pharmacies, transfer facilities, and mail back programs.

Disposal

Commercially generated biomedical waste: Medical waste-certificated haulers provide collection services to larger generators of medical waste, such as hospitals, clinics, labs, and veterinarians. The certified hauler collects untreated biomedical wastes that have been properly packaged from large and small biomedical waste generators in the county. Waste Connections has authority to collect in Clark and Skamania counties. Some generators self-haul their biomedical waste to permitted disposal facilities in accordance with federal and state regulations. The regional transfer stations provide drop off collection locations for sharps from residents only at each facility.

Law requires pathological and chemotherapy waste to be incinerated. Pathological and chemotherapy waste from local hospitals is packaged in yellow marked containers and picked up by a certified hauler for transport to the final incineration.

Residential generated biomedical waste: There is a growing amount of medical waste in the residential waste stream. Currently, there are pharmacies within Clark County which are accepting used containerized syringes back from their customers. Residents may also take used containerized syringes to any of the three transfer stations in sharps containers.

Syringes from residential customers are sometimes inadvertently delivered to West Van through the residential recycling collection system and these pose a serious issue for worker safety as sorters might be accidentally stuck. When these are discovered, procedures are in place for the syringes to be carefully removed from the recyclables picking line when the materials are sorted. The collector has implemented special communications to caution the public about proper handling of household syringes/sharps.

Biomedical wastes must be transported by a permitted hazardous waste service provider, and disposed at permitted treatment, storage, and disposal facilities. Wastes may be landfilled, sterilized, or incinerated, following state and federal laws.

Bulky waste

Bulky wastes are large items of refuse such as furniture and other oversized wastes, that would typically not fit into residential disposal containers. For the purposes of this CSWMP, bulky wastes do not include white goods, such as washing machines, water heaters, clothes dryers, stoves, refrigerators, and freezers.

Disposal

Currently, residential bulky wastes are not collected on regular routes by the WUTC certified collection company, Waste Connections. On-call services are available through Waste Connections for additional fees, dependent on the customer's location and the type of bulky waste. Several small private collection operators advertised as "junk removal" or "clean-up" companies, may perform waste removal, transportation, and disposal of residential bulky wastes. The hauling of waste by these private collection operators has strict rules from the WUTC to prevent hauling activities that would require a G-Certificate, held by Waste Connections.

In the cities of Vancouver and Camas, bulky wastes are collected at the curb on certain days of the week by reservation only. In the City of Vancouver, this service is provided by the contracted hauler Waste Connections. In the City of Camas, the service is provided by the City Solid Waste Division. Common items such as chairs, sofas, and mattresses have set collection rates.

City of Vancouver and Waste Connections provide annual neighborhood cleanup events for bulky wastes in active and recognized city neighborhoods.

The City of Ridgefield holds an annual community clean up event that accepts bulky wastes. Proof of residence is required to participate.

Some bulky wastes from larger non-residential generators are collected by Waste Connections, often via drop box service and some bulky wastes are self-hauled by both residential and non-residential generators to CRC transfer stations.

Contaminated soils

Contaminated soils are defined in WAC 173-350-100 as soil containing one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

- Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act—Cleanup, that would be established for existing land use at the location where soil is placed; or
- Contains contaminants that affect pH, and pH of the soil is below 4.5 or above 9.5 or is not within natural background pH limits that exist at the location where soil is placed.

Ecology has established guidance for the handling and disposal of contaminated soils in Washington. Petroleum-contaminated soils are regulated in Guidance for Remediation of Petroleum Contaminated Sites (WA Ecology No. 10-09-057). In Oregon, contaminated soils are regulated under OAR 340-93-170.

Disposal

Finley Buttes and Wasco County landfills are permitted to dispose of petroleum-contaminated soils. Other landfills permitted to dispose of petroleum contaminated soils are the Roosevelt Regional Landfill in Klickitat County, WA, and the Columbia Ridge Landfill in Gilliam County, OR. Petroleum-contaminated soils can also be delivered to the CRC transfer stations, with advance notice.

These soils must be handled in accordance with chapter 173-303 WAC. Guidance should be obtained from Ecology on this issue. Some petroleum-contaminated soils can be treated on-site to lower their contamination levels.

Construction and demolition wastes

Construction and demolition (C&D) projects produce a wide variety of debris and wood waste that make up 24.2% of landfilled waste in Washington by weight. C&D waste is produced by residents and businesses through remodeling projects, new construction, building demolitions, building deconstructions, land clearing, and other related activities. The term C&D mainly refers to wastes that are not hazardous and can be disposed of in a landfill, though C&D projects also produce hazardous waste. The diversion of C&D materials from the landfill relies on the availability of reuse and recycling markets, the participation of the construction industry, and the transfer station capacity limitations/availability.

Waste uniquely produced during C&D activities can include the following six material types: bulky waste, deconstruction materials, demolition debris, hazardous waste, inert waste, and new construction materials.

Hazardous waste, also known as dangerous waste, is commonly produced from C&D projects and must be managed according to Dangerous Waste Regulations, chapter 173-303 WAC. Building components being disposed of must be screened to designate dangerous wastes. Hazardous C&D waste can include asbestos, leftover paint, adhesives, aerosols, solvents, used shop towels, materials coated with lead paint, lead pipes, materials containing PCB, contaminated soil, contaminated water, mercury-containing lights, radioactive smoke detectors, and more. Waste designated as dangerous must be disposed of through a certified hazardous waste management company. Some hazardous materials may be recycled, including paint, motor oil, batteries, mercury-containing lights, and other materials through product stewardship programs and universal waste rules. The amount and types of hazardous waste produced will impact a business's generator status. See Chapter 7: Moderate risk waste for more details on hazardous waste.

Disposal

New construction materials that are left over from C&D projects can be reused, recycled, or disposed of. This may include any of the materials described above that were purchased new for use on the project. New construction materials are among the easiest materials to reuse or recycle because they are produced in a predictable schedule and are less likely to be mixed with municipal solid waste or hazardous items. Leftover materials are not typically saved for future projects, though their clean state allows them to be easily separated and recycled where vendors are available. Hazardous products leftover from new construction may include paint, adhesives, aerosols, and cleaning chemicals, which can be saved for future projects. The unused hazardous products must be disposed of according to hazardous waste regulations when discarded or unwanted.

Disaster debris

The regional solid waste management system is responsible for the handling of debris resulting from a disaster, both natural and man-made. The local disaster debris plan describes the policies and procedures in managing debris on a regional basis, specifies goals and recommend implementation strategies, and provides tools and reference information to facilitate debris management and recovery. Maintained documented adherence to proper procedures is important to support requests to the Federal Emergency Management Agency for reimbursement of local costs.

The plan ensures that the disaster debris efforts are coordinated, efficient, effective, and environmentally sound. The plan contains the following:

- Disaster debris will be managed according to the following hierarchy — reduce, reuse, recycle, recover, and landfill.
- Debris will be removed from the right-of-way.
- Debris clean-up areas will be prioritized to remove first from public roads and streets and to allow access to emergency operations facilities and essential public facilities.
- Elimination of debris-related threat to public health and safety.
- Debris removal from private property is the responsibility of the property owner.
- Disaster debris that is to be landfilled will be taken to a regional solid waste system facility.
- Normal garbage service will be restored as quickly as possible.

Dredge spoils

Dredge spoils are soils and organic materials produced during dredging operations. Before they can be used as fill, dredge spoils must be evaluated similarly to contaminated soils to determine whether a solid waste handling permit is necessary. This evaluation involves characterizing the material to check if it qualifies as dangerous waste, in which case it must be managed according to the Dangerous Waste Regulations (WAC 173-303). If the material is not classified as dangerous waste, the next step is to assess its contaminant levels against applicable cleanup standards for the proposed fill location. This assessment will determine if a solid waste handling permit is required for its use as fill.

Disposal

Dredge spoils are subject to the same waste designation rules as contaminated soils. Independent testing and approval is required before dredge spoils will be accepted for landfilling. In addition, dredge spoils must be dewatered before they are accepted for disposal. Wasco County Landfill operates a dredge spoils dewatering facility in The Dalles, OR to process dredge spoils prior to disposal in the landfill. Dewatered and dried dredge spoils are acceptable cover material at Finley Buttes, Wasco County, and other landfills in Washington and Oregon. If testing reveals the contamination is below certain levels, spoils can be used as fill with certain conditions.

Industrial process waste or sludge

Sludge is generally defined as "a semi-solid substance consisting of settled sewage solids, combined with varying amounts of water and dissolved materials generated from a wastewater treatment plant or other industrial source." Industrial process waste includes materials that have similar physical properties to sewage sludge but may contain inorganic chemicals that result from a specific industrial process.

Ecology generally regulates industrial process waste or sludge as solid waste in Clark County under 173-350 Solid Waste Handling Standards. Clark County Public Health issues permits to City of Vancouver's Industrial Food Wastewater Pretreatment Lagoon to land apply waste solids in Clark County, consistent with 173-350 WAC. Municipal wastewater treatment solids that qualify as Class A or Class B biosolids are subject to 173-308 WAC Biosolids Management.

Testing requirements regarding dangerous waste designation of industrial process waste may be subject to management requirements of chapter 173-303 WAC. Waste designated as "dangerous" is outside the scope of this plan. In Oregon, sludge disposal is regulated by DEQ under OAR 340-94-040.

Disposal

Permitting and regulation of biosolids (wastewater treatment solids) is subject to chapter 173-308 WAC, with oversight provided by Ecology and local health departments with delegated authority. The amount of industrial process waste or sludge generated in Clark County is largely unknown because there are no requirements to report.

Paper and mill wastes

This section specifically addresses only the manufacturing by-products of the county's paper mills, as well as other mills. These wastes include, but are not limited to wastewater treatment sludges, calcium carbonate, and mud waste.

Disposal

Georgia-Pacific operates Lady Island Landfill, a private landfill, adjacent to its Camas mill. This facility is permitted as a limited-purpose landfill, which may accept both wood waste and dried wastewater sludge. The mill generates only incidental amounts of wood waste due to modification in the milling process (i.e. greater combustion of primary solids and the facility no longer receives whole logs). The mill does generate ash from their boiler that is powered by a combination of hog fuel and fossil fuel for energy recovery. Ash generated from boiler operations is either placed in their limited-purpose landfill or hauled to a regional landfill. Based on Georgia-Pacific waste generation rates of the last several years, the capacity of the Lady Island Landfill exceeds the 20-year period covered by this Plan.

Street sweepings and vactor wastes

Vactor wastes or catch basin wastes are collected through private collection contractors and local municipal jurisdictions. Street sweeping wastes are collected primarily through local municipal jurisdictions. The material consists of soils, gravel, vegetative matter, and various solid wastes such as cigarette butts, paper and beverage containers. The soils and vegetative matter are generally contaminated by hydrocarbons.

This section addresses only those wastes collected and managed by local jurisdictions. These wastes are typically considered "solid waste" as defined by chapter 70A.205 RCW, and are managed in accordance with applicable federal, state and local regulations.

Disposal

Clark County Public Works collects and stores street sweeping material at a permitted processing site located at Whatley Pit. The cities of Battle Ground, Camas, Ridgefield, Vancouver, and Washougal and the Washington State Department of Transportation also deliver to Whatley Pit and participate in funding of the facility. Facility use is guided by an interlocal agreement.

When a large enough pile is accumulated a large trommel screen is brought on site to remove the solid waste debris. The screened organic material is utilized as fill. If testing reveals the contamination is below certain levels the material may be used as a soil amendment.

For vactor waste, Clark County Public Works operates a decant facility to process vactor waste generated in the county. The facility is located at Whatley Pit. The cities of Battle Ground, Ridgefield and Vancouver as well as the Washington State Department of Transportation also utilize the decant facility at Whatley Pit for waste collected in vactor trucks.

The City of Camas operates a decant facility at the Camas Public Works Operation Center. Other local jurisdictions manage these materials through similar means.

The material collected at the Whatley Pit decant facility is dewatered and screened to remove the excess liquids and debris. The remaining organic material may be used as soil amendment if testing reveals contamination is below acceptable levels.

Tires

Waste tires require special consideration due to the fire risk, leachate, and potential for pests, such as mosquitoes. Waste tires include “tires that are no longer suitable for their original intended purpose because of wear, damage or defect” (chapter 70A.205 RCW). WAC 173-350-350 governs waste tire storage and requires a solid waste permit for facilities that store more than 800 waste tires or over 20 tons of heavy equipment tires. For statewide tire disposal information, visit ***Ecology’s waste tire page***.

Additionally, the presence of the chemical 6PPD in tires creates concern when handling and disposing of tires. When 6PPD is exposed to air, it reacts with ozone to create 6PPD-quinone (also known as 6PPDQ). 6PPDQ is lethal to coho salmon and can contaminate water systems. For more information on efforts to protect salmons, see ***Ecology’s Tire anti-degradant (6PPD) and 6PPD-quinone***.

Illegal dumping of tires is an ongoing concern. Tires collected within the county right-of-way are temporarily stored at county maintenance facilities before transport to processing facilities.



Disposal

Currently, waste tires are accepted from self-haul residential and non-residential generators at the CRC transfer stations. The waste tires are segregated by tires on rims and tires not on a rim then placed in trailers for shipment. Tires on the rim are transported to Finley Buttes Landfill where they are removed from the rim, shredded, and landfilled. Tires that are off the rim are transported to RB Tire Recycling located in Portland, OR. RB processes the tires into a crumb rubber product that is utilized in a variety of products including rubber mats. Recycled tires are also used as fuel, construction material, and in other re-use applications.

Waste tires are also collected by retail tire outlets and stored for later transport to processing facilities. Large retail outlets transport their waste tires to various operations. Currently, most waste tires generated within the county are shredded and then recycled.

At the city level, the City of Vancouver’s Spring Clean-up program provides each garbage customer within the city limits a coupon redeemable for recycling/disposal of up to four passenger tires. In Ridgefield, tires are accepted at the annual community cleanup event with proof of residency.

Vehicle wastes: Hulks and auto fluff

Vehicle hulks are not specifically defined in chapter 173-350 WAC. For the purposes of this CSWMP, "vehicle hulks" are defined as abandoned or discarded vehicle bodies, including recreational vehicles. ORS 459.247 prohibits the disposal of vehicle hulks in landfills. Auto fluff is generally defined as the lightweight material left over after vehicles are shredded and most metals are removed.

Travel trailers and camper shells are considered municipal solid waste and bulky wastes, not vehicle hulks. Mobile homes are also not considered hulk vehicles however, the transportation, demolition, and disposal of mobile homes involve regulatory challenges like hulk vehicles. Clark County has collaborated with the various agencies having jurisdiction over the transportation, demolition, and disposal of mobile homes to develop information to assist residents and contractors with the process.

Code enforcement officers in the cities and Clark County, along with local law enforcement agencies (including the Clark County Sheriff's Office and the Washington State Patrol) jointly administer the abandoned vehicle hulk management program in Clark County. When an abandoned vehicle is determined to be a public nuisance, one of these agencies contacts the property owner and requests that the vehicle be removed or stored out of sight. If the registered owner of the vehicle cannot be located or is not responsible, the affected property owner can be authorized by the local law enforcement agency to have the vehicle towed and scrapped. Noncompliance with the request will result in the agency getting a licensed hulk hauler to remove the vehicle. Sometimes the vehicles are filled with garbage, which creates additional costs.

Disposal

Hulk vehicles delivered to the shredding facilities may contain fluids such as gasoline, oils, brake fluid and antifreeze. Clark County encourages the proper management of these fluids by residents or hulk haulers. Residents may set antifreeze and oil at the curb for recycling if they are a curbside recycling customer and follow the specific preparation requirements. Residents can also take antifreeze and oil to the transfer stations for recycling. Hulk vehicles may contain mercury switches. Clark County recommends the removal of mercury switches prior to shredding. Ecology's Mercury Switch Program assists wrecking yards with the cost of removing these devices prior to recycling. Pacific Coast Shredding has participated in the Ecology program since 2007. Metal is magnetically separated from auto fluff in the shredding process. The remaining material is not recyclable but may be used as cover material at a landfill.

Local wrecking yards and metal recyclers also accept vehicles for disposal when accompanied by a title certificate proving ownership. Auto hulks have fluids, refrigerants, air bags and tires removed, and then they are crushed and transported to the auto shredder operation at Pacific Coast Shredding LLC in Vancouver or Schnitzer Steel Products Company in Portland.

White goods

Large household appliances, also known as "white goods," are defined as appliances, such as washing machines, water heaters, clothes dryers, stoves, refrigerators, and freezers. White goods are easily recycled for their metal value after an appliance has been stripped of insulation, plastic, glass, non-ferrous metals, lubricants, refrigerants, and other contaminants. Most of the materials in white goods are recyclable, but environmentally threatening components, such as PCB-contaminated capacitors in older appliances, mercury-containing switches and oil-filled compressors, or refrigerants in refrigerators, freezers, or air conditioners can cause environmental contamination when damaged.

Disposal

White goods can be picked up curbside by the contracted or franchised haulers and are also collected or accepted by several private companies in Clark County. Some appliance companies accept self-hauled white goods or remove used white goods as part of the pick-up or delivery service for new appliances.

Companies may charge a handling or stripping fee for appliances that are self-hauled to their drop-off facilities or may also offer a payment or donation receipt based on an appliance's scrap value. WUTC-certificated and city-contracted haulers also provide curbside pickup of white goods upon request, generally for a fee. Most white goods, after stripping, are recycled through Metro Metals NW/Pacific Coast Shredding, Inc. in Vancouver. Additional metal recycling firms operate in Portland, OR and surrounding communities.



The City of Vancouver, in coordination with its contracted collector, offers each residential garbage customer one free curbside pickup of a major appliance during the year, when scheduled in advance through the hauler. City of Vancouver neighborhood associations also accept non-freon containing white goods that can be recycled as scrap metal during their annual neighborhood clean-up. The City of Ridgefield annual cleanup event includes items with freon such as freezers, refrigerators, and air conditioning units.

State and federal regulations to control the release of refrigerants into the atmosphere have significantly affected white goods handling. Refrigerants, such as Freon, are almost universally used in refrigerators, freezers and air-conditioning systems. In response to both the federal and state Clean Air Acts, no refrigerants may be released from refrigeration, commercial or industrial appliances. As a result, venting refrigerants during white goods processing or disposal is not permitted. White goods processors must recover refrigerants from appliances.

Ecology has adopted WAC 173-303-506, for the management of used or "spent" refrigerants. The rule also conditionally exempts spent refrigerants from chapter 173-303 WAC, Dangerous waste regulations, when they are reclaimed or recycled.

The CRC transfer stations provide central locations for the collection of white goods and bulky wastes. The transfer stations also assist in the distribution of public education materials concerning recycling opportunities for oversized wastes and current handling requirements for white goods.

8.3 Existing miscellaneous waste education and outreach programs

Wastes requiring special disposal considerations and technical knowledge pose unique challenges in ensuring proper and safe disposal. The programs outlined below are examples of efforts to address miscellaneous wastes in the regional waste system. For a more comprehensive list of education and outreach programs, refer to Appendix O.

C&D Waste Connections educator: Waste Connections provides an educator with part of their time dedicated to C&D outreach and education. Historically, this educator's role was limited to tracking and reporting waste and recycling data from customers seeking LEED® or other sustainability certifications during renovation or construction. This work plan expanded in 2022 to pursue additional elements to improve C&D recycling outreach. This role expansion includes providing more outreach materials, technical assistance, and research on recycling and reuse options for C&D waste that could be utilized. Vancouver's collection contract requires the collector provide an educator to promote C&D recycling.

C&D recycling toolkit: Voluntary recycling of C&D waste requires knowledge of where to recycle each material type, and the ability to source separate the materials to be recycled. Clark County published a C&D recycling toolkit in 2009 that listed regionally available recycling vendors of C&D waste like asphalt, carpet, drywall, insulation, metal, plastics, plumbing, roofing, and rubble. This toolkit is now outdated, as recycling vendors have changed over time. Oregon Metro published an updated 2018-19 toolkit that lists newer, regional options for recycling and salvaging materials, providing a more current resource for contractors and residents.

Developing and distributing an updated toolkit specific to Clark County would allow the inclusion of regionally specific contact information, recycling locations, and solid waste regulations that differ from Oregon. An updated toolkit could also include resources and general guidance for material reuse, deconstruction, and waste reduction. Updating these resources would also allow for the possible expansion of recycling options listed in the regional recycling directory known as Recycling A-Z Directory and RecycleRight app. A new toolkit could be developed internally by Solid Waste staff or completed through a qualified contractor.

8.4 Planning issues

Are there ways to divert more reusable and recyclable materials from C&D waste streams?

There is a widespread need for more recycling of C&D materials, and this relies heavily on locally available recycling processing or transfer facilities. Most C&D materials that enter the transfer stations in Clark County are not recycled. Various recyclers of specific C&D materials operate privately in Clark County, though it is for limited source separated material at various locations. No companies are recycling mixed loads of C&D waste in Clark County.

One method to increase C&D recycling, as used by King County, WA, is to build C&D recycling markets through an ordinance requiring defined types of C&D waste to be recycled at designated C&D recycling facilities. As of 2022, there are no existing facilities in Clark County that recycle C&D waste on a large scale, but an ordinance directing C&D material to a recycler would incentivize larger C&D recyclers to open operations in Clark County. To approve such vendors, Clark County would request proposals to enter agreements with private C&D recyclers, who could then open locations in the county.

Such agreements would include strict operational and administrative requirements like the following:

- Compliance with all applicable regulations, laws, and permitting requirements.
- Suitable techniques for screening incoming material to prevent accepting municipal solid waste, hazardous waste, and other non-C&D wastes.
- C&D materials will be recycled at a specified rate.
- Incidental MRW will remain under a specified percentage of incoming material and will be disposed of following WUTC rules.
- Hours of operation are posted/accessible.
- The facility will provide Clark County with accurate data, including measurement of incoming materials, quantity recycled, quantity landfilled, and other metrics as needed.

Other methods for increasing diversion could include partnerships with local planning departments and the contractor community. Having the ability to connect with builders before construction projects begin would allow Solid Waste and Recycling staff to provide waste management resources and education for free programs such as ***PaintCare*** and ***E-Cycle Washington***. Incentives to reduce waste could include reduced permit fees, or fees partially refunded after the contractor provides evidence of deconstruction, waste reduction, and other waste diversions.

Recycling C&D waste is additionally beneficial because it provides a new, marketable, usable resource without performing environmentally damaging activities like mining, mineral extraction, and deforestation. The marketable resource then provides local economic opportunities. The development of a recycling program for C&D waste will require a larger, comprehensive study of diversion methods and policy solutions for Clark County Solid Waste and Recycling staff and partners to consider. The research will allow Clark County Solid Waste and Recycling staff to gain expertise in C&D recycling, infrastructure needs, and general diversion methods to build into future programs and contracts.





9

SOLID WASTE COLLECTION

9.1 Introduction

Municipal solid waste refers to all solid and semisolid wastes, including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, construction and demolition wastes, abandoned vehicles or parts thereof, and recyclable materials (Chapter 70A.205 RCW). This chapter addresses the collection, processing, and disposal infrastructure for municipal solid waste in Clark County, including recyclable and organic materials. The category of collection and processing is divided into certified hauler services and self-haul. Certified hauler services include curbside residential pick up as well as commercial, industrial, and institutional pick up and drop box pick up. Self-hauling of waste includes residents and contractors hauling waste themselves from their businesses or residences to a transfer station.

Washington Utilities and Transportation Commission (WUTC), Clark County, and the cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, and the town of Yacolt are responsible for the management of solid wastes within Clark County. Waste Connections of Washington (Waste Connections) is privately contracted to provide collection services for garbage, recycling, and yard debris/organics within the county boundaries.

Clark County Public Health Solid Waste Enforcement has authority over public health and safety for garbage collection in all of Clark County, including the cities and towns. Solid Waste Enforcement issues permits for solid waste storage, collection, transfer, and disposal according to chapter 70A.205 RCW, chapter 173-350 WAC, and Clark County Code Chapter 24.12.

Collection services and requirements are dependent on the type of collection system being utilized. Systems vary in who can provide services, rate approval, bill responsibility, operating conditions, and whether the service is subscription (voluntary) or mandatory.



9.2 Conditions assessment

Rate setting and billing

In 1961, state law established that solid waste collection services should be available to all residents of the state at rates that were fair, just, and reasonable. Rates or fees charged for garbage collection in Clark County vary by area and service provider.

Rate setting for refuse and garbage collection and recyclable materials collection also needs to be structured to provide incentives to reduce and recycle wastes while fully recovering program costs to the extent allowed by regulatory agencies.

Rates are evaluated and adjusted annually to reflect current costs. Updated information on fees is provided on the Waste Connections website, broken down into ***residential*** and ***commercial*** rates.

Urban-rural designation

State planning guidelines require that counties develop clear criteria for designating areas as urban or rural for the purpose of providing minimum solid waste and recycling services. For example, state law (RCW 70A.205.045(7)(b)(i)) requires that recyclables be collected from homes and apartments in urban areas, whereas drop-off centers can be used in rural areas. In Clark County, designation of urban and rural is determined by considering total population, population density, and other applicable land use or utility service plans. Additionally, anticipated population growth and presence of other urban services are considered when planning. Within the Clark County regional system, rural includes all areas outside the urban growth area (UGA) as defined by the Clark County Comprehensive Plan. Urban includes the UGAs and all incorporated areas. The ***Clark County Comprehensive Plan*** is currently under revision and some cities are in the process of annexing to extend their municipal services, regulations, voting privileges, and taxing authority to new territory. For current maps showing the designations, refer to the ***Comprehensive Plan maps***. Regardless of designation, the solid waste system in Clark County meets the requirement by providing curbside recycling services countywide.

Residential collection services

Service options

Residents have many options that include varying container sizes, frequency of service, and subscription opportunities. These options vary based on the jurisdiction being served and contractual agreements. The options provided and selected will change the overall cost to the customer. A summary of the collection profile in each jurisdiction is provided in Table 9.2.1.

Table 9.2.1: Clark County curbside garbage and recycling residential services

Jurisdiction	Contract	Mandatory	Bulky items (fees may apply)	Collection frequency—garbage	Collection frequency—recycling	Cart size—garbage	Cart size—recycling*
Camas	City	G/R	No	W EOW	W	35 65	65
Ridgefield	City	G	Yes	W EOW M	EOW	20 32 64 96	95
Vancouver	City	G/R	Yes	W EOW M	EOW	20 32 64 96	95
Washougal	City	G/R	Yes	W EOW M	EOW	40 96	95
Other urban (Battle Ground, La Center, Unincorporated Clark County)	UTC	R**	Yes	W EOW M	EOW	20 32 64 96	64
Rural (includes Yacolt)	UTC	No	Yes	W EOW M	Varies	20 32 64 96	Varies

G: Garbage **R:** Recycling **W:** Weekly **EOW:** Every Other Week **M:** Monthly

* Glass is not accepted in comingled recycling carts. Glass is to be put in a separate dark green bin.
** Recycling is mandatory if garbage frequency is weekly or EOW.

Source: WCW rates page, City of Camas utility page, and individual city contracts

WCW rates page link: ***https://wcnorthwest.com/residential-rates***

City of Camas utility page link: ***https://www.cityofcamas.us/publicworks/page/garbage-services***

Minimum collection service levels: Efforts are being made statewide to establish minimum collection standards and services. Minimum collection service level options include providing recycling for all garbage customers in Clark County unincorporated and rural areas and providing garbage and recycling for all customers in the UGA.

Universal collection services: Universal collection services require residents and businesses to pay into the solid wastes management services regardless of if they choose to participate in the service as provided. In urban communities, universal services offer the benefit of maximizing route efficiency, reducing greenhouse gas emissions, and reducing the overuse of self-haul services at the county's three transfer stations. It also works on economies of scale and helps keep rates low by increasing the participation that spread fixed costs over a larger population. The unincorporated areas of the county, as well as the cities of Battle Ground, La Center, and the town of Yacolt, do not have a universal garbage collection. Waste generators have the choice of either subscribing to collection services provided by their WUTC-certificated company or self-hauling to a permitted disposal or transfer facility.

Bundling services: Bundling is when the price a residence or business pays for collection service includes more than one service such as garbage, recycling, and/or yard debris/organics. Bundling promotes greater participation and helps increase recovery rates. It also creates route efficiencies like those of universal collection services. By spreading these costs over greater numbers of people, bunding helps to keep rates affordable. Recycling services are commonly bundled with garbage service and is considered a best practice in solid waste collection policy.

Bulky items: Furniture, appliances, electronics, or tires can be picked up curbside when requested. This service is available in Vancouver, Ridgefield, Washougal, unincorporated Clark County and the rural areas of Clark County. The Waste Connections rates page provides a detailed list of accepted items and associated cost.

As part of the City of Vancouver contract, all single-family residents within the city limits who have active garbage service are eligible for one curbside disposal of up to five bulky items, each item weighing less than 100 pounds, for no additional charge. Additional pickups may be scheduled for an additional fee.

City of Camas residents can request pick up of a variety of large items for an additional fee (based on the item's size and weight), by contacting the city utility customer service line.

Special collection events: Special collection events are a way of collecting materials that are exceptions to regular collections services. This can be bulky items, HHW, or special recycling material such as rigid plastics or polystyrene. Special collection events work well when built around other events to create awareness synergies. These can be annual city festivals, the county fair, or neighborhood events. Special collection events are also a great time to partner with other organizations, such as reuse and repair, green gardening groups or even community health organizations.

In rural areas of the county, these events can supplement recycling collection for standard items as well. Special collection events provide very clean streams of materials due to active monitoring and therefore offer better market value for source separated material which can help offset costs associated with hosting an event.

Garbage collection services

Garbage in Clark County is currently collected by both private companies and municipal government agencies. Table 9.2.2 provides the service provider information and associated WUTC certification number.

Table 9.2.2: Service provider information

Service provider	WUTC certificate number	Address
Waste Connections	G-253	9411 NE 94th Ave. Vancouver, WA 98662
Waste Connections	G-101	PO Box 148 Kelso, WA 98526
City of Camas	None	616 NE 4th Ave. Camas, WA 98607

State law provides the following three categories under which garbage collection services (excluding recyclable materials collection) are administratively authorized and controlled:

State-certified collection: Since 1943, the Washington State Legislature has granted cities and towns the authority to require all residents and businesses to participate in a city mandated waste collection and disposal system. In 1989, the authority was expanded to include the collection of recyclables. Cities and towns implement this authority through their municipal or contracted collection programs. For cities which do not provide collection themselves or through contract, the WUTC is responsible for ensuring that the state certificated hauler serving the city follows the mandatory service and subscription ordinance. RCW 81.77 directs the WUTC to supervise and regulate private solid waste collection companies in the state of Washington. Companies are required to obtain a certificate from the WUTC declaring that the company is qualified, willing, and able to provide the outlined service, specify categories of solid waste that can be collected, and outline the geographic service area.

As part of its legislative mandate, the WUTC audits these companies for fair rates, proof of adequate insurance, operational safety, and requires annual reports. Any solid waste collection company, including certificated companies, may also provide service under contract with an incorporated city or town. The WUTC's authority covers private collection companies that operate in unincorporated areas of a county and in incorporated municipalities where the city chooses not to regulate through other means. City contracted collection services are not subject to WUTC control. Collection systems directly operated by city crews and equipment are also exempt from regulation by the WUTC.

County controlled collection: Statutory restrictions imposed upon counties by RCW 36.58A limit a county's authority concerning solid waste collection. A county currently may provide collection services itself or through direct contract only if no qualified private company is willing or able to do so. In addition, a county may not provide service in an existing certificated area unless it acquires rights by purchase or condemnation. Except in the circumstances stated above, the county is prohibited from directly managing or operating solid waste collection systems. It is unlikely that such a combination of circumstances would ever occur within Clark County. However, a county may exercise limited control of solid waste collection services in unincorporated areas through the adoption of service-level ordinances. Service-level ordinances can establish the types and levels of services to be provided to both residential and non-residential customers. In addition, such ordinances can encourage rate structures that promote waste reduction and recycling activity.

City-controlled collection: Cities and towns have the authority to make decisions about the collection of solid waste within their jurisdictional limits. Three types of collection options are allowed per Washington state law. Within Clark County, the cities and unincorporated areas utilize the following options:

- **Municipal:** This approach utilizes municipal employees and equipment to collect waste. The City of Camas uses this approach for garbage collection.
- **Contracted with a private company:** Incorporated cities and towns may elect to contract with private companies for waste and recycling collection. Services provided by the contractor and regulated by the jurisdiction need to comply with Chapter 70A.205 RCW. Battle Ground, Ridgefield, Vancouver, and Washougal use this approach and have a contract with Waste Connections.
- **WUTC certificated:** With this collection method, cities can delegate solid waste collection authority and responsibility to the WUTC. The cities allow the WUTC-certificated hauler to provide service under WUTC regulation at rates approved by the WUTC. It is the collection company's responsibility to collect fees for services rendered and to remit a licensing fee, franchise tax, or fee based on gross receipts to the city. The license, therefore, benefits the city by generating revenues while the WUTC remains the regulatory authority for licensed collection. The City of La Center and the town of Yacolt as well as the unincorporated areas of Clark County use this approach by allowing the hauler certificated for their area (Waste Connections) to collect residential and commercial solid waste within their municipal limits.

In 2022, to accommodate the county's anticipated growth for the next five to seven years, Waste Connections began preparing to transition to automated residential garbage collection. This process required rerouting the entire county and notifying customers of new service dates. Service date changes did not apply to residential customers in Vancouver city limits, Camas, Ridgefield, and Washougal as they have individual collection contracts with Waste Connections. Waste Connections fully

transitioned from customer-provided garbage carts to 95-gallon roll carts in the rural service area and cities' service areas (cities of Battle Ground, La Center, and the town of Yacolt). In 2023, Waste Connections completed the transition to automated garbage carts in the UGA of Clark County. Upgrading garbage carts in these select areas allows the drivers to operate safely from the cab instead of out on busy roadways, thereby reducing injury and accidents.

Recycling collection services

Recyclable material is a commodity and is regulated differently from general solid wastes in the state of Washington. The collection and transportation of recyclable materials from single-family and multifamily residences are regulated under RCW 81.77 and RCW 36.58. Under these statutes, counties have the authority to directly regulate the collection of source-separated recyclable materials. Local government jurisdictions, including both counties and cities/towns, have the option to either contract directly with a private collection company to provide residential recyclable materials collection services or delegate the responsibility to the WUTC. If the local government contracts directly with a collection company, then it regulates collection activities and the WUTC is not involved. If the authority is delegated to the WUTC, then a WUTC-certificated collection company would provide the collection service. In addition to these two options, cities have the option of providing recyclable collection services within their jurisdictional boundaries by using city personnel and equipment. The self-hauling of recyclable materials by generators to recycling centers, transfer stations, or other locations is not regulated.

In Clark County, Waste Connections is the sole contracted hauler providing residential recycling services, including single-family and multifamily residences. This allows for consistency across the county regarding acceptable materials, cart size and color as well as in methods to properly prepare recyclable materials. This continuity allows for unified messaging and prevents customer confusion when moving around the county. Single-family recycling services are offered every other week except for Camas and Battle Ground which maintain weekly service. Multifamily residences have the option of weekly and every other week collection. In Vancouver, multifamily properties can have more frequent recycling collection up to twice per week based on site storage and volume capacities.

In 2009, countywide recycling collection transitioned from a 3-bin system to a roll cart-based collection system for mixed recycling and separate bin for glass at single-family residences. Multifamily residences may have either carts or dumpsters for mixed recycling and a separate cart for glass. The carts are for commingled paper, plastic, and metal recyclables; glass bottles are collected separately in a bin next to the cart. Currently, the roll cart size varies by location. Refer to Table 9.2.1 for the current offerings. The blue carts have black lids that are hot stamped with the accepted list of recyclables. Select jurisdictions that separately contract recycling services from the county have their carts hot stamped on the side with their city logo. County recycling carts are hot stamped "RECYCLE."

Some items cannot be commingled due to risk of contamination and safety. Single family residential customers are provided with an 11-gallon dark green bin for glass that is set out next to the blue recycling cart. While containers are not provided for motor oil and antifreeze recycling, directions are provided to fill clear gallon jugs and place next to the blue recycling cart.

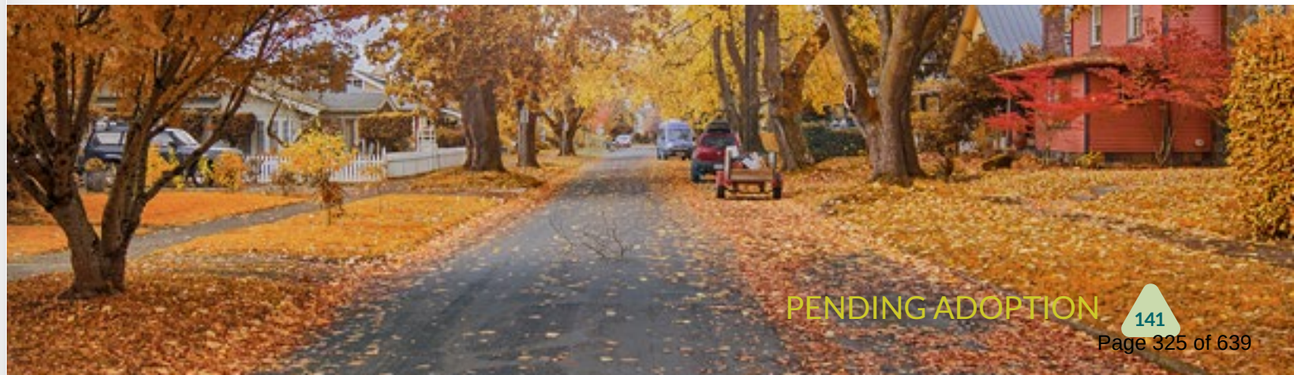
Batteries are also accepted curbside when properly prepared. Preparation includes taping the ends and placing in a clear plastic bag on top of the recycling bin. Battery contamination in the commingled recycling cart have become a concern. Alternative methods of recycling batteries are preferred over curbside services.

Yard debris and organics collection services

The service level for organic materials (food and yard debris) varies throughout Clark County. All organic materials (food and yard debris) services are subscription based. Subscription options and availability very based on the location of the residence.

The City of Vancouver and the City of Ridgefield have expanded yard debris curbside collection to add food waste including pre-and and post-consumer food waste, such as whole or partial pieces of produce, meats, bones, cheese, bread, and cereals. Residents received a complimentary kitchen pail to collect food scraps and then empty into the green cart. Households are encouraged to layer food scraps and yard debris to reduce any potential odors and/or vectors as the organics cart is picked up every other week. The remaining areas of the county allow only yard debris in the curbside collection. More information concerning organic materials including food waste, refer to Chapter 6: Organics.

Any additional yard debris above normal service level will be billed as extra yard debris. For public health reasons, all food waste must be contained within the organics cart and must not be included in any extra yard debris placed out. Extra yard debris can be placed in a Kraft paper bag, spare can or bundled at the curb. Loose yard debris cannot be collected at the curb.



Self-haul

In addition to curbside services, residents may also self-haul their garbage, bulky items, recyclable materials, and household hazardous waste to public drop-off centers at the three CRC transfer stations. Yard debris is accepted as self-hauled material at CTC and West Van as well. WTS does not accept yard debris at this time. Additionally, community collection events may be scheduled periodically throughout the year.



Commercial collection services

Commercial recycling

Clark County has a competitive commercial recycling environment, with commercial recycling services provided by a variety of service providers. Some operators specialize in paper fibers such as office paper or corrugated cardboard or wood wastes, while others offer a full array of services for most commodities. The county actively supports commercial recycling through technical assistance programs and promotional educational materials. The degree of source separation required varies by vendor. Source-separated recyclables may be commingled (combined with other source-separated recyclables) to increase collection efficiencies. Waste collection systems can readily adapt to changes in customers served with additional equipment, workforce, and periodic adjustments to route schedules. As collection service within the regional area is performed under contract, these contract rates take into consideration increases in the customer base. WUTC also can review rates for G-certificated haulers which also incorporates a review of the customer base.

The collection and transport of recyclable materials from nonresidential generators are regulated by the WUTC under RCW 81.80. Three types of authorities are established in RCW 81.80, including common carriage, contract carriage, and private carriage. Counties have no authority to regulate the collection and transportation of nonresidential recyclable materials. Cities may enter non-exclusive contracts with providers of non-residential recycling services or may establish a regulatory framework to direct the nature of their activity and services within the jurisdiction. Local businesses, however, may choose to make other collection arrangements.

Common carriers are permitted by the WUTC and can collect a specific commodity or multiple commodities within a designated geographic territory. Common carriers do not own the commodity being hauled; they are simply providing a transportation service for the owner. Common carriers are required to provide collection and transportation services to anyone requesting the service within the collection territory. Fees are negotiated between the carrier and the customer.

Contract carriers are permitted by the WUTC and can collect a specific commodity or multiple commodities from a single nonresidential generator. Contract carriers negotiate the tariff or fee paid for the service with the waste generator without WUTC involvement.

The City of Vancouver has established a licensing program that pertains to common carriers collecting recyclable materials within the city limits. A key purpose of this requirement is to obtain data on recycling activities within the jurisdiction. All recycling collectors obtain from the city a license which is renewed annually. Licensed recyclers must comply with the code requirements and are only to collect source-separated recyclables. An annual report on tons or cubic yards collected is required at the end of each year.

Commercial yard debris and food waste

Under current law, all nonresidential collection of yard debris for composting may occur in a competitive marketplace. Solid waste haulers, disposal companies, private recyclers, private composters, and individual collectors are allowed to make collection arrangements with nonresidential generators, adhering to jurisdictional licensing requirements.

Food waste is a large sector of the garbage waste stream and diversion of food is a major legislative focus. The county is currently working with school districts, restaurants, and institutional entities in the development of food waste collection programs in an effort to meet the legislative requirements.

Commercial food waste collection: In 2022, approximately 100 businesses participated in the food scraps composting service. Methods of participation include shared service with other businesses through their property management company and directly subscribing to Waste Connections. Due to low participation in the voluntary composting service compared with the total number of food-related businesses, most of the food waste generated at businesses is still going to landfill.

School food waste collection: During the 2023-24 school year, Waste Connections provided weekly service to 62 schools for the collection of 368 food only carts. Using the EPA estimates of 150 pounds per cart and assuming a 36-week school year, approximately 993.6 tons (1,987,200 pounds) of food waste was diverted from the landfill and composted.

Retail food waste collection: Many large retailers utilize the private company Divert, Inc and other processing systems for their food waste. Waste Connections currently services food waste drop boxes for several retail locations. This data gives an idea of how much food waste is generated from the retail sector. With the inclusion of food rescue in the Washington Organics Management Law (HB 1799), opportunities exist for diverting some of these tons to feed people and animals.

9.3 Processing and recovery

The county contracts CRC for the processing of residentially collected recyclables and all such recyclables in the county are delivered to West Van for processing. CRC also processes recyclables collected from areas outside Clark County at this same facility. Recyclable materials received through the curbside and multifamily collection programs are marketed by CRC and a portion of the revenue generated from the sale of these materials is returned to the City of Vancouver and contract hauler with the possibility of a percentage returned to the City of Vancouver and county.

The cities of Camas, Ridgefield, and Washougal have contracts that do not include provisions for recycling revenue share. CRC's transfer and disposal contract with the county requires the company to recover and recycle a minimum of 10% of the incoming disposal stream.

CRC meets its minimum annual recycling requirement by recovering materials from selected loads on the tipping floor. Most recovery is wood and metal, pulled from loose drop box or self-haul loads. Very little is recovered from compacted loads of mixed waste due to contamination and operational difficulties. Source-separated materials delivered to CRC drop-off recycling facilities by self-haulers are counted toward the minimum annual recycling requirement; however, materials recovered through CRC's source-separated recycling collection services and materials collected by county and city recycling collection contractors are not included.

9.4 Existing collection education and outreach programs

To increase participation in curbside services and reduce contamination of the recycling and yard debris/organics carts, educating the public is key. The programs outlined below are examples of efforts to educate the customer of proper use of the curbside services. For a more comprehensive list of education and outreach programs, refer to Appendix O.

Organics 101 — Curbside Composting: To increase participation and to prevent contamination, no-cost organics collection workshops are offered to residents multiple times a year through a partnership with Vancouver Solid Waste, Clark County Green Neighbors, and Waste Connections. The "Organics 101 – Curbside Composting" workshop focuses on what is and isn't accepted in the cart, how to maintain the cart and pail to keep them clean, and where the materials go after leaving the curb.

Mailers and informational resources: Waste Connections in collaboration with Clark County and contracted cities develops and distributes mailers and other resources highlighting current topics and key changes to the services provided. This multilingual newsletter uses words and images to educate the public on what can and cannot be placed in the specific carts, how to dispose of hazardous items like medications, and safety precautions.

9.5 Planning issues

What opportunities are available to expand garbage, recycling, and yard debris/organics collection services?

An evaluation of the current Clark County solid waste system was conducted as part of the Regional Solid Waste Systems Study (Appendix I). Several opportunities were identified to explore including strategies to modify collection services such as expanding universal services, bundling bulky waste, conducting collection events, and eliminating on-call yard debris service in urban areas with the implementation of organics collection.

Additional opportunities include looking into current processing infrastructure to incorporate more automation to increase waste diversion rates.

What intervention points are available to reduce the burden of illegal dumping?

Illegal dumping and the burden it places on communities have a direct impact on the county's collection system. Bulky waste, couches, mattresses, and other similar items are frequently illegally dumped as a result of inconvenient collection, lack of options or education, or the avoidance of costs. There are many ways and examples the county could develop a bulky waste pickup service for its residences. Vancouver offers a free collection service through Waste Connections for up to five items a year and Tacoma offers a twice a year call collection service. Other cities offer set out dates throughout the year when people can set items out for collection or discounted or free transfer station self-haul vouchers.

How can we increase capacity and participation in food waste collection services?

Given the March 2022 passage of Washington's organics law per HB 1799, Organics Materials Management (now added to chapter 70A.205 RCW), there's a need to evaluate the expansion of collection programs for yard debris and food scraps from residential and commercial customers.

In contrast to recycling collection, organics collection services are offered on a subscription basis throughout the county, except in the rural service area where service is not provided. Currently, the City of Vancouver and the City of Ridgefield have transitioned their yard debris collection programs to an organics collection service model. Currently, about 60% of residential Vancouver customers subscribe to this service, which now allows them to include food scraps along with yard debris for every other week collection. Putting food scraps into the organics cart instead of the garbage cart is voluntary and up to the customer.

Concerns have been reported over storing food waste in the green cart may lead to issues of odor, potential pests, and fly/insect infestation, especially during warm summer months. Education on how to layer yard debris with food waste and keep the lids secured can address these concerns to increase the participation of the public.

In addition to residential services, Vancouver currently has a commercial food collection program. Participation has been slow to gain traction. The county, in partnership with Vancouver, could evaluate barriers to participation in Vancouver's commercial collection program. This could look at pricing, frequency of collection, and education about the program to food waste producing businesses such as restaurants, hotels, hospitals, and schools.





10
TRANSFER AND DISPOSAL

10.1 Introduction

Transfer stations are central collection facilities where solid waste in unloaded from route and commercial collection vehicles or private vehicles and reloaded into larger containers or vehicles for shipment to a landfill or other processing facility. From the transfer stations, materials may be taken to a municipal solid waste landfill, material recovery facility (MRF), or compost facility. A MRF is a collection location that separates and prepares single-stream recycling materials to be sold to end buyers. A MRF also allows the opportunity for separation of items not collected curbside. At the end of the waste stream, municipal solid waste that cannot be recycled, repurposed, or further utilized in the current system is transported to the landfill as its final destination.

In Clark County, municipal solid waste is directed to privately owned facilities through contractual agreements between the haulers and municipalities or through interlocal agreements between the county and municipalities. Municipal solid waste collected by the contracted hauler is delivered to county designated transfer facilities operated by Columbia Resource Company (CRC) under a contract managed by Clark County. Waste Connections provides the majority of municipal solid waste collection services within the county either through a contract or a franchise granted by the WUTC. The county contract with Waste Connections requires the company to deliver municipal solid waste collection under the WUTC franchise or through a contract to the designated county transfer system.

Currently, the waste in Clark County is delivered to and processed at the following three facilities prior to being sent to landfill:

- Central Transfer and Recycling (CTR), located at 11034 NE 117th Ave., Vancouver.
- Washougal Transfer Station (WTS), located at 4020 Grant St., Washougal
- West Vancouver MRF (West Van), located at 6601 NW Old Lower River Road

This chapter outlines the Clark County infrastructure, facilities, and operations for the sorting, transporting, and management of the final stages of the solid waste system.

10.2 Conditions assessment

Flow control

Solid waste flow control is the legal provision that allows local government to designate the places where municipal solid waste is taken for processing, treatment, or disposal. Two significant flow control legal decisions helped shape the understanding and implementation of these rules today. In the Carbone decision of 1994, the US Supreme Court ruled that state or local laws that direct where waste should be processed or disposed of violates the “dormant” commerce clause and discriminated against other states in interstate commerce. This rule stated that a municipality could not force a private waste hauler to dispose of waste at a disposal facility of the municipality’s choosing, which essentially made flow control unconstitutional.

Following that decision, in 2007 the US Supreme Court ruled in United Haulers Association Inc. v. Oneida-Herkimer Solid Waste Management Authority that local governments are permitted to engage in flow control to government owned disposal facilities or government contracts in specific circumstances. The court concluded that flow control laws that favor government owned disposal facilities do not discriminate against interstate commerce and are reviewed under a more lenient balancing test. The court’s decision narrows the impact of the court’s Carbone decision in 1994.

Transportation and disposal contracts

In April 1990, the county and the City of Vancouver entered a long-term contract with CRC, a wholly owned subsidiary of Waste Connections, with services that began in January 1992. This contract has been amended eight times (1992, 1996, 1998, 1999, 2000, 2019, 2021, 2022). This contract was replaced in its entirety with a new Master Service Agreement on September 1, 2024. The new Master Service Agreement outlines a long-term contract between the county, City of Vancouver, and CRC with the initial terms expiring the end of 2032 with the option for up to five additional years through a contract extension. The service agreement retains some of the basic services outlined in the previous contract with some additional details and clarifications.

The contract outlines:

- Operation of the three privately owned transfer stations in Clark County.
- Criteria for capital improvement & maintenance programs.
- Annual diversion of a minimum of 10% of the incoming waste stream from disposal.
- Transport and disposal criteria of non-recycled and non-hazardous waste from West Van and CTR (primarily by containers transported on barges) to the Finley Buttes Landfill in Morrow County, OR.

- The processing and marketing of recyclable materials from the county/city curbside collection programs.
- Public drop-off facilities provided for source separated recyclable materials.
- Household hazardous waste (HHW) drop-off facilities operated at each transfer station.
- Provides assurances to the public and customers served that there will be improved operations & maintenance standards and performance requirements and remedies for non-compliance or non-performance.
- Simplified and updated annual fee and contribution adjustment processes.
- Dedicated funding to be used for current needs and future investments.
- Measures to provide resiliency and plan for major system impacts and natural disasters.
- Reinforces the preference for the development of a regional entity to be developed to oversee the regional solid waste system.

Some other municipal solid waste practices are known to exist in Clark County, including the following:

- Woodland area wastes are collected by Waste Control (the WUTC-certified collection company for that area) and transported to the Cowlitz County Headquarters Landfill in Castle Rock, WA.
- Some self-haul wastes generated in the eastern, northern, and southern portions of the county are transported into Skamania County, Cowlitz County, and the Portland, OR area, respectively.
- Some amount of commercially generated waste and waste from franchised and/or WUTC-certified haulers in portions of Skamania County, Cowlitz County, and the Portland-metro area is transported to Clark County transfer facilities. This waste is a minor portion of the waste stream received at these facilities.

Transfer stations

Chapter 173-350 WAC, Solid Waste Handling Standards and Clark County Code Chapter 24.12, Solid Waste Management are the primary regulations governing the design and operations of transfer stations. Per the regulations, transfer stations are to be centrally located collection points for solid waste customers, including for commercial vehicles (e.g., route trucks that serve residents and businesses, roll-off trucks, etc.) and customers that self-haul their waste. With the evolution of collection services beyond solid waste to include recyclables and organic waste, these facilities also receive source separated materials that are processed on-site or shipped to



another facility for processing. A transfer station often provides other services such as drop-off of recyclables, HHW, electronic waste, and bulky items. All the materials received at a transfer station are consolidated by material type, loaded into larger transfer vehicles, and shipped offsite for processing and/or disposal.

Central Transfer and Recycling Center

Operations began at the currently located site for CTR in 1985 as the R&R Transfer Station. CRC purchased this facility in 1990 to use as one of the two transfer stations it was required to provide by contract with the county. During the second half of 1991, CRC reconstructed and expanded the site to include a new 38,000-square-foot transfer building with a hydraulic compactor unit. The old transfer building was expanded to 13,000 square feet and converted for use as a drop-off facility for recyclable materials. New entry and scale house facilities were also added. The new transfer station building began operating in January 1992. This facility is currently approved to process 1,200 tons of municipal solid waste per day.

CTR also accepts commercial waste including construction and demolition debris (C&D), source separated recyclable materials, and other miscellaneous wastes. Miscellaneous wastes such as asbestos, petroleum-contaminated soils, ash, certain sludges, and bulky wastes can be delivered to CTR with advance notice and completion of a special waste application issued by CRC.

CTR recovers both source separated and non-source separated recyclable materials. Source separated materials are delivered to a public drop site separate from the main CTR tipping floor. Non-source separated recyclable materials are recovered by CRC staff from selected loads on the tipping floor. Most tipping floor recovery occurs from drop box and self-haul loads including C&D sourced materials, not from compacted

loads of mixed residential and commercial wastes. These recovered materials include corrugated cardboard, wood, metals, and other materials deemed economically recoverable. Recycled materials accumulated at CTR are either delivered directly to secondary markets or transferred to CRC's West Van facility for further processing.

Municipal solid waste delivered to CTR is either top-loaded into transfer trailers or end-loaded by hydraulic compactor units into shipping containers. Solid wastes that are top loaded are less compact and could be transported to the West Van facility for processing to divert additional recyclable materials. Solid wastes that are compacted into shipping containers are transported by truck directly to the barge-loading facility at Tidewater Barge Lines at the Port of Vancouver. They are then shipped upriver via barge for final transport to the Port of Morrow and to the Finley Buttes Landfill. Tidewater Barge Lines holds a contract with CRC to manage all transportation segments from the transfer station to the landfill. At times of the year when river locks are being serviced, the containers are delivered the entire distance by truck.

As required by the Master Service Agreement, HHW is accepted from residential self-haulers in the receiving area of the recycling/HHW building on designated days each week. HHW is received, sorted, and packaged before its removal from CTR by a licensed contractor and transported directly to a state-permitted treatment, storage, and disposal facility. There is a limit of 25 gallons or 200 pounds per day per customer, except for nicotine/vaping products that are limited to 1 gallon per visit.

Other hazardous materials accidentally or illegally disposed of with regular waste are also removed from municipal solid waste by CRC personnel when seen on the tipping floor. Load check spotters, equipment operators, and other station personnel have been trained to identify and isolate unacceptable and/or unauthorized wastes for proper handling and disposal, separate from municipal solid waste.

CTR is the busiest of the three transfer stations and received 242,090 tons or 59.12% of all waste generated in the county in 2023. It also receives the most customer traffic with almost 230,796 inbound trips in 2023.







Washougal Transfer Station

WTS began operations in 2009. The facility is located on a 4.6-acre site at the Port of Camas-Washougal. Customers enter from Grant Street to a scale house complex that includes one inbound scale and one outbound scale. Each vehicle is weighed, and fees are assessed based on the total waste disposed. The site includes a 75-by-60-foot transfer station building (4,500 square feet) with a depressed tunnel for loading transfer trucks and trailers. The station operates as a lift and load, meaning the bottom of the tunnel is only 8 feet below the tipping floor. WTS is currently approved to process 300 tons of municipal solid waste per day.

This facility functions as a transfer station for municipal solid waste from self-haul and commercial customers, public recycling drop-off facility, and an HHW collection site (two days per month). WTS serves the eastern portion of Clark County, including the cities of Camas and Washougal, though some material is from Skamania County. Unlike the other transfer stations, this site operates for the public on a limited schedule but is available for use by collection vehicles on all days that collection routes operate.

WTS received 40,797 tons in 2023 representing about 10% of the county's waste. Both the trips and total tons received have increased steadily over the past several years. This has occurred even though the station is open to receive waste from self-haul customers only three days per week (Wednesday, Friday, and Saturday).

In the Regional System Study Phase 1 Report (Appendix I), it was noted that the WTS will need to expand soon. However, the county is currently considering the option to expand the number of days Washougal is open to receive self-haul customers, which is expected to help relieve some of the traffic issues at CTR. It may also impact the timeframe for expanding the existing WTS. Potential site improvements identified in the Phase 1 Report are discussed further in Appendix I.

English Pit Transfer Station (Closed)

The former English Pit Transfer Station was located at 912 NE 192nd Ave. in eastern Clark County. The facility is owned by Clark County and was operated as a transfer station from 1978 to March 1989. The facility consisted of a 6,000-square-foot transfer building, a pay booth, and an administration building.

Materials recovery facility

A MRF is like a transfer station because it's a centralized location for receiving materials from various customers. However, it differs because materials are processed on-site. The type and complexity of processing methods vary across different MRFs. Materials are received at the facility, and then mechanically and manually sorted by material type (e.g., paper, plastic, metals, glass). Once sorted or separated, materials are baled or compacted and then sold to a secondary processor or mill for preparation into a finished good or a feedstock for a product or packaging.

West Vancouver Materials Recovery Center

West Van is located on a 21+ acre site off Old Lower River Road at the Port of Vancouver. The property includes a large 86,100-square-foot pre-engineered metal building that receives municipal solid waste from both self-haul customers and Waste Connections collection trucks servicing residential and commercial accounts. This facility functions as both a transfer station and a materials recovery center for residential curbside, multifamily, and commercial recycling materials and accepts source separated recyclable materials delivered by the public, including scrap metal, appliances, sheetrock, and other materials. The facility was designed to receive and transfer up to 1,200 tons of municipal solid waste per day under the current operations schedule. This is the original transfer station structure that was constructed in 1992.

West Van also houses the equipment used to process source separated recyclable materials collected through county/city curbside and multifamily collection programs as well as the commercial commingled recycling collection programs and delivered by the contracted operator. This is the only MRF operating in Clark County and was significantly updated in 2009 when the county switched to a cart-based collection system. A more detailed description of the MRF can be found in the final Regional System Study report (Appendix I).

In addition to recycling, organics/food waste from residential customers from the cities of Vancouver and Ridgefield and commercial generators are separated and may be reloaded within the transfer station building for delivery to permitted composting sites or transfer facilities located beyond Clark County.



In addition to these primary functions, West Van includes several other facilities necessary to provide the full range of services. This includes the following:

- Scale house complex with inbound/outbound scales
- Recycle drop-off for bulky items such as tires, appliances, and scrap metal
- HHW drop-off on specified days and a limit of 25 gallons or 200 pounds per day per customer
- Wood waste/yard debris area
- Waste requiring special handling such as tires, appliances, and asbestos
- Waste oil and glass drop for collection trucks
- Administration office
- Maintenance building
- Employee break building

In 2023 West Van received nearly 126,573 tons or 31% of municipal solid waste generated in the county. The transfer station received 125,187 trips this same year, increasing over 30,000 trips since 2021. Further details on curbside recycling and yard debris collection programs are provided in Chapter 9: Solid waste collection. CRC also receives another 12,000 tons of commingled materials from out-of-county sources. These materials are processed at the MRF which is co-located within West Van.





Composting facilities

Commercial and industrial composting happens at large-scale composting facilities designed to handle a high volume of organic materials. These facilities may provide composting services to the residential, commercial, and institutional sectors. They can divert significant quantities of organic materials from disposal facilities.

Currently two organic waste composting facilities are permitted in Clark County. The West Van MRF is permitted to compost up to 50,000 cubic yards of organic material annually. This facility has historically composted source separated leaves. Due to a change in economic factors, the facility is not actively composting material at the facility but reserves the right to do so.

In addition to yard debris, West Van can be used as a food waste transfer site. The transfer site allows residential and commercial collection vehicles to off-load their collected material in a central location, where it is then reloaded into larger-capacity transfer trucks for delivery to the composting facility. Organics could be compacted and then hauled, similar to how garbage is aggregated for transporting.

Most yard debris and food waste collected at West Van is transported to the Dirt Hugger Compost Facility 94 miles east in Dallesport, WA where organic materials are used to produce a variety of high-quality organic compost products.

In addition to West Van, H&H Wood Recyclers is permitted to compost up to 30,000 cubic yards of organic material annually. Composting on site is limited to less than 10,000 cubic yards of material at any one time. This facility composts source separated leaves annually. Most yard debris collected at this facility is incorporated with dry woody waste and utilized as hog fuel and/or transported to another location for composting.

Landfills

Clark County and the cities and town within the county are committed to minimizing the amount of waste being disposed of through the implementation and maintenance of waste reduction programs as well as recycling and organics collection programs. After waste reduction, reuse, recycling, composting, and energy recovery, the remainder of Clark County's waste is landfilled.

In 1999, Waste Connections purchased CRC and the Finley Buttes Landfill in Morrow County, OR as well as an additional landfill in Wasco County, OR. Since then, CRC, Finley Buttes Landfill, and Wasco County Landfill have been wholly owned subsidiaries of Waste Connections.

Considering the disposal sites in Oregon are long distances from where materials are generated, combining significant amounts of waste at a transfer station can minimize haul times and costs for certificated/contracted haulers, self-haulers, and municipal collectors. Wastes from CTR and West Van that are not able to be further recycled or composted are pushed into a compactor for loading into shipping containers. The containers are then transferred to the Tidewater Barge Lines barge loading facility for shipment upriver for final transport to the Finley Buttes Landfill. Waste collected at the WTS is transported via truck from the transfer station to a landfill in Wasco County, OR. The barging system serves as the alternative transport system for waste from the WTS to Finley Buttes Landfill. Both landfills are modern municipal solid waste disposal facilities permitted by the Oregon Department of Environmental Quality.



Since the municipal solid waste from all transfer stations is disposed of in Oregon, ORS 459.055 (waste reduction and recycling) and OAR 340-93-97 (landfill standards) apply to the county. ORS 459.055 requires local governments outside of Oregon that transport waste to Oregon landfills to implement waste reduction and recycling programs which must be at least as effective as Oregon programs in similar jurisdictions. The local governments must apply to the Oregon DEQ and be accepted before waste can be exported to Oregon.

Finely Buttes Landfill: Finley Buttes Landfill is located approximately 180 miles east of Clark County in Morrow County, OR, at 73221 Bombing Range Road, Boardman, OR. The facility is privately owned and operated by Waste Connections. It is the primary designated disposal site for municipal solid waste generated within Clark County. The landfill is designed, constructed, and operated to comply with all requirements of the Oregon DEQ and EPA Subtitle D municipal solid waste landfill requirements.

Finley Buttes Landfill occupies a permitted 510-acre site. The projected life of the currently permitted landfill is 180 years, which exceeds the 20 years covered by this CSWMP. Currently, the site receives around 500,000 tons of municipal solid waste each year, more than half of which is from Clark County.

Wasco County Landfill: Wasco County Landfill is located about five miles southeast of The Dalles, OR near the intersection of Interstate 84 and US Route 197. The landfill site comprises 337 acres, with 213 acres of the site permitted by the Oregon DEQ for active landfilling. The landfill operator estimates that there are approximately 28 years before reaching capacity. The landfill is privately owned and operated by Waste Connections and is the designated disposal site for municipal solid waste from the WTS and is a backup facility to the Finley Buttes Landfill.

Disposal sites in Clark County

Rufener Landfill (a.k.a. Boise Cascade Landfill, Portside Landfill, Fruit Valley Landfill): The limited purpose Rufener Landfill on Northwest Lower River Road in Vancouver was owned by Boise Cascade and received clarifier solids from the Boise Cascade papermaking plant until April 1996. The county decommissioned the landfill and ended post-closure care in 2017.

Lady Island Landfill: Georgia-Pacific operates Lady Island Landfill as a limited-purpose, privately owned landfill. Adjacent to its Camas mill, this facility accepts both wood waste and dredge materials generated by the mill. This facility is permitted through Clark County Solid Waste Enforcement.

Leichner Landfill: The Leichner Landfill was the last municipal solid waste landfill that operated in Clark County; it accepted waste from 1937 through 1991 at a site located in the south-central part of the county. The site was previously owned and operated by Leichner Brothers Land Reclamation Company and was permitted to operate as a sanitary landfill and to receive municipal solid waste and some construction, demolition, and land clearing waste. Under an order from Ecology, the Leichner Landfill ceased operations on Dec. 31, 1991. Leichner Landfill was purchased by the county in 2012.

Closed and abandoned landfill sites: Closed and abandoned landfills are present throughout the state, including Clark County, and pose potential risks to human health and the environment. With lack of consistent data, Ecology has requested an inventory of all closed and abandoned landfills including any pending actions. A full list of closed and abandoned disposal sites can be found in Appendix G.



10.3 Evaluation of ownership options

Evaluation of potential public ownership and the different ownership models was assessed in conjunction with the Regional Solid Waste System Study (Appendix I). The findings from the study helped inform negotiations for the updated Master Service Agreement that was executed and commenced September of 2024. The new agreement documents the commitment between CRC, the county, and Vancouver for the public option to purchase existing transfer stations. It further notes that Vancouver and the county desire to move toward public ownership of the existing and future to-be-built transfer stations and to move toward a more regional and standardized solid waste system. These statements of intent for public ownership of transfer facilities is also captured in the Vancouver and county interlocal agreement (ILA) for planning and ILA for Coordination (Appendix D).

Regional entity formation

The Master Service Agreement includes a statement of intent in which both the county and Vancouver asserted their commitment to public ownership of existing regional transfer stations and a strong preference for public regional entity ownership by a county successor. The understanding outlines the intent of the public agencies to work together to create a regional, multi-jurisdictional public entity to act as the county successor to own and provide solid waste disposal and transfer services to those participating jurisdictions. The county and Vancouver intend to negotiate the terms of an interlocal agreement pursuant to chapter 39.34 RCW, or other appropriate statutory basis, that identifies a legal mechanism for formation of the entity to be the county successor, a general initial framework for shared, representational governance by all participating jurisdictions, and establishes a transparent and accountable timeline for formation of the entity by December 31, 2029. In recognition of this mutual intent, the county will take lead on hiring a subcontractor to help develop this public regional entity and support coordination amongst the participating jurisdictions. If the county, Vancouver, and other participating jurisdictions are unable to form a regional entity by December 31, 2030, the county and Vancouver agreed to temporarily own and govern the facilities until a public regional entity can be formed and take over.

Purchase of existing transfer stations

Effective December 31, 2032, the county, followed by the county successor has the first right to purchase CTR and West Van sites for a purchase price of one dollar ($1) per regional transfer station site. The City of Washougal shall have the first right to purchase followed by the county followed by the county successor to purchase the WTS site for the purchase price specified in a separate 2005 or successor agreement between the City of Washougal and its contractor. Notice to exercise this the right to purchase shall be given to CRC prior to December 31, 2031.

10.4 Existing transfer and disposal education and outreach programs

The programs outlined below are examples of educational opportunities to improve the successful diversion of waste before transferred to the landfill. For a more comprehensive list of education and outreach programs, refer to Appendix O.

Transfer station and MRF tours: Waste Connections education staff and Clark County Green programs work to connect audiences and interested residents with tours of the Waste Connections transfer station and MRF. The tours include drop-off locations and education that demonstrate how much waste is produced in the county. The tour guides facilitate community discussions and presentations about recycling and waste reduction.

Secure Your Load campaign with Ecology: Clark County is collaborating with Ecology to reduce litter created by self-hauling customers through the ***Secure Your Load for Safer Roads*** campaign. The campaign includes tools and resources for social media, advertising, and in-person education. Additionally, Ecology is providing the county with cargo nets and ratchet straps to be distributed at the transfer stations along with stickers and informational pamphlets.

10.5 Planning issues

What is being done to move towards a decision on public ownership of the transfer stations?

Through interlocal agreements with Clark County and the City of Vancouver, the intention of moving toward public ownership has been documented. These parties, along with any other municipal entity within the county that chooses to participate, intend to create a regional, multi-jurisdictional entity county successor to own and provide solid waste disposal and transfer services to those participating jurisdictions. The county, operating as the lead agency in these efforts, is actively working with the Regional Solid Waste System Steering Committee (RSWSSC) to develop a consensus on public ownership and expect that process to go on through the planning period. In the event the county, Vancouver, and other participating jurisdictions are unable to form this anticipated regional entity by December 31, 2030, the county and Vancouver agree to meet and determine in good faith how one or both entities will temporarily own and govern the solid waste transfer facilities until such time as the regional entity can be formed and become operational, which is not anticipated to take longer than 24 months.

How do we incorporate the greenhouse gas emissions inventory data into our solid waste planning?

Disposal of organics in landfills is a major source of greenhouse gas emissions. Key to fighting climate change is to stop treating organics, especially food, as waste. With the passage of HB1181 during the 2023 Washington state legislative session, Clark County is now required to add a climate change element to its comprehensive plan by June 30, 2025. The ***Ecology Climate Element Planning Guidance*** released in December of 2023 identifies the following potential climate-related impacts related to solid waste management:

- Increased solid waste and potentially hazardous waste (downed tree limbs, building rubble, roof shingles, vehicles, and appliances) and associated environmental and public-safety impacts following severe storms, flooding, and other hazards.
- Increased waste associated with population growth (including climate migration) and hazards presents opportunities for recycling materials into new products (cradle-to-cradle).
- Increased emissions of carbon dioxide, methane, and other greenhouse gases associated with the transport and disposal of waste.

Organic waste is one of the largest sources of methane production at landfills, therefore diversion of organic wastes should be a priority. Data on the impacts of climate change to our solid waste system is limited and inconsistent in methodology and what is available. This creates challenges for planning for the next 20 years. Clark County Solid Waste and Recycling will continue to monitor and stay current on legislative updates and information by participating in Washington State Association of Counties and prioritize making informed and prompt program changes as information becomes available.



What efforts can be made to address greenhouse gas emissions towards the end of the waste stream?

With the passage of HB1181 during the 2023 Washington state legislative session, efforts are being made to ensure greenhouse gas emissions and climate change elements are incorporated into Clark County planning. Waste diversion, in particular food and other organic materials, should remain a focal point in planning. As organic waste breaks down in municipal solid waste landfills, methane gas is created.

Methane gas collection

Most of Clark County's waste is sent to Finley Buttes Landfill which harvests landfill gas emissions as a renewable energy source for electricity and heat. The methane gas produced at the Finley Buttes Landfill is harvested through a perforated piping system of over 100 vertical and horizontal extraction wells and high-density polyethylene piping. Managed by Finley Bioenergy, the gas is routed to suitable energy recovery systems or combustion devices. The system allows for the sale of 25 million kilowatts per year to the local utility, PacifiCorp, and over 45,000 therms per month to Cascade Specialties, a local food processing plant. The system helps meet Oregon state requirements for renewable energy, and the EPA's requirements for greenhouse gas reductions, and provides the plant with energy savings. It's a constant source of power that is running nonstop, powered by landfilled food waste and other decomposing garbage.

What considerations should be made to handle the anticipated growing population?

Over the past 10 years, the population in Clark County grew 18.1% for an average of 1.8% per year. In 2021 the county generated almost 502,000 tons of material of which 419,492 tons were transported and disposed of in landfills. Assuming the population continues to grow at a rate consistent with the past 10 years, waste projections suggest that by 2040 the amount of waste disposed of in the landfill could approach 570,000 tons per year, an increase of 37%. Such a significant expected increase in the amount of municipal solid waste to be disposed of creates an opportunity for consideration of alternative technologies to handle tons that would otherwise be landfilled.

Since the current transfer stations were developed in the early 1990s and the addition of the Washougal facility in 2009, new services and programs for managing waste and recyclables have been implemented, but facilities have not been expanded. There have been recent improvements to the MRF processing equipment at West Van to utilize more efficient technology, however, more needs to be done to meet the need of the growing population.

Capacity

The existing regional solid waste system can be modified or upgraded, as needed and as possible, to maintain or improve existing levels of service and meet the needs of the growing population. During the Regional Solid Waste System Study (Appendix I), it was noted that CTR receives about 60% of the waste generated in Clark County while the area it serves is expected to receive the largest population growth over the next 20 years. Recognizing the burden this will put on the existing regional solid waste system, recommendations were provided which include siting a fourth transfer station in northern Clark County. The preliminary siting report outlines recommendations and includes the steps to site a new transfer station. Clark County will continue to evaluate options and anticipates further studies including a feasibility study and comparative analysis prior to the next plan update. The siting guidelines for solid waste handling facilities are provided in Appendix H.

Increased traffic and congestion concerns

With increasing population has come increased tonnage and vehicle traffic into each of the three facilities. These trends will continue, particularly with the expected growth in the northern areas of the county, much of which is currently serviced by CTR. Self-haul customer trips have increased significantly over the years, resulting in ongoing challenges with vehicle backups at the facilities. CTR has significant challenges regarding ingress, egress, and on-site traffic management. The number of vehicles delivering waste has increased by 24% in just the past six years. This is discussed further in the Regional System Study Report (Appendix I). The Washington Department of Transportation also plans in the next few years to place a traffic barrier on Northeast 117th Avenue. This is expected to prevent a left turn into the facility (traveling north on 117th Avenue) and a left turn out of the facility.

An examination of how policies and/or collection services could potentially reduce traffic at the transfer stations, primarily at CTR, was included as part of the Regional System Study Report (Appendix I). Options include strategies to modify collection services through universal services and collection events, modify transfer station rates, and revise hours and days of operations. Note that for rate increases, existing interlocal agreements with the cities and town require any rate increase that may result from the implementation of the recommended alternative to be approved by the county only after notice to, and consultation with, the affected cities and town.

What plans exist to improve the current conditions of the transfer stations and MRF?

The age of the facilities and the increased need for expanded customer services for recycling and HHW has also created significant opportunities for facility improvements and expansion. With this in mind, the transfer stations are inspected by an engineering firm on a triennial basis, through a contract between Clark County and a consultant. The contract period is September 1, 2023, to August 31, 2029. The first inspections occurred in September 2023 and identified various maintenance needs and potential capital improvements. The triennial inspection reports will help inform maintenance and capital improvements to occur at the facilities under the Master Service Agreement between the county, Vancouver, and CRC. To supplement triennial inspections, county Solid Waste Operations staff conduct periodic observational inspections of the facilities. Periodic inspections allow the county to record improved and/or worsening conditions of the facilities.



11

FUNDING AND FINANCING

11.1 Introduction

Funding and financing of the Clark County's solid waste system involves a combination of public and private companies and agencies. Presently, Columbia Resource Company (CRC), a private company, owns and operates the county's solid waste transfer and disposal facilities which include Central Transfer and Recycling, West Vancouver Materials Recovery Center, and Washougal Transfer Station. CRC's parent company Waste Connections of Washington (Waste Connections) manages many of the collection operations in the county. Clark County's role is to plan and manage the regional system, including implementing outreach and education programs as outlined in the CSWMP. The county also oversees post-closure and cleanup activities at former disposal sites. The six cities and one town have various roles, related primarily to waste collection within their boundaries. This chapter describes funding and financing mechanisms supporting solid waste management programs in the county.



11.2 Public ownership of the transfer stations

The question of retaining private ownership of the three CRC owned transfer stations or moving towards public ownership leads to unique funding and financing considerations as we move into the future. As outlined in Chapter 10: Transfer and disposal and the Regional Solid Waste System Study (Appendix I), Clark County and participating jurisdictions are reviewing future ownership options. To better inform the decision-making process, the county has contracted with a financial consulting group to perform a cost/benefit analysis of publicly owning the three transfer stations currently in the county. The data from this report will inform future decisions, and by the end of the years covered in this CSWMP, a decision and actions on public ownership will be made. Part of this decision will include managing the operational costs of the transfer stations.

11.3 Legislation

In Clark County, as well as other areas of the state, solid waste funding has often supported local recycling programs, litter abatement, pollution prevention programs, resource conservation, sustainability efforts, and related environmental awareness efforts. As noted in previous chapters, many of these programs and efforts are required by Washington law, while others are required by Oregon law, which also applies as most of the county's solid waste is disposed of in Oregon. It does not attempt to describe the finances of the private companies involved in the regional solid waste system. The following are Washington and Oregon statutes that apply to the county's solid waste management system. For a comprehensive list of solid waste regulations, refer to Appendix F.

Establishing rates and fees

State level

Under Revised Code of Washington (RCW) 81.77.030, the Washington Utilities and Transportation Commission (WUTC) sets collection rates for haulers who are certificated by the WUTC. WUTC is to set rate structures consistent with the state's solid waste management priorities in chapter 70A.205 RCW and consistent with minimum levels of collection and recycling services established according to county solid waste management plans.

RCW 70A.200, the Waste Reduction, Recycling, and Model Litter Control Act, authorizes Ecology to promote and stimulate recycling, encourage litter abatement, and provide employment in litter cleanup and related activities for the state's youth. Funding generated from a tax ("Litter Tax") on products such as fast-food containers support these activities and a grant program for litter cleanup in and by local communities.

Under RCW 81.77.080 and 110, solid waste collection companies certificated by the WUTC must pay an annual fee of 1% of their gross operating revenue to the WUTC to pay for its costs of regulating them. Collection companies are solely responsible for the payment of their annual certification fees.

County level

Under RCW 36.58.040, counties have full jurisdiction to construct, purchase, or contract for the development of solid waste handling systems or facilities, and to establish the rates and charges. Counties may also award contracts for solid waste handling that include the collection of county fees.

Under RCW 36.58.045, counties may levy fees on the collection of solid waste in unincorporated areas of the county to fund administration and planning expenses.

Under RCW 36.58.100-150, counties may establish solid waste disposal districts, independent taxing authorities, and collect disposal fees based on the weight or volume of materials received. The district may issue general obligation bonds for capital purposes and may issue revenue bonds for other activities. The district may fund its operation through excise taxes. The disposal district may not include a city or town without the city council's consent. There are currently no disposal districts in the county.

Under RCWs 39.34 and 39.106, counties can establish intergovernmental agreements with other jurisdictions or form a joint service utility that may collect disposal fees and issue revenue bonds for capital purposes.

Under RCW 81.77.195, upon request of a county, the WUTC may approve rates, charges, or services at a discount for low-income senior customers and low-income customers, if adopted by the county in its comprehensive solid waste management plan. Expenses and lost revenues as a result of these discounts must be included in the company's cost of service and recovered in rates to other customers. At the time of this revision, there is not a rate structure that includes discounted rates for eligible customers. Clark County is committed to moving toward including discounted rates in the future and will include an implementation timeline in the next plan revision.

City level

Under RCW 35.21.130, cities may require property owners and occupants to use the solid waste collection and disposal system (including recycling systems) and may set rates.

Under RCW 35.21.152, cities have full jurisdiction to construct, purchase, or contract for the development of solid waste handling systems or facilities, and to establish the rates and charges.

Taxes

State taxes

Under RCW 82.18, the state Department of Revenue collects a 3.6% refuse tax on the collection, transfer, storage, or disposal of solid waste. Funds are used to provide financial assistance to local governments for repair and maintenance of public works projects. Waste Connections, as a privately owned company, is solely responsible for the payment of the refuse tax.

Permit fees

RCW 70A.205.125 grants Clark County Public Health (CCPH) the authority to collect permit fees on solid waste facility permits.

RCW 82.21.030 imposes a Pollution Tax on petroleum products, pesticides, and certain chemicals. A portion of the revenues from this tax, also known as the Hazardous Substance Tax, goes into the Model Toxics Control Operating account under RCW 70A.305.180. This is the funding source for Local Solid Waste Financial Assistance (LSWFA). LSWFA supports the maintenance of Solid Waste Management Plans and Hazardous Waste Management Plans (this CSWMP is a combination of both), and implementation of eligible projects identified in those plans.

11.4 Regional solid waste system revenue sources

Solid waste operations and outreach programs are funded through a combination of contract-based revenue streams, including transfer and hauling contracts, tipping fees, municipal fees, and the sale of recyclables. The following sections outline the fees that support the Clark County regional solid waste system.

Regional administrative fees

When Waste Connections purchased CRC in 1999 and assumed its contract, the county moved from a per ton tip fee surcharge to a monthly administrative fee paid by the transfer station owner/operator to the county to generate revenue for regional solid waste programs. Upon execution of the 2006 contract extension and the completion of the third transfer facility, the administrative fee was increased.

Users of the transfer stations pay a per ton tipping fee to dispose of waste. As outlined in the Master Service Agreement signed September 2024, these tip fees are subject to an annual fee adjustment incorporating two components, an operating fee and a transport fee, incorporated as a blended and weighted annual Inflation Adjustment Factor. The annual adjustments are intended to address changes in operational costs.

County health fee

The county health fee (listed as SW Fee: County Tipping Fee in Table 11.5.1) is a temporary fee, implemented in January 2018, that is added to the MSW and drop box tip fees at a rate of $1.43 per ton. This fee was implemented as a temporary fee and is not subject to annual inflationary adjustments. As defined in the Master Service Agreement between Clark County, CRC, and Vancouver, the $1.43 per ton fee is temporarily removed during the annual tip fee adjustment and added back after the inflationary adjustments are made. The fee was established due to reductions in Model Toxics Control Act (MTCA) funded grants, including a reduction in Local Solid Waste Financial Assistance (LSWFA) grant funding received by the county. This was done as a temporary measure to offset initial reductions that support the Solid Waste & Recycling and Solid Waste Enforcement programs, which also included contributions for indirect expenses to Clark County Public Health Department. Clark County is currently reviewing this temporary fee and will update the CSWMP through the amendment process to reflect any changes.

Recycling and yard debris collection contracts administrative fees

The county assesses a recycling and yard waste contract administrative fee on the single-family and multifamily recycling contracts as well as yard waste collection service contract. The fees are collected monthly by the recycling and yard waste collection contractors as part of the collection rate and are submitted to the county. These fees are based on number of subscribers to the service and cover the county's costs of administering the contracts.

Sale of recyclable materials (commodities)

Under the contract agreement with CRC, the recyclable materials received through the county and the City of Vancouver single-family and multifamily curbside recycling collection programs are marketed. A portion of the revenue received from the sale of recyclables is shared quarterly with the county and City of Vancouver, based on the number of tons collected in each jurisdiction and the value of the materials that are marketed.

11.5 Regional fund management and restrictions on use

Each account used to fund the regional solid waste system have been established to serve specific functions within the system. The tables below outline the revenue and expenditures permitted within the parameters of each fund as well as forecasting to ensure future needs.

Professional services

The Clark County regional solid waste system relies on partnerships and professional consultants to provide services and expertise. These include services integral in the decision-making process for regional solid waste management such as feasibility studies, waste characterization studies, and system wide decision facilitation. Note that the professional services are listed on the tables as a single line item and are held as an average of what is typically spent however, the actual costs of contracts may vary year to year. The professional services under each funding source will be specific to the restrictions outlined below. The county has led efforts to create oversight committees to ensure the professional services are reviewed, approved of, and paid for out of the appropriate fund. Examples of approved professional services are provided under each fund described below.

Clark County Solid Waste Fund (Fund 4014)

Fund 4014 is the designated operations and administrative enterprise fund maintained by the county. The revenue sources for Fund 4014 include county administrative fees paid by the contractor under the disposal and collection contracts; state grants; a share of the revenue from sales of recyclable materials; interest income; and sponsorships and partnerships with businesses and organizations in the community. Fund 4014 is to be used for administrative costs, regional waste reduction, recycling programs, and other related programmatic work including professional services for waste characterization studies (estimated $320,000), contract negotiation and facilitation (estimated $100,000), and financial consultation (estimated $150,000). For a breakdown of revenue and expenditures for Fund 4014, refer to table 11.5.1.

Table 11.5.1: Clark County Solid Waste Fund (4014), Revenues and Expenditures 2023-2030

	2023 Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
MSW Inbound Tonnage	406,345.70	412,237.71	418,215.16	424,279.28	430,431.33	436,672.58	443,004.34	449,427.90

Revenue	2023 Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Grants								
State Grant: ECY LSWFA	$639,327.48	$425,941.62	$502,500	$502,500	$502,500	$502,500	$502,500	$502,500
Subtotal—Grants	**$639,327.48**	**$425,941.62**	**$502,500**	**$502,500**	**$502,500**	**$502,500**	**$502,500**	**$502,500**
Fees/Charges for Services								
SW Fee: Regional Admin Fee	$2,074,937.03	$2,183,889.12	$2,240,990	$2,297,015	$2,354,440	$2,413,301	$2,473,634	$2,535,475
SW Fee: Single—Family Recycling	$247,334.33	$241,642.20	$247,636	$253,827	$260,173	$266,677	$273,344	$280,178
SW Fee: Multi—Family Recycling	$40,826.37	$45,357.90	$46,264	$47,421	$48,607	$49,822	$51,068	$52,345
SW Fee: Yard Debris	$137,961.36	$150,522.08	$153,997	$157,847	$161,793	$165,838	$169,984	$174,234
SW Fee: Curbside Revenue Share Program	$0.00*	$26,100.19	$20,000	$20,600	$21,218	$21,855	$22,511	$23,186
SW Fee: County Tipping Fee*	$585,049.96	$589,884.50	$598,048	$606,719	$615,517	$624,442	$633,496	$642,682
Subtotal—Fees/Charges for Services	**$3,086,109.05**	**$3,237,395.99**	**$3,306,935**	**$3,383,429**	**$3,461,748**	**$3,541,935**	**$3,624,037**	**$3,708,100**
Other								
Investment Interest	$300,616.47	$335,749.44	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000
FARF Support of Solid Waste Fund	$58,745.43	$80,000.00	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000
Miscellaneous Revenue	$3,973.23	$539.50	$750	$750	$750	$750	$750	$750
Subtotal—Other	**$363,335.13**	**$416,288.94**	**$380,750**	**$380,750**	**$380,750**	**$380,750**	**$380,750**	**$380,750**
TOTAL—Revenue	**$4,088,771.66**	**$4,079,626.55**	**$4,190,185**	**$4,266,679**	**$4,344,998**	**$4,425,185**	**$4,507,287**	**$4,591,350**

*The county tipping fee is a temporary fee and is currently under evaluation. The outcome will be addressed in a future amendment or the next CSWMP revision.

Expenditures	2023 Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Personnel								
Wages/Salaries	$948,968.09	$1,390,939.66	$1,434,839	$1,503,891	$1,573,891	$1,638,889	$1,711,508	$1,779,593
Separation Payout	$4,596.08	$1.11	—	—	—	—	—	—
Overtime	$4,442.68	$5,479.14	$12,000	$12,590	$13,188	$13,743	$14,363	$14,945
Benefits	$383,370.75	$438,452.78	$483,777	$507,042	$531,026	$554,675	$580,291	$605,704
Subtotal—Personnel	**$1,341,377.60**	**$1,834,872.69**	**$1,930,616**	**$2,023,523**	**$2,118,105**	**$2,207,307**	**$2,306,162**	**$2,400,242**
Other Operating								
Supplies	$93,001.25	$75,570.87	$121,600	$125,248	$129,005	$132,875	$136,861	$140,967
Professional Services	$1,034,985.60	$611,257.67	$580,314	$994,414	$939,248	$902,265	$856,707	$817,019
Communications/ Telephone	$7,618.85	$9,374.75	$9,226	$9,503	$9,788	$10,082	$10,384	$10,696
Advertising	$84,575.22	$22,857.64	$35,000	$36,050	$37,132	$38,246	$39,393	$40,575
Rent Land & Buildings	$33,404.69	$30,140.82	$23,303	$24,002	$24,722	$25,464	$26,228	$27,015
Utilities	$4,125.62	$6,858.42	$8,000	$8,240	$8,487	$8,742	$9,004	$9,274
Association Dues, Memberships/ Licenses	$10,828.17	$12,728.83	$12,500	$12,875	$13,261	$13,659	$14,069	$14,491
Technology ER&R	$14,629.00	$15,120.00	$41,920	$43,178	$44,473	$45,807	$47,181	$48,596
Travel	$21,092.00	$18,717.19	$33,500	$34,505	$35,540	$36,606	$37,704	$38,835
Tuition and Registration	$14,334.04	$26,781.35	$7,900	$7,900	$7,900	$7,900	$7,900	$7,900
Subtotal—Other Operating	**$1,318,594.44**	**$829,497.54**	**$873,263**	**$1,295,915**	**$1,249,556**	**$1,221,646**	**$1,185,431**	**$1,155,368**
Indirect/Transfers								
Indirect: County	$124,765.00	$90,307.00	$190,552	$196,269	$202,157	$208,222	$214,469	$220,903
Indirect: Department	$306,053.16	$351,450.35	$391,720	$403,472	$427,680	$440,510	$453,725	$467,337
Operating Transfers	$343,775.06	$344,647.53	$347,500	$347,500	$347,500	$347,500	$347,500	$347,500
Subtotal—Indirect/Transfers	**$774,593.22**	**$786,404.88**	**$929,772**	**$947,241**	**$977,337**	**$996,232**	**$1,015,694**	**$1,035,740**
TOTAL—Expenditures	**$3,434,565.26**	**$3,342,881.13**	**$3,733,651**	**$4,266,679**	**$4,344,998**	**$4,425,185**	**$4,507,287**	**$4,591,350**
NET	**$757,825.40**	**$907,150.95**	**$609,930**	**$94,127**	**$14,767**	**$0**	**$0**	**$0**
Other Offsets								
**GASB adjustment, correcting operating fund balance	$0.00	$441,174.07	$0	$0	$0	$0	$0	$0
Subtotal — Other Offsets	**$0.00**	**$441,174.07**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ending Fund Balance								
Ending Fund Balance	$654,206.40	$295,571.35	$456,534	$0	$0	$0	$0	$0
Subtotal—Fund Balance	**$654,206.40**	**$295,571.35**	**$456,534**	**$0**	**$0**	**$0**	**$0**	**$0**
Projected Fund Balance	**$7,496,904.75**	**$7,792,476.10**	**$8,249,010**	**$8,249,010**	**$8,249,010**	**$8,249,010**	**$8,249,010**	**$8,249,010**

*Recycling markets fluctuate. The 2023 prices for the sale of recyclable materials resulted in the County being $0.
**2023 ending fund balance included book value of fixed assets. An entry in 2024 moved fund balance related to fixed assets out of the operating fund balance. Beginning fund balance for 2025 includes only available cash.

Designated Capital Improvement and Maintenance Restricted Fund (DCIMRF)

The DCIMRF is a restricted interest-bearing fund established and maintained by CRC for the sole purpose of funding select capital improvement and maintenance explicitly authorized in the Master Service Agreement contract between Clark County, City of Vancouver, and CRC. The fund activities are monitored regularly by the county and Vancouver. Any interest earned must remain within the fund. Accessing resources from the DCIMRF including both contributions and any interest, requires formal written approval from the county and Vancouver.

DCIMRF funds specific and approved capital improvement projects and/or maintenance projects. As this is a CRC managed account, there are no professional services listed. Funds in this account are held for reimbursement for approved project only. For a breakdown of revenue and expenditures for the DCIMRF, refer to table 11.5.2.

Capital Improvement Program (CIP) Oversight Committee

The Capital Improvement Program (CIP) Oversight Committee has been established with representatives from Clark County and the City of Vancouver to review requests from CRC for reimbursement on capital and select maintenance projects. The committee will meet a minimum of quarterly each year to review requests and approve reimbursement from appropriate funds. Initial projects identified during the RSWSS (Appendix I) are informing priority projects and financial projections. This list is in the process of being finalized by the CIP Oversight Committee. For more information on capital fund projects, refer to section 11.9 Capital needs and financing plan.

Table 11.5.2: Designated Capital Improvement & Maintenance Restricted Fund (DCIMRF), Revenues and Expenditures 2023-2030

Revenue	2023* Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Contractual Contribution, lump sum	–	$4,200,000.00	–	–	–	–	–	–
Contractual Contribution, tonnage residual	–	–	$5,436,286	$5,707,305	$5,924,161	–	–	–
2025 Barge Reimbursement	–	–	*($599,344)*	–	–	–	–	–
Investment Interest			$168,000	$328,198	$529,618	$747,769	$737,680	$727,187
TOTAL—Revenue	**$0.00**	**$4,200,000.00**	**$5,004,942**	**$6,035,503**	**$6,453,779**	**$747,769**	**$737,680**	**$727,187**

Expenditures	2023* Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Other Operating								
Estimated Approved Capital Projects**	–	–	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000
Estimated Approved Maintenance Projects	–	–	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000
Subtotal—Other Operating	**$0.00**	**$0.00**	**$1,000,000**	**$1,000,000**	**$1,000,000**	**$1,000,000**	**$1,000,000**	**$1,000,000**
Ending Fund Balance								
Ending Fund Balance	$0.00	$4,200,000.00	$4,004,942	$5,035,503	$5,453,779	*($252,231)*	*($262,320)*	*($272,813)*
Subtotal—Fund Balance	**$0.00**	**$4,200,000.00**	**$4,004,942**	**$5,035,503**	**$5,453,779**	**($252,231)**	**($262,320)**	**($272,813)**
TOTAL — Expenditures	**$0.00**	**$4,200,000.00**	**$5,004,942**	**$6,035,503**	**$6,453,779**	**$747,769**	**$737,680**	**$727,187**
NET	**$0.00**	**$0.00**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

*Account was established in 2024 upon execution of the Master Service Agreement (MSA)

**Capital Improvement Projects (CIP) oversight committee has been established to prioritize a list of captial projects which will be approved and begin in 2026

Projected Fund Balance	–	**$4,200,000.00**	**$8,204,942**	**$13,240,445**	**$18,694,224**	**$18,441,993**	**$18,179,673**	**$17,906,860**

Regional Solid Waste System Fund (RSWSF) (6318)

RSWSF is an interest-bearing special revenue fund established and maintained by the county for the sole purpose of funding the regional solid waste system. Any interest earned must remain within the fund. CRC deposits monthly contributions to this fund based on inbound MSW and drop box tonnage processed as defined in the Master Service Agreement Attachment A.1. All funds in RSWSF are maintained by the county until a regional entity is established to oversee the regional system through public ownership.

RSWSF is to be used to support the regional solid waste system needs including professional services such as the consulting services for the North County transfer station siting study (estimated $750,000 over the next few years), consulting services to assist with the public ownership decision (estimated $500,000 over the next few years), and projects agreed to and identified by the CIP Oversight Committee (see above). For a breakdown of revenue and expenditures for the RSWSF, refer to table 11.5.3.

Table 11.5.3: Regional Solid Waste System Fund (RSWSF) (6318), Revenues and Expenditures 2023-2030

Revenue	2023 Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Contractual Contribution, lump sum	–	$5,800,000.00	–	–	–	–	–	–
Contractual Contribution, tonnage	–	$6,089,963.49	$6,963,282	$7,064,250	$7,166,682	$3,392,946	$3,442,144	$3,492,055
Interest, Other Earnings	–	$54,935.26	$537,520	$797,207	$1,084,372	$1,380,070	$1,549,855	$1,729,495
TOTAL — Revenue	**$0.00**	**$11,944,898.75**	**$7,500,802**	**$7,861,457**	**$8,251,054**	**$4,773,016**	**$4,991,999**	**$5,221,550**

Expenditures	2023 Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Other Operating								
Reimbursable Capital Projects — TBD*	–	–	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000
Professional services — Contracts TBD**	–	–	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000
North County Recycling and Transfers Stations Siting Study	–	–	$730,000	$480,000	$680,000	–	–	–
Subtotal–Other Operating	**$0.00**	**$0.00**	**$1,730,000**	**$1,480,000**	**$1,680,000**	**$1,000,000**	**$1,000,000**	**$1,000,000**
Ending Fund Balance								
Ending Fund Balance	$0.00	$11,944,898.75	$5,770,802	$6,381,457	$6,571,054	$3,773,016	$3,991,999	$4,221,550
Subtotal—Fund Balance	**$0.00**	**$11,944,898.75**	**$5,770,802**	**$6,381,457**	**$6,571,054**	**$3,773,016**	**$3,991,999**	**$4,221,550**
TOTAL—Expenditures	**$0.00**	**$11,944,898.75**	**$7,500,802**	**$7,861,457**	**$8,251,054**	**$4,773,016**	**$4,991,999**	**$5,221,550**
NET	**$0.00**	**$0.00**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
*Capital Improvement Projects (CIP) oversight committee has been established to prioritize a list of captial projects which will be approved and begin in 2026								
**Professional services for regional projects will need RSWSSC and CIP oversight committee approval. Contracts pending.								
Projected Fund Balance	**–**	**$11,944,898.75**	**$17,715,701**	**$24,097,158**	**$30,668,212**	**$34,441,228**	**$38,433,227**	**$42,654,777**

Leichner Landfill Financial Assurance Reserve Fund (FARF)

Clark County has a continuing financial responsibility for monitoring and maintaining the closed Leichner Landfill. Through various agreements with the county, City of Vancouver, Leichner Landfill, and Ecology, the county manages and administers the financial affairs associated with the closure and post-closure cost of the Leichner Landfill. Maintenance activities are performed by the county and private consultants approved by the county. The funding comes from monies contributed by ratepayers on the disposal fees when the landfill was in operation and interest that is earned on the FARF balance. FARF is to be used for costs associated with post-closure activities including professional services for engineering and monitoring (estimated $650,000 annually). Funds are provided in the fund balance to support these activities through the 25-year post-closure care term. If the fund balance is no longer a viable funding source for these activities, the county intends to use its authority under RCW 36.58 to create a new fee through its solid waste transfer system contract.

The Leichner Landfill Oversight Committee was established in the disposal and settlement agreement to oversee management of the Leichner Landfill site, the FARF, and compliance with the Consent Decree. The committee meets on a quarterly basis with voting members from the City of Vancouver and Clark County. For a breakdown of revenue and expenditures for FARF, refer to table 11.5.4.



Table 11.5.4: Financial Assurance Reserve Fund (FARF), Revenues and Expenditures 2023-2030

Revenue	2023 Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Investment Interest	$560,462.46	$547,546.59	$549,068	$538,327	$525,394	$510,080	$492,180	$471,479
Miscellaneous Revenue	$497.00	–	–	–	–	–	–	–
TOTAL—Revenue	**$560,959.46**	**$547,546.59**	**$549,068**	**$538,327**	**$525,394**	**$510,080**	**$492,180**	**$471,479**

Expenditures	2023 Actual	2024 Actual	2025 Budget	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected
Other Operating								
Professional or Contracted Services	$525,981.73	$658,079.75	$690,984	$725,533	$761,810	$799,901	$839,896	$881,891
Subtotal—Other Operating	**$525,981.73**	**$658,079.75**	**$690,984**	**$725,533**	**$761,810**	**$799,901**	**$839,896**	**$881,891**
Transfers								
Operating Transfers	–	$80,000.00	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000
Subtotal—Capital	**$0.00**	**$80,000.00**	**$80,000**	**$80,000**	**$80,000**	**$80,000**	**$80,000**	**$80,000**
City (33.23%)	$174,783.73	$245,263.90	$256,198	$267,679	$279,733	$292,391	$305,681	$319,636
County (66.77%)	$351,198.00	$492,815.85	$514,786	$537,854	$562,077	$587,510	$614,215	$642,255
Subtotal—Operating Expenditures	**$525,981.73**	**$738,079.75**	**$770,984**	**$805,533**	**$841,810**	**$879,901**	**$919,896**	**$961,891**
Ending Fund Balance								
Ending Fund Balance	$34,977.73	*($190,533.16)*	*($221,916)*	*($267,206)*	*($316,416)*	*($369,821)*	*($427,716)*	*($490,412)*
Subtotal—Fund Balance	$34,977.73	($190,533.16)	($221,916)	($267,206)	($316,416)	($369,821)	($427,716)	($490,412)
TOTAL—Expenditures	**$560,959.46**	**$547,546.59**	**$549,068**	**$538,327**	**$525,394**	**$510,080**	**$492,180**	**$471,479**
NET	**$0.00**	**$0.00**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Projected Fund Balance	**$11,492,334.33**	**$11,301,801.17**	**$11,079,885**	**$10,812,679**	**$10,496,263**	**$10,126,442**	**$9,698,726**	**$9,208,314**

11.6 Grants

Local Solid Waste Financial Assistance

Clark County, cities, and town may apply for grants from Ecology's Local Solid Waste Financial Assistance (LSFWA) grants program to partially fund mandates from the state for solid waste management activities. The LSFWA grant program is funded by the state's Local Toxics Control Operating Account (see Legislation, above). Grant funded programs must comply with the CSWMP. A 25% local match is required, and activities and expenditures must be approved by Ecology staff. The LSFWA grants are usually offered by Ecology on a biennial cycle. More information can be found on ***Ecology's local solid waste financial assistance program grants*** webpage.

LSWFA funds are maintained in the Clark County Solid Waste Fund. Funds have historically been used to support work related to solid waste management planning, household hazardous waste events, waste reduction and recycling, and implementing requirements related to the organics management laws.

Litter cleanup

Clark County, the cities, and town may also apply for Community Litter Cleanup Program grants which are funded by the Waste Reduction, Recycling, and Model Litter Fund (see Legislation, above). These small grants help to pay for litter and illegal dump cleanup programs in the region.

Additionally, the Ecology Ramp Litter Cleanup Program grant is a competitive grant program that provides funding to local governments for litter cleanup of state highway ramps. Clark County recognizes the value and importance of this work and will continue to look into ways to support litter cleanup efforts including future grant applications.

Presently, litter cleanup grants are not part of the funding plan for this planning cycle however will be considered in future grant cycles.

Other grant funding sources

Other grants from public and private sources may occasionally become available. In the past, grants from other sources have been used to purchase street banners, survey recycling setouts, remove hazardous materials from school science labs, increase access to high school student composting education, and purchase event recycling containers. These other grants are utilized when available but are not relied upon to fund core program services.

11.7 City revenues and expenditures

Host fees are paid monthly to the City of Vancouver for West Van and to the City of Washougal for WTS. For the City of Vancouver, the host fee is adjusted on the same date and by the same percentage point applied to the operating fee component of the municipal solid waste (MSW) tip fee. The City of Washougal manages their own contract with CRC and host fee adjustments.

City of Vancouver accounts for about 40% of the county's residents. Vancouver City Council sets collection rates for garbage, recycling, and organics within city boundaries. The rate formulas include collection costs, disposal fees, and city fees, as well as a utility tax, which the garbage collection contractor pays monthly. Recycling collection is funded through customer fees plus a portion of revenues received from the sale of recyclable materials.

The Vancouver city fee is used for the Solid Waste Services Program, which provides for staff, contract management, regulatory and enforcement activities, solid waste and recycling education, public information, neighborhood cleanup programs, leaf collection, the neighborhood recycling education program, and solid waste program administration. City of Vancouver staff performs the following roles:

- Plans for and manages the delivery of garbage, recycling and organics (food and yard debris) collection services within the City of Vancouver for residents and businesses.
- Manages a long-term comprehensive contract with a private collection services operator.
- Acts as a liaison between the collection contractor and Vancouver customers on billing and service issues.
- Develops collection services rate structures and rate modeling adopted by Vancouver City Council.
- Manages resident and neighborhood programs including neighborhood clean-up events, a bulky curbside pickup service for residents, and coupon programs in the fall and spring.
- Licenses open market haulers of commercially generated recyclable materials.
- Coordinates with the collection contractor to provide a Commercial Recycling pilot that provides a reduced cost for basic commingle and glass recycling service for all commercial customers.
- Participates in educational programs offered by the County, the collection and disposal contractor, and other partner agencies, institutions and groups.
- Maintains data on City programs and budget, reviews development projects for waste storage and screening needs and provides a variety of community cleanup efforts and technical assistance to related to Vancouver's solid waste ordinances.

Camas is the only Clark County city that operates its own residential garbage collection service and receives user fees for the service. Both Camas and Washougal handle solid waste billing, and in both cities, the solid waste fund is an enterprise fund.

The general funds for Battle Ground, Camas, Ridgefield, and Washougal all receive revenues from their respective taxes or franchise fees on garbage collection. Yacolt and La Center have no solid waste revenues.

11.8 Solid waste enforcement revenues and expenditures

County level

Public Health receives annual permit fees from permitted facilities in Clark County, including the three county contracted transfer stations, to fund the Solid Waste Enforcement program. These permit fees fund inspections, permit request reviews, and related activities. Public Health also receives Local Solid Waste Financial Assistance (LSWFA) funds from Ecology and support from the Clark County Solid Waste Fund for solid waste enforcement activities.

State level

The WUTC collects a franchise fee which is included in garbage collection rates in unincorporated Clark County and the cities and town with WUTC haulers. The franchise fee revenues help support WUTC administration, including a customer service telephone line, rate review, and occasional enforcement activities related to non-licensed garbage hauling.

11.9 Capital needs and financing plan

Transfer stations

As described in the sections above, the three system transfer facilities currently receive most of the solid waste generated in the county. CTR and West Van, the two largest transfer stations, were designed and constructed in the early 1990s. However, since 2010 the amount of waste generated in the county has increased from 203,000 tons per year (TPY) to over 409,000 TPY in 2023. These facilities are now receiving a significantly higher volume of waste and customer traffic than they were designed to manage. And, other than the construction of a third transfer station in the City of Washougal in 2009, there have been no significant investments in the transfer station system.



To gain better understanding of the current condition, Clark County contracted an agency to conduct a Regional Solid Waste System Study (Appendix I). This study identified that each of the three stations have deficiencies in efficiently managing the current amount of waste and traffic. Each facility has a limited number of stalls for customers to unload, insufficient tip floor space to handle surges in waste quantities, and limitations to load out materials within operating hours. While there are identified options to extend operating hours at the transfer stations to remove materials from the tip floors, additional trailers and containers must be available on-site for this purpose.

Given that current operations are exceeding capacity, the population projections for the region add additional concern. Population projections from the Office of Financial Management estimate the county will have approximately 720,000 people by 2040. This represents an increase of 217,000 more than the 2020 Census numbers and is expected to increase the total waste generated from 407,000 TPY in 2021 to 571,000 tons in 2040, a 30% increase. The preliminary assessment of the facility needs as reported in Phase 1 of the Regional Solid Waste System Study (Appendix I) indicates that improvements and expansion of transfer station facilities will cost between $30 million and $50 million or more. This does not include capital investment in a new Materials Recovery Facility (MRF) that is expected to be privately financed (see below). In Phase 2 of the study an updated cost estimate included a six-year Capital Improvement Plan and conceptual plans illustrating a phased development plan for expanding the transfer station system for each service area. The cost estimate table is visible in Appendix N: Clark County municipal solid waste data.

A key element of the future facilities plan is the need to expand capacity for serving the north/central part of the county. The ***Comprehensive Clark County Growth Management Plan*** shows the largest percentage of growth over the next 20 years will occur in this area currently served by CTR. The range of possibilities is to expand the existing CTR facility onto an adjacent parcel or possibly site a new transfer station. A feasibility study to determine if a fourth transfer station is needed in the northern part of the county, combined with an evaluation of improvements to CTR, will provide and identify next steps. Planning for any improvements to the system (either a fourth transfer station or improvements to CTR) will be during the next five years.

Funding options for any capital improvements or acquisitions will be evaluated with any decision to move forward on a project. Revenues generated from current rates are available to fund capital improvements. The county will continue to evaluate funding options that may include:

- Committing revenue from the rates to pay for improvements.
- Relying on private capital from the contractor that will be paid by rates.
- Issuing revenue bonds if a decision is for the facilities to be publicly owned.

Existing interlocal agreements with the cities and town require any rate increase to be approved by the county only after notice to and consultation with the affected cities and town. This includes any increase that may result from planned capital improvements to the system. Tipping fees and/or transaction fee increases would also be reviewed by the WUTC as these would be pass-through rates on collection services. Specific information will be available for review when alternatives have been reviewed, a decision as to the direction for capital improvements is made, and cost estimates of the project are established. Also, as discussed in Regional Solid Waste System Study (Appendix I), the county and the cities and town are evaluating options for public ownership of the transfer station system.

Materials Recovery Facilities (MRF)

The MRF at West Van processes all the recyclables generated in the county. As reported in the Phase 1 Regional Solid Waste System Study, the MRF processes 200 tons per day (TPD) over two shifts with older, less efficient equipment. CRC has made some equipment improvements to help reduce labor costs and produce cleaner materials to meet market demand. However, due to the current strain on the system the long-term plan is for CRC, at their sole expense, to relocate the existing MRF equipment and install modern equipment at a newly sited facility. The costs associated with this relocation is not eligible for DCIMRF reimbursement. The MRF will remain privately owned and operated. The timeline for the acquisition of a new site and removal of existing equipment was agreed upon as part of the recently signed Master Service Agreement with the target acquisition date of no later than December 31, 2025. The decision on where the MRF equipment will be moving and what equipment will be required is currently in negotiations between the county, City of Vancouver, and CRC. The current recycling processing contract (Attachment A.2 in the Master Service Agreement) is set to expire December 31, 2027, with the option for a conditional extension to December 31, 2028.

Financing current needs and future investments

The Master Service Agreement signed in 2024 outlined the requirement to dedicate funds to be used for current needs and future investments. Included in this requirement is a dedicated financial commitment from CRC of $50 million (in 2023 dollars) in the first four years of a new contract, with an additional $13 million (2023 dollars) estimated funding in subsequent years of the new contract and conditional extension years. The combined $63 million in funding for the regional system are contributions from the MSW and drop box tip fees and contractor to be used for timely investment in capital improvement and select maintenance projects managed and approved by the county with input from Vancouver. These contributions, referenced as Contractual Contribution on the tables, are spread between the DCIMRF and the RSWSF 6318 as outlined in the agreement.





12

IMPLEMENTATION SCHEDULE

12.1 Introduction

Chapter 70A.205 RCW defines the requirement for a clearly defined implementation schedule for programs and actions outlined in the CSWMP with consideration given to the system needs for the next 20 years. This chapter lists recommendations noted in previous chapters. The action items identified are in line with the goals and objectives outlined in Chapter 1: Background and administration.

12.2 Emerging issues

It is anticipated that the programs will generally be able to stay on the course established by this CSWMP for the next 20 years. As we implement this CSWMP, issues may arise that could directly impact our local solid and hazardous waste management programs. These include the introduction of new state, federal, and international government regulations and policies, advancements in technology, and changes in product use and design. Consequently, we may need to adjust the recommendations in this CSWMP or add new action items to our implementation strategy to effectively address them before our CSWMP is updated again. When these issues arise, the CSWMP may need to be amended or revised to address them using the process defined in 1.11 Process of updating the plan and will be referenced in our next plan update.

12.3 Implementation schedule

The following pages provide details on the action items and projected timeline to meet the priorities outlined in this CSWMP.

Table 12.3.1 Summary of recommendations/actions, implementation schedule

Recommendations/actions		2025	2026	2027	2028	2029	2030	Future
Administration								
A1	Coordinate with the Regional Solid Waste Systems Steering Committee (RSWSSC) to revise bylaws and interlocal agreements related to the potential public ownership of the transfer stations and other regional solid waste issues.	X	X	X	X	X	X	X
A2	Work with Oregon Metro to advance proposals that would mutually benefit both regions; provide for a reciprocal exchange of technical assistance and input for areas of mutual concern; enhance communication; and when appropriate use joint contracts.	X	X	X	X	X	X	X
A3	Identify and plan to develop ordinances related to solid waste planning and regional solid waste activities.	-	-	-	-	-	-	X
A4	Implement a continuous improvement program for data management including researching data management software.	X	X	X	X	X	X	X
Planning area								
P1	The county will maintain work with the RSWSSC and SWAC to present the information needed to develop a consensus on whether the transfer station system should be publicly owned	X	X	X	X	X	X	X
P2	Subcontract with a professional facilitation agency to support and coordinate the development of a regional entity.	X	X	X	X	X	X	-
P3	Negotiate the terms of an interlocal agreement meeting the criteria outlined in the Master Service Agreement for forming a regional entity with the intent to own and manage the regional transfer stations.	-	-	-	X	X	-	-
P4	Form a regional entity with the intent to own and manage the regional transfer stations.	-	-	-	-	-	X	X
P5	Negotiate the terms for a new materials processing center (Attachment 4 to the Master Service Agreement)	X	X	-	-	-	-	-
Enforcement								
E1	Identify and plan to develop and revise ordinances related to solid waste enforcement including updating Clark County solid waste code.	-	-	-	-	-	-	X
Waste reduction								
W1	Promote and support the four core programs: Green Schools, Green Business, Green Neighbors, and Composter Recycler.	X	X	X	X	X	X	X
W2	Increase education and outreach accessibility for diverse populations.	X	X	X	X	X	X	X
W3	Provide waste reduction education and assistance to businesses and schools	X	X	X	X	X	X	X
W4	Promote toxics waste reduction through green cleaning and natural gardening workshops, online and printed resources.	X	X	X	X	X	X	X

Recommendations/actions		2025	2026	2027	2028	2029	2030	Future
Recycling								
R1	Continue to promote the RecycleRight App.	X	X	X	X	X	X	X
R2	Continue to promote a satellite battery disposal program and recruit additional drop-off locations.	X	X	X	X	X	X	X
R3	Provide education to residents on proper battery recycling curbside and at drop-off locations	X	X	X	X	X	X	X
R4	Provide targeted education and outreach programs with an emphasis on waste prevention and recycling contamination reduction through the Green Neighbors, Green Schools, Green Business, and Composter Recycler programs.	X	X	X	X	X	X	X
R5	Translate and transcreate educational materials and campaigns to ensure recycling information is clearly understood by all audiences.	X	X	X	X	X	X	X
R6	Develop and distribute single-family and multifamily content about current top contaminants for use by the county and regional partners. (e.g. tanglers, batteries, clamshells)	X	X	X	X	X	X	X
R7	Evaluate the need for an annual residual study analysis to monitor waste diversion and effectiveness of sorting equipment.	X	X	X	X	X	X	X
R8	Conduct a comprehensive waste characterization study.	X	-	X	-	X	-	-
Organics								
O1	Reduce food waste at schools through approaches such as share tables, flexible and right-size food ordering.	X	X	X	X	X	X	X
O2	Provide targeted education and outreach programs with an emphasis on food waste reduction and composting through the Green Neighbors, Green Schools, Green Business, and Composter Recycler programs.	X	X	X	X	X	X	X
O3	Provide education and resources to maintain community hub composting.	X	X	X	X	X	X	X
O4	Provide education and resources for home composting efforts.	X	X	X	X	X	X	X
O5	Provide technical assistance, waste audits, and incentives for businesses to prevent food waste, compost, and increase food donations.	X	X	X	X	X	X	X
O6	Research current practices for prevention, donation and diversion of food waste.	X	X	X	X	X	X	X
O7	Reduce food waste at restaurants and foodservice businesses through waste measurement and tracking and planning.	X	X	X	X	X	X	X
O8	Identify ways to expand curbside organics services countywide.	X	X	X	X	X	X	X
O9	Evaluate edible food recovery from commercial food service.	X	X	X	X	X	X	X
O10	Explore expanding local food waste processing infrastructure including more capacity and/or efficiency at existing facilities	-	-	-	-	-	-	X
O11	Conduct outreach and education related to the value of compost, curbside organics recycling collection.	X	X	X	X	X	X	X
O12	Research composting opportunities to transport food waste to farms for composting alongside agricultural waste.	-	-	-	-	-	-	X
O13	Support the City of Vancouver's Wastewater Biosolids Program Planning efforts and potential outcome for large scale anerobic digestion or other resource recovery methods and technologies to leverage organics diversion outcomes and achieve state organics mandates.	X	X	X	X	X	X	X
O14	Evaluate opportunities to collaborate with local organizations on food waste reduction, including the Clark County Food Bank.	X	X	X	X	X	X	X
Moderate risk waste								
MRW1	Implement campaigns for PaintCare and medication take-back programs	-	X	X	-	-	-	-
MRW2	Assess the feasibility of collecting SQG dangerous waste at HHW facilities and implement collections if warranted	X	X	X	X	X	X	X
MRW3	Evaluate accessibility and participation at HHW facilities	-	X	X	X	X	X	X
MRW4	Expand days and hours of operation at HHW facilities	-	X	X	X	X	X	X
Miscellaneous waste								
M1	Review construction and demolition (C&D) technical assistance through education and resources	-	X	X	-	-	-	X
M2	Update Green Business certification requirements to align with new statewide initiatives and Pollution Prevention Assistance Program	-	X	-	X	-	X	X
M3	Research C&D waste management and recommend actions	-	-	-	-	-	-	X
M4	Publish a new C&D recycling toolkit identifying regional recycling options for C&D wastes	-	-	X	-	-	-	X
M5	Research opportunities for C&D facility in Clark County.	-	-	-	-	-	-	X
M6	To align with local economic and climate goals, conduct a detailed analysis of the following: • Deconstruction promotion and incentives • C&D waste prevention and reuse methods • C&D recycling markets • Incentives and policy solutions	-	-	-	-	-	-	X
Solid waste collection								
S1	Adopt universal collection in urban areas	-	-	-	-	-	-	X
S2	Bundle pricing in urban areas, non-WUTC and city contracts for garbage, recycling, and organics	-	-	-	-	-	-	X
S3	Pilot special collection events in communities	-	-	-	-	-	-	X
S4	Bulky waste collection as part of garbage service	-	-	-	-	-	-	X
S5	Engage with Ecology, Northwest Product Stewardship Council (NWPSC), and legislative groups (including Washington Association of Solid Waste Managers, WACSWM) to promote product stewardship bills	X	X	X	X	X	X	X

Recommendations/actions		2025	2026	2027	2028	2029	2030	Future
Transfer and disposal								
T1	Update the county's ordinances regarding directing waste to designated disposal sites in the county's regional solid waste management system.	-	-	-	-	-	-	X
T2	Utilize the existing contract for garbage export to Finley Buttes Landfill located near Boardman, OR, and Wasco County Landfill located near The Dalles, OR as the primary disposal sites for Clark County waste for the duration of the current disposal contract but consider alternative disposal options when considering any amendments to the agreement with CRC.	X	X	X	X	X	X	X
T3	Assess and recommend changes to existing signage at the transfer stations for clarity and consistency and update as needed	X	X	X	X	X	X	X
T4	Initiate and complete Environmental Site Assessments for existing and future regional solid waste transfer and material recovery facilities.	X	X	X	X	-	-	X
	Funding and financing							
F1	Maintain status quo of Clark County as the designated lead agency for regional Local Solid Waste Financial Assistance (LSWFA) planning and implementation grant applications. Lead agency will provide appropriate documentation with each application confirming full partner support.	X	X	X	X	X	X	X
F2	Establish and implement an ongoing process, involving the Regional Solid Waste System Steering Committee to provide regional partners with a role concerning regional program funding and expenditure decisions.	X	X	X	X	X	X	X
F3	Continue existing programs with funding currently in place for regional system support, including the LSWFA grant from Ecology.	X	X	X	X	X	X	X
F4	Pursue federal and state grants that are appropriate to plan goals and desired outcomes.	X	X	X	X	X	X	X
F5	Evaluate funding options to ensure that funding of required solid waste, waste prevention, and recycling roles continue such as new revenue-generating authorities, and contract revisions for disposal and collection services.	X	X	X	X	X	X	X
F6	Create a fund policy for the newly established special revenue fund/capital improvement fund for improvements to the system and transfer stations using revenue generated from rates.	X	-	-	-	-	-	-
F7	Increase transparency and timeliness of financial reporting with SWAC and RSWSSC.	X	X	X	X	X	X	X
F8	Evaluation of discounted rates for feasibility and implementation in preparation for the next plan revision.	X	X	X	X	X	X	X



A

APPENDIX A: Acronymns and definitions

Acronyms	
AHW	Acutely hazardous waste
C&D	Construction and demolition waste
CCC	Clark County Code
CCPH	Clark County Public Health
CRC	Columbia Resource Company
CROP	Contamination Reduction Outreach Plan
CSWMP	Comprehensive Solid Waste Management Plan
CTR	Central Transfer and Recycling Center
DEA	Drug Enforcement Agency
DEQ	Oregon Department of Environmental Quality
DOH	Washington State Department of Health
DOT	Washington Department of Transportation
Ecology	Washington Department of Ecology
EHW	Extremely Hazardous Waste
EPA	United States Environmental Protection Agency
HHW	Household hazardous waste
ILA	Interlocal Agreement
MRF	Materials recovery facility
MRW	Moderate risk waste
MSW	Municipal solid waste
ORS	Oregon Revised Statute
PPA	Pollution Prevention Assistance Program
ppm	Parts per million
QEL	Quantity exclusion limit
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
RRP	Renovation, Repair, and Painting
RSWSSC	Regional Solid Waste System Steering Committee
SEPA	State Environmental Policy Act
SQG	Small quantity generator
State	The State of Washington
SWAC	Solid Waste Advisory Commission
SWCAA	The Southwest Washington Clean Air Agency
SWE	Solid Waste Enforcement
SWEO	Solid Waste Education and Outreach
SWO	Solid Waste Operations
TPD	Tons per day
TSCA	Toxic Substances Control Act
WAC	Washington Administrative Codes
Waste Connections	Waste Connections of Washington
West Van	West Vancouver Materials Transfer Station
WTS	Washougal Transfer Station
WUTC	Washington Utilities and Transportation Commission

Definitions

Anaerobic digestion: Involves the breaking down of organic matter using bacteria in the absence of air to produce biogas and a high nutrient residue that can be used as a soil amendment. Often allows for either fuel or energy production.

Best management practices: Best management practices are effective, practical, structural, or nonstructural methods that prevent or reduce the movement of sediment, nutrients, pesticides, and other pollutants from the land to surface or groundwater, or which otherwise protect water quality from potential adverse effects of land use activities.

Bulky wastes: Large items such as appliances, furniture, and other oversized wastes.

Central Transfer and Recycling Center (CTR): The transfer station is located at 11034 NE 117th Ave, Vancouver, WA.

Clark County Code (CCC): Codified ordinances and regulations adopted by the Clark County Council that govern how the county government works.

Clark County Public Health (CCPH): The Clark County department that provides various health-related services and has authority (delegated by the state of Washington) to enforce state solid waste rules and regulations. Clark County is a political subdivision of the state of Washington.

Climate change: Changes in the long-term trends in average weather patterns of a region, including the frequency, duration, and intensity of wind and snowstorms, cold weather and heat waves, drought, and flooding; climate change is attributed primarily to the emission of greenhouse gases, including such compounds as carbon dioxide and methane.

Collecting agency / Collection service provider: Any agency, business, or service operated by a person for the collecting of solid waste. (WAC 173-304).

Columbia Resource Company (CRC): Owner and operator of the three transfer stations in Clark County (CTR, West Van, and Washougal) and designated processor of recyclables. CRC is a wholly-owned subsidiary of Waste Connections, Inc.

Commercial solid waste: Solid waste generated by businesses. This includes waste from business activities such as construction, transportation, communications and utilities, wholesale trades, retail trades, finance, insurance, real estate, government, and others.

Commingled: All recyclable materials are separated from garbage by the generator and placed in the same container.

Compact fluorescent light: A light bulb or tube that generates light by an electric current being driven through a tube containing argon and a small amount of mercury vapor. The mercury in the CFL requires special disposal concerns.

Composted material: As defined in RCW 70A.205.015, organic solid waste that has been subjected to controlled aerobic degradation at a solid waste facility in compliance with the requirements of this chapter. The natural decay of organic solid waste under uncontrolled conditions does not result in composted material.

Comprehensive Solid Waste Management Plan (CSWMP): Formally referred to as "Plan" or "SWMP" in previous versions, the CSWMP is a document that identifies goals and policies for implementing, evaluating, and modifying existing and future solid waste management programs as required by Ecology (RCW 70A.205.040). The use of CSWMP was incorporated in the 2025 revision as the revision incorporates CROP and the MRW plan.

Construction and demolition waste (C&D): Recyclable and non-recyclable materials that are generated from the construction, remodeling, repair, or demolition of buildings, roads, or other structures.

Contamination Reduction and Outreach Plan (CROP): The goal of the CROP is to reduce contamination of the materials collected in Clark County's single-family, multifamily, drop box, and commercial recycling programs. The CROP intends to improve the uniformity, marketability, and environmental benefits of recyclable material streams.

County: For the purposes of this plan, "county" refers to Clark County.

Curbside recycling: The act of collecting recyclable materials by a recycling company from residential generators at the curb and brought to a material recovery facility.

Department of Transportation: The federal department concerned with transportation.

Disposal: The discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water (WAC 173-350).

Diversion rate: Includes the recycling rate along with the percentage of generated wastes that are productively utilized but not made into new products (this includes wood, yard waste, used oil, and other products that are burned for fuel and some glass, concrete, asphalt, and rubble which may be crushed and used as aggregate as well as rendering).

Diversion: Materials diverted from disposal in a landfill to a broad range of other uses including recycling, composting, energy recovery, and reuse.

Drug Enforcement Agency (DEA): The federal agency that enforces controlled substance laws and regulations in the United States.

Ecology: See Washington State Department of Ecology below.

Electronic waste (E-waste): Broken, obsolete, or worn-out electronics that can be recycled through the E-Cycle Washington program, which includes computers, monitors, laptops, tablet computers, televisions, portable DVD players, and e-readers, sometimes collectively referred to as "covered units."

Environmental Impact Statement: A document required by the National Environmental Policy Act for certain actions "significantly affecting the quality of the human environment" that describes the positive and negative effects of a proposed action. The Environmental Impact Statement process is a required component of the SEPA review.

Environmental Protection Agency (EPA): A United States agency whose mission is to protect human health and the environment.

Equity: When all people have an equal opportunity to attain their full potential. Inequity occurs when there are differences in well-being between and within communities that are systematic, patterned, unfair, and can be changed; they are not random, as they are caused by our past and current decisions, systems of power and privilege, policies, and the implementation of those policies.

Feedstock: Any organic material used in the processing or manufacturing another product.

Food rescue: Refers to the redistribution of surplus edible food to other users.

Food waste: Waste from fruits, vegetables, meats, dairy products, fish, shellfish, nuts, seeds, grains, and similar materials that results from the storage, preparation, cooking, handling, selling, or serving of food for human consumption. Includes, but is not limited to, excess, spoiled, or unusable food and includes inedible parts commonly associated with food preparation such as pits, shells, bones, and peels. Does not include dead animals not intended for human consumption or animal excrement (from RCW 70A.205.715).

Garbage: An alternative term for solid waste. "Solid waste" or "wastes" means all putrescible and no putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition, and construction wastes, abandoned vehicles or parts thereof, and recyclable materials (from RCW 70A.205.015)

High-intensity discharge: A gas-discharge arc lamp which creates light by sending an electrical discharge between two electrodes and through a plasma, or ionized gas. These light bulbs may contain mercury.

Household hazardous waste (HHW): Any waste that exhibits any of the properties of dangerous wastes but is exempt from regulation under chapter 70A.300 RCW, Hazardous waste management, solely because the waste is generated by households. Household hazardous waste can also include other solid waste identified in the local hazardous waste management plan prepared under chapter 70A.300 RCW, Hazardous waste management (WAC 173-350).

Interlocal Agreement (ILA): An agreement between a city and the county for participation in the Clark County solid waste system.

Landfill gas: A gas generated through the decomposition of waste buried in the landfill, which consists of about 50–60%methane and about 40–50% carbon dioxide, with less than 1% oxygen, nitrogen, and other trace gases.

Landfill: A disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill (WAC 173-350).

Lead-based paint: Paint that contains lead, a toxic heavy metal. Lead-based paint was banned for residential use in 1978.

Materials recovery facility (MRF): Any facility that receives, compacts, repackages, or sorts source separated solid waste for the purpose of recycling (WAC 173-350).

Metro: A regional governmental agency, known as "Metro," that supports regional services including solid waste planning, waste reduction, and disposal. Includes Portland, several other cities, and three counties in northwest Oregon.

Mixed paper: All clean mixed wastepaper, including newspaper, colored printing and writing paper, magazines, phone books, catalogs, advertising supplements known as "junk mail," paperback books, and paperboard (non-corrugated cardboard as cereal and cracker boxes).

Model Toxics Control Act: Washington's environmental cleanup law. MTCA funds and directs the investigation, cleanup, and prevention of sites that are contaminated by hazardous substances.

Moderate risk waste (MRW): Solid waste that is limited to conditionally exempt small quantity generator waste and household hazardous waste (WAC 173-350).

Municipal solid waste (MSW): A subset of solid waste which includes unsegregated garbage, refuse, and similar solid waste material discarded from residential, commercial, institutional, and industrial sources and community activities, including residue after recyclables have been separated. (WAC 173- 350).

National Pollutant Discharge Elimination System (NPDES): A permitting system that regulates point sources of water pollution discharging to waters of the United States to improve water quality.

Non-putrescible waste: Waste materials that do not contain organic matter that is subject to rapid decomposition by fungi and bacteria.

Oregon Department of Environmental Quality (DEQ): A department of the state of Oregon, with essentially the same role as Washington's Department of Ecology.

Oregon Revised Statutes (ORS): The compilation of all permanent Oregon state laws now in force.

Organic materials management: Management of organic materials through composting, anaerobic digestion, vermiculture, black soldier fly, or similar technologies (RCW 70A.205).

Organic materials: Include, but are not limited to, manure, yard debris, food waste, food processing waste, wood waste, and garden waste (RCW 70A.205).

Organics: Any solid waste that is a biological substance of plant or animal origin capable of microbial degradation. Used locally to define the commingling of yard debris and food waste curbside collection service. Currently only applicable to certain areas.

Parts per million (ppm): An expression of the concentration of a chemical or contaminant in a sample of either liquid or solid material.

Putrescible wastes: Waste that rots or decays rapidly. It can be characterized as soft organic material which usually have high moisture content, are readily degradable, generate odor and attracts vermin.

Pollution Prevention Assistance Program (PPA): An Ecology program where local government specialists may provide non-regulatory technical assistance to SQG businesses.

Polychlorinated biphenyl (PCBs): A group of synthetic organic chemicals once used in industrial and commercial manufacturing, found to persistently be harmful to human health and wildlife.

Prevention: In relation to solid waste, prevention refers to avoiding the waste in the first place and represents the greatest potential for cost savings and environmental benefits for businesses, governments, and consumers.

Product stewardship or extended producer responsibility: An environmental management strategy whereby manufacturers take responsibility for minimizing a product's environmental impact throughout all stages of a product's life cycle, including end-of-life management.

Quantity exclusion limit (QEL): The quantity of dangerous waste generated in a calendar month used to distinguish when a dangerous waste is only subject to the small quantity generator provisions, the medium quantity generator provisions, or when a dangerous waste is subject to the large quantity generator provisions.

Recovery rate: The percent of total solid waste generated that is recovered from the municipal solid waste stream. Includes both recycled material and material burned for energy recovery.

Recyclable material: Any material that has been recovered or diverted from the non-hazardous solid waste stream for purpose of reuse, recycling, or reclamation, and a substantial portion of which is consistently used in the manufacture of products, which may otherwise be produced using raw or virgin materials.

Recycling: Transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration (RCW 70A.205).

Recycling rate: The percentage of all waste generated by residents and businesses that are recovered and made into new products.

Refuse: An alternative term for solid waste.

Renovation, Repair, and Painting (RRP): An EPA program rule requiring contractors, construction companies, painters, and other subcontractors to be RRP certified by the EPA. The certification teaches best practices for mitigating exposure and pollution from lead-based paint.

Residence: The regular dwelling place of an individual or individuals (RCW 70A.205).

Resource Conservation and Recovery Act (RCRA): Federal law establishing the framework for a national system of solid waste control. Subtitle D of the Act is dedicated to non-hazardous solid waste requirements, and Subtitle C focuses on hazardous solid waste.

Reuse: The return of a commodity into the economic stream for use in the same kind of application as before without a change to its identity.

Revised Code of Washington (RCW): The compilation of all permanent Washington state laws now in force.

Self-hauler: Anyone who brings garbage, recyclables, and/or yard debris to transfer facilities except a commercial collection company.

Sharps: A term for sharp items needing safe disposal including hypodermic needles, syringes, scalpel blades, lancets, razor blades, and intravenous tubing with attached needles.

Small quantity generator (SQG): A dangerous waste generator whose dangerous wastes are conditionally exempt from regulation under chapter 70A.300 RCW, Hazardous waste management, solely because the waste is generated or accumulated in quantities below the threshold for regulation and meets the conditions prescribed in WAC 173-303-070 (8)(b).

Solid waste: All solid and semi-solid wastes, including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and recyclable materials (RCW 70A.205).

Solid Waste Advisory Commission (SWAC): A Clark County-appointed advisory group comprising 10 volunteer members that represent a broad spectrum of the community.

Solid Waste Education and Outreach Program (SWEO): Clark County program providing education and outreach to community members. Programs include Green Business, Green Neighbors, Green Schools, and Composter Recycler.

Source separation: The separation of different kinds of solid waste at the place where the waste originates (RCW 70A.205).

Southwest Clean Air Agency (SWCAA): The Southwest Clean Air Agency is responsible for enforcing federal, state, and local outdoor air quality standards and regulations in Clark, Cowlitz, Lewis, Skamania, and Wahkiakum counties of southwest Washington state.

Special waste: Solid wastes that require special handling and are collected, processed, recycled and/or disposed of separately from other solid wastes as defined by applicable codes and interagency agreements.

State Environmental Policy Act (SEPA): A state policy that requires state and local agencies to consider the likely environmental consequences of a proposal before approving or denying the proposal.

Sustainability: An approach to growth and development that balances social needs and economic opportunities with the long-term preservation of a clean and healthy natural environment. This approach to action and development integrates environmental quality, social equity, fiscal responsibility, and economic vitality.

Tipping fee: The per-ton rate charged by transfer and disposal facilities for the disposal of garbage.

Toxic Substances Control Act (TSCA): Gives authorization to the EPA to regulate and screen all chemicals produced or imported into the United States to prevent unreasonable risks to health and the environment.

Transfer station: An intermediate solid waste disposal facility at which solid waste is temporarily deposited to await transportation to a final disposal site.

Washington Administrative Codes (WAC): Administratively adopted, formally codified rules which define how state agencies will implement the requirements of state laws (the "RCWs").

Washington State Department of Ecology (Ecology): A department in the state of Washington that is tasked to protect, preserve and enhance Washington's environment, and promote the wise management of air, land, and water for the benefit of current and future generations.

Washington State Department of Health (DOH): The Washington state public health agency.

Washington Utilities and Transportation Commission (WUTC): A state agency responsible for oversight of private utility and transportation services including electric, natural gas, telecommunications, water utilities, household movers, solid waste carriers, private ferries, inter-city buses, and safety issues affecting charter buses, railroads, limousines, and nonprofit transportation services.

Washougal Transfer Station (WTS): A transfer station facility serving the southeast area of Clark County, located at 4020 South Grant St. at the Port of Camas-Washougal.

Waste Connections of Washington: A publicly traded waste-handling company that provides solid waste collection, transfer, and recycling services for residents and businesses of Clark County, Washington.

Waste Control, Inc.: A publicly traded waste-handling company that, under contract with Clark County, performs a portion of waste-related services in Clark County.

Waste reduction: Reducing the amount or toxicity of waste generated or reusing materials (RCW 70A.205.015).

Waste prevention: A strategy that involves the manufacturing of products or consumer behavior in purchasing, using, or reusing products.

Wasted food: The edible portion of food waste.

West Vancouver Material Recovery Center (West Van): A transfer station and material recovery facility located at 6601 NW Old Lower River Road, Vancouver, WA.

Yard debris: Means plant material commonly created while maintaining yards and gardens, and through horticulture, gardening, landscaping, or similar activities. Yard debris includes but is not limited to grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, vegetable garden debris, holiday trees, and tree pruning 4 inches or less in diameter (RCW 70A.205.015).



B

APPENDIX B: SEPA checklist and determination

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Determination of NONSIGNIFICANCE
Notice Date: May 24th, 2024

PROJECT:
Clark County Comprehensive Solid Waste Management Plan (CSWMP) – 2025-2030

Please find enclosed an environmental Determination of Non Significance (DNS) issued pursuant to State Environmental Policy Act (SEPA) Rules (Chapter 197-11, Washington Administrative Code). The enclosed review comments reflect evaluation of the environmental checklist by the lead agency as required by WAS 197-11-330(1)(a)(i).

Written comments may be submitted on this determination within fifteen (15) days of its issuance, after which the DNS will be reconsidered in light of the comments received.

Please address all correspondence to:

Clark County Department of Public Works
Audrey Cronin, Environmental Permitting Manager
PO Box 9810
Vancouver, WA 98666-9810

DISTRIBUTION LIST

Federal:
US Army Corps of Engineers
US EPA
US Soil Conservation Services
Bonneville Power Administration
Federal Emergency Management Agency
US Fish & Wildlife

Regional:
Fort Vancouver Regional Library
Regional Transportation Council
Southwest Clean Air Agency
Southwest Washington Health District
Camas Public Library

Tribal:
Cowlitz Indian Tribe
Confederated Tribes & Bands of the Yakama Nation
The Confederated Tribes of Grand Ronde
Confederated Tribes of Warm Springs

State:
Washington State Department of Fish & Wildlife
Washington State Department of Ecology
Washington State Department of Natural Resources SW Washington
Washington State Department of Transportation
Washington State Department of Archaeology and Historic Preservation

County:
Clark County Fire District No. 5
Clark County Fire District No. 6
Clark County Fire District No. 9
Clark County Fire & Rescue
East County Fire & Rescue
Clark Public Utilities Electrical
Clark Public Utilities Water
Clark Regional Wastewater District
Clark County Community Development
Development Services
Fire Marshall
Clark County Conservation District
Clark County Sheriff's Office

Local:
City of Vancouver
City of Camas
City of Ridgefield
City of Woodland
City of Battle Ground
City of La Center
City of Washougal
Vancouver Parks & Recreation
Greater Vancouver Chamber of Commerce

Vancouver School District
Evergreen School District
Camas School District
Hockinson School District
Battle Ground School District
Mt. Pleasant School District
Woodland School District
Green Mountain School District
La Center School District
Ridgefield School District
Washougal School District

Port of Vancouver
Port of Camas-Washougal

Columbia River Economic Development Council
Clark County Association of Realtors
Clark County Home Builders Association
Vancouver Audubon Society
Friends of Curtin Creek (postcard only)
Properties within 500' of project (postcard only)
The Columbian
The Reflector

C-Tran
AT&T
Century Link
Clark Public Utilities – Water
Clark Public Utilities – Electric
Clark Regional Wastewater District
Xfinity - Comcast Cable Services
Northwest Natural
Pacific Power & Light

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Determination of NONSIGNIFICANCE
Notice Date: May 24th, 2024

DISTRIBUTION LIST, Continued

Neighborhood Associations:
Airport Green Neighborhood Association
Andresen/St. Johns Neighborhood Association
Arnada Neighborhood Association
Bagley Downs Neighborhood Association
Bella Vista Neighborhood Association
Bennington Neighborhood Association
Burnt Bridge Creek Neighborhood Association
Burton Evergreen Neighborhood Association
Carter Park Neighborhood Association
Cascade Highlands Neighborhood Association
Cascade Southeast Neighborhood Association
Central Park Neighborhood Association
Cimarron Neighborhood Association
Columbia Way Neighborhood Association
Concerned Citizens of Hockinson Neighborhood Association
Countryside Woods Neighborhood Association
Daybreak Neighborhood Association
Dubois Park Neighborhood Association
East Fork Frontier Neighborhood Association
East Fork Hills Rural Neighborhood Association
East Minnehaha Neighborhood Association
East Old Evergreen Hwy Neighborhood Association
Edgewood Park Neighborhood Association
Ellsworth Springs Neighborhood Association
Enterprise/Paradise Point Neighborhood Association
Esther Short Neighborhood Association
Evergreen Highlands Neighborhood Association
Fairgrounds Neighborhood Association
Fairway/164th Avenue Neighborhood Association
Father Blanchet Park Neighborhood Association
Felida Neighborhood Association
Fern Prairie Neighborhood Association
Fircrest Neighborhood Association
First Place Neighborhood Association
Fisher-Mill Plain Neighborhood Association
Fisher's Creek Neighborhood Association
Fisher's Landing East Neighborhood Association
Forest Ridge Neighborhood Association
Fourth Plain Village Neighborhood Association
Fruit Valley Neighborhood Association
Greater Brush Prairie Neighborhood Association
Green Meadows Neighborhood Association
Harney Heights Neighborhood Association
Hearthwood Neighborhood Association
Heritage Neighborhood Association
Hough Neighborhood Association
Hudson's Bay Neighborhood Association
Image Neighborhood Association
Kevanna Park Neighborhood Association
Landover-Sharmel Neighborhood Association
Lincoln Neighborhood Association
Maple Tree Neighborhood Association
Marrion Neighborhood Association
Meadow Glade Neighborhood Association
Meadow Homes Neighborhood Association
Mountain View Neighborhood Association
Northeast Hazel Dell Neighborhood Association
North Fork Lewis River Neighborhood Association
North Garrison Heights Neighborhood Association
North Hearthwood Neighborhood Association
North Image Neighborhood Association
North Salmon Creek Neighborhood Association
Northcrest Neighborhood Association
Northfield Neighborhood Association
Northwest Neighborhood Association
Northwood Neighborhood Association
Oakbrook Neighborhood Association
Ogden Neighborhood Association
Old Evergreen Hwy Neighborhood Association
Parkside Neighborhood Association
Parkway East Neighborhood Association
Pleasant Highlands Neighborhood Association
Proebstel Neighborhood Association
Ramblin' Creek/South Salmon Creek Neighborhood Association
Ridgefield Junction Neighborhood Association
Riveridge Neighborhood Association
Riverview Neighborhood Association
Road's End Neighborhood Association
Rose Village Neighborhood Association
Sherwood Neighborhood Association
Shumway Neighborhood Association
Sifton Neighborhood Association
Southcliff Neighborhood Association
Sunnyside Neighborhood Association
Truman Neighborhood Association
Vancouver Heights Neighborhood Association
VanMall Neighborhood Association
Village at Fisher's Landing Neighborhood Association
Washougal River Neighborhood Association
West Hazel Dell Neighborhood Association
West Minnehaha Neighborhood Association
Wildwood Neighborhood Association

Determination of NONSIGNIFICANCE
Notice Date: May 24th, 2024

DETERMINATION OF NON-SIGNIFICANCE

Description of Proposal: Clark County Public Health is proposing a routine update of its Comprehensive Solid Waste Management Plan (CSWMP) for years 2025 to 2030 to ensure that the plan accurately reflects the current state of the local solid waste system, including long-range handling and financing needs. The CSWMP must be reviewed every five years at a minimum and updated as needed through the amendment process. The area of jurisdiction for the CSWMP is the entirety of Clark County in the State of Washington.

Proponent: Clark County Public Health

Location of proposal, including street address, if any: There is no location associated with this proposal, as it is a non-project action.

Lead Agency: Department of Public Health, Clark County, Washington

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

The lead agency has determined that the requirements for environmental analysis, protection, and mitigation measures have been adequately addressed in the development regulations and comprehensive plan adopted under chapter 36.70A RCW, and in other applicable local, state, or federal laws or rules, as provided by RCW 43.21C.240 and WAC 197-11-158. Our agency will not require any additional mitigation measures under SEPA.

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below.

Comments must be submitted by **June 8th, 2024**

Responsible Official: Alan Melnick, MD

Position/title: Public Health Director/Clark County Health Officer

Address: Clark County Public Health
PO Box 9825
Vancouver, WA 98666

Date: 05/16/24 **Signature:** Alan Melnick

The staff contact person, telephone number, and e-mail for any questions on this review is Audrey Cronin, 360-558-0524, audrey.cronin@clark.wa.gov.

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SEPA ENVIRONMENTAL CHECKLIST FOR

CLARK COUNTY COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN FOR YEARS 2025-2030

A. Background

1. **Name of proposed project, if applicable:**

   Clark County Comprehensive Solid Waste Management Plan (CSWMP) for years 2025-2030

2. **Name of applicant:**

   Clark County Public Health, Solid Waste & Recycling Program

3. **Address and phone number of applicant and contact person:**

   Alan Melnick, MD
   Director/Health Officer of Clark County Public Health
   PO Box 9825
   Vancouver, WA 98666
   (564) 397-8412

4. **Date checklist prepared:**

   May 3rd, 2024

5. **Agency requesting checklist:**

   Clark County Public Health, Solid Waste & Recycling Program

6. **Proposed timing of schedule (including phasing, if applicable):**

   RCW 70A.205.075 requires that a Solid Waste Management Plan be reviewed every five years at a minimum to assess if the plan reflects the current state of the local solid waste system. The five-year review cycle begins on the first day of the six-year planning period covered by the CSWMP; for this cycle, projected to be 1/1/2025. This plan should be reviewed in 2027 to allow time for a revision, if necessary, with a goal of adopting an updated plan by 2030.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

   Yes, as described above, the plan must be reviewed every five years and updated as needed through the amendment process.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

   The documents listed below were prepared to support the CSWMP update. However, this is a non-project action, and activity-specific environmental documentation was not prepared as part of this plan update. Future project actions will undergo individual environmental review and permitting.

   - Regional Solid Waste System Study, Phase 1 Report – JRMA Architects Engineers (2021)
   - Regional Solid Waste System Study, Phase 2 Report - JRMA Architects Engineers (2023)

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

   The CSWMP may interact with a variety of other agencies' plans and programs relating to solid waste management. However, the development and administration of these plans and programs will not affect the adoption of the 2025 CSWMP update.

10. **List any government approvals or permits that will be needed for your proposal, if known.**

    No permits are needed for the adoption of the CSWMP update. However, the Washington State Department of Ecology, the Clark County Solid Waste Advisory Commission (SWAC), and the Clark County Council must approve the draft plan prior to its adoption.

11. **Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

    This proposal involves the routine update of Clark County Public Health's CSWMP to ensure that the plan accurately reflects the current state of the local solid waste system, including long-range handling and financing needs. The area of jurisdiction for the CSWMP is the entirety of Clark County in the State of Washington.

    The plan was developed to provide the community with goals and policies for implementing, evaluating, and modifying existing and future solid waste management programs. The plan includes updated descriptions of existing conditions and programs to reflect progress and accomplishments over the previous years. It lists policies and practices reviewed by SWAC, solid waste program staff, representatives of six cities, one town, interested citizens, solid waste industry representatives, and others.

    The plan addresses critical items needed for future decision-making on implementing improvements to the solid waste system in Clark County as follows:

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- Promotes sustainable practices for governments, non-governmental organizations, businesses, and residents.
- Review pertinent regulations and other management plans.
- Guidelines for the development of programs, policies, and operating plans.
- Planning for solid waste infrastructure and operations (including facility siting criteria and process).
- Background information to support facility permitting decisions by Clark County Public Health and other state and local government agencies.
- The technical support and justification for grant applications, capital project fund requests, budget planning, and future programs.
- Serves as education and information to the public.
- Identifies and presents opportunities for collaboration with others in the region for collection and recycling services and potential ownership and operation of facilities as well as with statewide agencies.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

    The CSWMP update is a non-project action that applies to the entirety of Clark County in the State of Washington.

B. Environmental Elements

1. Earth

a. **General description of the site:**

   Clark County is located in southwestern Washington, just north of and adjacent to the Columbia River and Portland, Oregon. The county's 656 square-mile area contains various topographic features, from mountainous cascade areas in the east to rolling farmland and lowlands in the west.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

b. **What is the steepest slope on the site (approximate percent slope)?**

The CSWMP update is a non-project action and is not affected by nor will it affect site conditions. Project actions resulting from the adoption of this plan will undergo individual environmental review.

c. **What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.**

Non-project action: question does not apply.

d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

Non-project action: question does not apply.

e. **Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.**

Non-project action: question does not apply.

f. **Could erosion occur because of clearing, construction, or use? If so, generally describe.**

Non-project action: question does not apply.

g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

Non-project action: question does not apply.

h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any.**

Non-project action: question does not apply.

2. Air

a. **What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.**

The CSWMP update is a non-project action and is not affected by nor will it affect air quality. Project actions resulting from the adoption of this plan will undergo individual environmental review.

No significant increase in emissions is anticipated as a result of the recommendations made in the CSWMP.

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b. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

Non-project action: question does not apply.

c. **Proposed measures to reduce or control emissions or other impacts to air, if any:**

Non-project action: question does not apply.

3. Water

a. Surface:

1. **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

   The CSWMP update is a non-project action and is not affected by nor will it affect water quality. Project actions resulting from the adoption of this plan will undergo individual environmental review.

2. **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

   Non-project action: question does not apply.

3. **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

   Non-project action: question does not apply.

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   Non-project action: question does not apply.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

   Non-project action: question does not apply.

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

   Non-project action: question does not apply.

b. Ground:

1. **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**

   Non-project action: question does not apply.

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

   Non-project action: question does not apply.

c. Water Runoff (including stormwater):

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

   Non-project action: question does not apply.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

   Non-project action: question does not apply.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

   Non-project action: question does not apply.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Non-project action: question does not apply.

4. Plants

The vegetation types indicated below can be found across Clark County. However, the CSWMP update is a non-project action and will not result in impacts to vegetation. Project actions resulting from the adoption of this plan will undergo individual environmental review.

a. **Check the types of vegetation found on the site:**

   ☒ **deciduous tree: alder, maple, aspen, other**

   ☒ **evergreen tree: fir, cedar, pine, other**

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   ☒ **shrubs**

   ☒ **grass**

   ☒ **pasture**

   ☒ **crop or grain**

   ☒ **orchards, vineyards, or other permanent crops.**

   ☒ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**

   ☒ **water plants: water lily, eelgrass, milfoil, other**

   ☒ **other types of vegetation**

b. **What kind and amount of vegetation will be removed or altered?**

   Non-project action: question does not apply.

c. **List threatened and endangered species known to be on or near the site.**

   The following federally listed threatened or endangered plant species may be found in Clark County:

   - Golden paintbrush
   - Bradshaw's lomatium
   - Water howellia
   - Nelson's Checker-mallow
   - Willamette Daisy

   However, this is a non-project action and will not affect vegetation.

d. **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.**

   Non-project action: question does not apply.

e. **List all noxious weeds and invasive species known to be on or near the site.**

   Non-project action: question does not apply.

5. Animals

a. **List any birds and other animals that have been observed on or near the site or are known to be on or near the site.**

   Examples include:

   - **Birds: hawk, heron, eagle, songbirds, other:**
   - **Mammals: deer, bear, elk, beaver, other:**

- **Fish: bass, salmon, trout, herring, shellfish, other:**

  Clark County hosts a wide variety of bird and animal species. However, the CSWMP update is a non-project action and will not result in impacts to wildlife. Project actions resulting from the adoption of this plan will undergo individual environmental review.

b. List any threatened and endangered species known to be on or near the site.

The following federally listed threatened or endangered animal species can be found in Clark County:

- Gray Wolf
- Columbian White-Tailed Deer
- Northern Spotted Owl
- North American Wolverine (proposed)
- Marbled Murrelet
- Streaked Horned Lark
- Yellow-billed Cuckoo
- Oregon Spotted Frog
- Chinook Salmon
- Chum Salmon
- Steelhead
- Coho Salmon
- Pacific Eulachon
- Bull Trout

However, this is a non-project action and will not affect animal species.

c. Is the site part of a migration route? If so, explain.

Several migration routes intersect Clark County, such as the Columbia River corridor, which supports migration for salmon and various bird species. Other rivers in Clark County, including the East Fork Lewis River and Washougal River, support migrating salmonids. Clark County is also included within the Pacific Flyway, the major migrating corridor for birds in North America west of the continental divide.

However, this is a non-project action and will not affect wildlife migration.

d. Proposed measures to preserve or enhance wildlife, if any.

Future project actions implemented under the Clark County CSWMP may contribute to the protection of existing wildlife and their habitats by addressing proper management and disposal methods for solid wastes in order to reduce such problems as contamination of ground and surface water. However, the adoption of the plan will not involve specific measures to preserve or enhance wildlife because it will not impact wildlife or its habitat.

e. List any invasive animal species known to be on or near the site.

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Non-project action: question does not apply.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Adoption of the CSWMP will not require the use of the above-mentioned energy sources. Future actions that result from the adoption of the CSWMP will assess energy needs in individual SEPA analyses.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No, the adoption of the CSWMP would not affect the potential use of solar energy.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

The CSWMP discusses options for alternative technologies as part of the county's solid waste system. One of these options is a future Energy from Waste Facility, which could use chemical or biological processes to convert waste into an energy source. No energy-conservation technologies are mandated by the plan but are identified and evaluated as future waste management options.

An example of an existing energy conservation feature operating under the current CSWMP is Finley Buttes Landfill in Boardman, OR, where the majority of Clark County's waste is sent. The landfill is operated by Waste Connections of Washington (WCW). The facility harvests landfill gas emissions as a renewable energy source for electricity and heat. The methane gas produced at the Finley Buttes landfill is harvested through a perforated piping system of over 100 vertical and horizontal extraction wells and high-density polyethylene piping. Managed by Finley Bioenergy, the gas is routed to suitable energy recovery systems or combustion devices. The system helps meet the EPA's requirements for greenhouse gas reductions and provides the plant with energy savings.

Additionally, household hazardous waste (HHW) processed at Clark County HHW facilities may be reused as alternative fuel sources. (see 2023 CSWMP).

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

No. There are no environmental health hazards that could occur because of this proposal. The plan serves to reduce the occurrence of environmental health hazards by promoting best practices for solid waste management.

1. **Describe any known or possible contamination at the site from present or past uses.**

   Non-project action: question does not apply as the action is non-site specific.

2. **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.**

   Non-project action: question does not apply as the action is non-site specific.

3. **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

   Non-project action: question does not apply as the action is non-site specific.

4. **Describe special emergency services that might be required.**

   No special emergency services will be needed for this action.

5. **Proposed measures to reduce or control environmental health hazards, if any.**

   The CSWMP provides a comprehensive overview of methods to reduce and/or control environmental health hazards in Clark County.

b. Noise

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

   This non-project action will not be affected by noise.

2. **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

   This non-project action will not create or be associated with noise.

3. **Proposed measures to reduce or control noise impacts, if any:**

   Non-project action: question does not apply.

8. Land and shoreline use

a. **What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

   Non-project action: question does not apply as the action is non-site specific.

b. **Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have**

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not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Non-project action: question does not apply as the action is non-site specific.

1. **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

   Non-project action: question does not apply as the action is non-site specific.

c. **Describe any structures on the site.**

   Non-project action: question does not apply as the action is non-site specific.

d. **Will any structures be demolished? If so, what?**

   Non-project action: question does not apply as the action is non-site specific.

e. **What is the current zoning classification of the site?**

   Non-project action: question does not apply as the action is non-site specific.

f. **What is the current comprehensive plan designation of the site?**

   Non-project action: question does not apply as the action is non-site specific.

g. **If applicable, what is the current shoreline master program designation of the site?**

   Non-project action: question does not apply as the action is non-site specific.

h. **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

   Non-project action: question does not apply as the action is non-site specific.

i. **Approximately how many people would reside or work in the completed project?**

   Non-project action: question does not apply as the action is non-site specific.

j. **Approximately how many people would the completed project displace?**

   Non-project action: question does not apply as the action is non-site specific.

k. **Proposed measures to avoid or reduce displacement impacts, if any.**

   Non-project action: question does not apply as the action is non-site specific.

l. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

   The CSWMP update involves coordination with a variety of local governments, regional contractors, regulatory agencies, community organizations, advisory committees, and citizens to ensure the plan is compatible with existing and projected land uses and

plans. The draft plan is reviewed by the Department of Ecology and the Clark County Council prior to adoption.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Non-project action: question does not apply as the action is non-site specific.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None. This is a non-project action: question does not apply as the action is non-site specific.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None. This is a non-project action: question does not apply as the action is non-site specific.

c. Proposed measures to reduce or control housing impacts, if any:

None. This is a non-project action: question does not apply as the action is non-site specific.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

This is a non-project action: question does not apply as the action is non-site specific.

b. What views in the immediate vicinity would be altered or obstructed?

None. This is a non-project action: question does not apply as the action is non-site specific.

c. Proposed measures to reduce or control aesthetic impacts, if any:

The CSWMP includes recommendations for user groups to improve visual aesthetics in managing solid waste facilities.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None. This is a non-project action: question does not apply as the action is non-site specific.

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b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. This is a non-project action: question does not apply as the action is non-site specific.

c. What existing off-site sources of light or glare may affect your proposal?

None. This is a non-project action: question does not apply as the action is non-site specific.

d. Proposed measures to reduce or control light and glare impacts, if any:

None. This is a non-project action: question does not apply as the action is non-site specific.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Clark County has a variety of county, city, state, and federal recreational opportunities including sports facilities, neighborhood, community and regional parks, open space, and wildlife habitat areas. Some of these recreational opportunities are formally designated, while others are informally used without designation or authorization.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No. This is a non-project action: question does not apply as the action is non-site specific.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The plan update will not impact recreational facilities or opportunities. No proposed measures have been identified.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

The Cultural Resources Inventory of Clark County identifies numerous archaeological sites associated with Native American activity countywide. More than 70 historic structures, sites, objects, and vessels, as well as one historic district and one national landmark are located in Clark County. Historic preservation officials emphasize that comprehensive field investigations have not been conducted and that artifacts and historic resources are probably not confined to those identified sites.

The plan update is a non-project action that does not have the potential to affect cultural or historic resources. Any project actions that occur as a result of the CSWMP adoption will undergo individual review.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No. This is a non-project action: question does not apply as the action is non-site specific.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

None. This is a non-project action with no potential to impact cultural or historic resources.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None. This is a non-project action with no potential to impact cultural or historic resources.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

This is a non-project action: question does not apply as the action is non-site specific.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Clark County is served by C-TRAN with fixed route and demand transit service.

c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No. The CSWMP update does not affect transportation systems.

d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

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No. This is a non-project action: question does not apply as the action is non-site specific.

e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The adoption of the CSWMP will not generate vehicular trips, as it is a non-project action.

f. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No, the adoption of the CSWMP will not affect or be affected by agricultural or forest product transportation.

g. Proposed measures to reduce or control transportation impacts, if any:

The Regional Solid Waste System Study Report included in the CSWMP appendices evaluates operational efficiencies and impacts from solid waste traffic, self-hauling, and future traffic impacts from growth within Clark County. The report identifies strategies to reduce traffic impacts at transfer stations within the county, including modifying the level of collection services, expanding universal service, and bundling regular collection services.

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The mission of the CSWMP is to provide programs, services, and infrastructure that empower the community to reduce, reuse, recycle, and properly dispose of waste. As the county grows, these services must expand as well to serve the residents of Clark County. The plan identifies how the demand for solid waste management services has increased and discusses how the county can best address these needs.

b. Proposed measures to reduce or control direct impacts on public services, if any.

The CSWMP addresses the following elements which may help reduce impacts on public services related to solid waste management:

- Promoting sustainable practices for governments, non-governmental organizations, businesses, and residents.
- Reviewing pertinent regulations and other management plans.
- Providing guidelines for the development of programs, policies, and operating plans.

- Planning for solid waste infrastructure and operations (including facility siting criteria and process).
- Providing background information to support facility permitting decisions by Clark County Public Health and other state and local government agencies.
- Providing technical support and justification for grant applications, capital project fund requests, budget planning, and future programs.
- Serving as education and information to the public.
- Identifying and presenting opportunities for collaboration with others in the region for collection and recycling services and potential ownership and operation of facilities as well as with statewide agencies.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

All above utilities are available in Clark County. However, this is a non-project action and is not site-specific.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Refuse services are addressed by the CSWMP. However, adoption of the CSWMP is a non-project action and will not generate construction activities that could affect utilities, nor will it require the use of utilities.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X _____

Type name of signee: Audrey Cronin

Position and agency/organization: Environmental Permitting Manager/Clark County Public Works

Date submitted: May 3rd, 2024

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D. Supplemental sheet for non-project actions

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

   The Clark County CSWMP will not have an adverse impact to water or air, will not increase the production, storage, or release of toxic or hazardous substances, and will not produce noise. The continued implementation of the plan will result in decreased discharges to the environment through management strategies designed to encourage the proper management and disposal of solid waste. Project actions that result from the implementation of the plan will undergo individual environmental review.

   - **Proposed measures to avoid or reduce such increases are:**
     - Promote education and outreach to support individuals, schools, organizations, and businesses in improving efforts to reduce, reuse, and recycle waste materials, properly dispose of hazardous waste, and prevent food waste.
     - Provide communities with goals and policies for evaluating and modifying existing and developing new solid waste management programs.
     - Identify opportunities and recommendations for improving construction and demolition waste management.
     - Identify outreach strategies, opportunities, and recommendations for hazardous waste management.

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   Implementation of the CSWMP should reduce impacts to vegetation and wildlife by reducing the frequency of illegal dumping and encouraging proper disposal of solid wastes, and through outreach and education campaigns regarding proper disposal of waste.

   - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

   Please see response to question 1 proposed measures.

3. **How would the proposal be likely to deplete energy or natural resources?**

   The plan is not likely to deplete energy or natural resources, but should encourage the conservation of both through its recommendations for more innovative and efficient solid waste management.

   - **Proposed measures to protect or conserve energy and natural resources are:**

As discussed in section B.6, the CSWMP identifies options for alternative technologies within the county's solid waste system, including a future Energy from Waste Facility, which would use chemical or biological processes to convert waste into an energy source.

The plan also promotes waste reduction through reduction, reuse, and recycling of materials, thereby decreasing the depletion of energy and materials used in manufacturing or constructing new goods and facilities.

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

   Implementation of the CSWMP should not result in impacts to environmentally sensitive areas. Ongoing impacts to such areas should be lessened by proper adherence to the plan through an improvement in water quality and reduction in illegal dumping of solid and hazardous waste. Project actions that result from the implementation of the plan will undergo individual environmental review.

   - **Proposed measures to protect such resources or to avoid or reduce impacts are:**

   Please see response to question 1 proposed measures.

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

   Recommendations for land use are consistent with the Clark County Comprehensive Growth Management Plan and Shoreline Management Plan.

   - **Proposed measures to avoid or reduce shoreline and land use impacts are:**

   Not applicable.

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

   As discussed in sections B.14 and B.15, an element of the mission of the CSWMP is to provide services and infrastructure that empower the community to reduce, reuse, recycle, and properly dispose of waste. As the county grows, these public services must expand as well to serve the residents of Clark County. The plan identifies how the demand for solid waste management services has increased and discusses how the county can best address these needs. The Regional Solid Waste System Study Report included in the CSWMP appendices also evaluates operational efficiencies and impacts from solid waste traffic, self-hauling, and future traffic impacts from growth within Clark County. The report identifies strategies to reduce traffic impacts at transfer stations within the county, summarized below.

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- **Proposed measures to reduce or respond to such demand(s) are:**

The Regional Solid Waste System Study proposes modifying the level of collection services, expanding universal service, and bundling regular collection services to respond to the demand for additional waste collection services.

The CSWMP addresses the following elements which may help reduce impacts on public services related to solid waste management:

- Promoting sustainable practices for governments, non-governmental organizations, businesses, and residents.
- Reviewing pertinent regulations and other management plans.
- Providing guidelines for the development of programs, policies, and operating plans.
- Planning for solid waste infrastructure and operations (including facility siting criteria and process).
- Providing background information to support facility permitting decisions by Clark County Public Health and other state and local government agencies.
- Providing technical support and justification for grant applications, capital project fund requests, budget planning, and future programs.
- Serving as education and information to the public.
- Identifying and presenting opportunities for collaboration with others in the region for collection and recycling services and potential ownership and operation of facilities as well as with statewide agencies.

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

   The Clark County CSWMP conforms to all applicable local, state, and federal regulations. All future project actions that result from the implementation of this plan will undergo individual environmental review and will comply with all applicable laws and regulations.

C

APPENDIX C: Washington Utilities and Transportation Cost Assessment Questionnaire

Draft UTC Cost Assessment

Date: 1/1/2025

Lead Planning Jurisdiction: Clark County | **Contact Name:** Joelle Loescher | **Contact Phone:** 564.397.8126
Contact Email: joelle.loescher@clark.wa.gov

Plan Participants — list all jurisdictions that are signatories to the plan:
City of Battle Ground, City of Camas, City of La Center, City of Ridgefield, City of Vancouver, City of Washougal, Town of Yacolt

Base Year — last year with a full year's data	**Base Year**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
Calendar or Fiscal Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Demographics	**Base Year**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
Estimated Population	527,400	535,453	543,507	551,285	559,330	567,356	575,582	583,929
Waste Generation in tons of MSW from all sources								
	Base Year	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
UTC-Regulated Haulers	256,582.07	260,302.51	264,076.90	267,906.01	271,790.65	275,731.61	279,729.72	283,785.80
Non-Regulated Haulers–cities that provide municipal service or contract for service	13,589.81	13,786.86	13,986.77	14,189.58	14,395.33	14,604.06	14,815.82	15,030.65
Self-Haul	136,173.82	138,148.34	140,151.49	142,183.69	144,245.35	146,336.91	148,458.79	150,611.45
Total Tons of MSW Disposed	406,345.70	412,237.71	418,215.16	424,279.28	430,431.33	436,672.58	443,004.34	449,427.90
Recycling in tons only from residential sources (including multifamily)								
	Base Year	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
UTC-Regulated Haulers	—	—	—	—	—	—	-	-
Non-Regulated Haulers	32,646.39	33,119.76	33,600.00	34,087.20	34,581.46	35,082.89	35,591.60	36,107.67
Total Tons of Recyclables	32,646.39	33,119.76	33,600.00	34,087.20	34,581.46	35,082.89	35,591.60	36,107.67
Yard debris in tons only from residential sources (including multifamily)								
	Base Year	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
UTC-Regulated Haulers	—	—	—	—	—	—	-	-
Non-Regulated Haulers	3,715.87	3,769.75	3,824.41	3,879.87	3,936.12	3,993.20	4,051.10	4,109.84
Total Tons of Organics	3,715.87	3,769.75	3,824.41	3,879.87	3,936.12	3,993.20	4,051.10	4,109.84
Organics (Yard debris and food waste combined) in tons only from residential sources (including multifamily)								
	Base Year	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
UTC-Regulated Haulers	0	0	0	0	0	0		
Non-Regulated Haulers	5,117.24	5,191.44	5,266.72	5,343.08	5,420.56	5,499.16	5,578.89	5,659.79
Total Tons of Organics	5,117.24	5,191.44	5,266.72	5,343.08	5,420.56	5,499.16	5,578.89	5,659.79
UTC-regulated haulers Waste Connections of Washington G-253								
	Base Year	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
SW customers — total residential & commercial	81,526	82,708	83,907	85,124	86,358	87,611	88,881	90,170
Tons	**256,582**	**260,303**	**264,077**	**267,906**	**271,791**	**275,732**	**279,730**	**283,786**
Recycling customers–residential only	66,847	67,816	68,800	69,797	70,809	71,836	72,878	73,934
Tons	**32,646**	**33,120**	**33,600**	**34,087**	**34,581**	**35,083**	**35,592**	**36,108**
Organics customers — residential only	36,002	36,524	37,054	37,591	38,136	38,689	39,250	39,819
Tons	**5,117**	**5,191**	**5,267**	**5,343**	**5,421**	**5,499**	**5,579**	**5,660**

Curbside Materials Accepted by UTC-regulated haulers for recycling **For residential recyclables collected curbside** **Yes (Y) — countywide City — city specific No (N) — not provided** **G-cert hauler name & number: WCW — 253**	
Paper	
Mixed Paper	Y
Newspaper	Y
Cardboard	Y
Shredded Paper (bagged)	N
Non-foil wrapping paper	Y
Milk & Juice Cartons (no foil)	Y
Aseptic Containers (milk, soy, soup, juice boxes)	Y
Poly-coat Food Boxes (dry & frozen)	N
Other Paper — please specify	
Metal	
Aluminum Cans	Y
Steel Cans	Y
Scrap Metal	Y
Aluminum Foil	Y
Other Metals — please specify	
Plastic	
Plastic Bottles, Jugs & Jars (#1s and 2s)	Y
Dairy Tubs (#5s)	Y
Plastics (#3-7)	Y
Other Plastics — please specify	
Glass	
Source-separated	Y
Commingled	N
Organics	
Yard and garden waste	Y
Food waste	City
Compostable packaging and/or service ware	N
Facilities	
Material sources	
Do your facilities accept materials from outside your county?	Y
Does your county have a flow control ordinance?	N

Facility Name Facilities where fees are charged to accept MSW, organics, or recyclables that are owned or operated by the county, or that the county contracts to operate.	**Facility Type** (transfer station, landfill, incinerator, drop-off site)	**Facility Location** (include full address)	**Facility Owner** (Name, phone & email)	**Facility Operator** (if different from owner)	**Current annual recycling** (tons or cubic yards if applicable)
Central Transfer and Recycling Center	Transfer, drop-off site	11034 NE 117th Ave.	Columbia Resource Company	N/A	9,093
West Vancouver Materials Recovery Facility	Transfer, drop-off site, MRF	6601 NW Old Lower River Road, Vancouver	Columbia Resource Company	N/A	34,622
Washougal Transfer Station	Transfer, drop-off site	4020 Grant St., Washougal	Columbia Resource Company	N/A	4,616

Estimated Tip/Disposal Fee Forecast In $ per ton or cubic yard								
Facility Name for facilities accepting MSW	**Base Year**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Central Transfer and Recycling Center	$106.34	$111.94	$115.86	$119.91	$124.11	$128.45	$132.95	$137.60
West Vancouver Materials Recovery Facility	$106.34	$111.94	$115.86	$119.91	$124.11	$128.45	$132.95	$137.60
Washougal Transfer Station	$106.34	$111.94	$115.86	$119.91	$124.11	$128.45	$132.95	$137.60
Tip/Disposal Fee Breakdown in $ per ton or cubic yard and/or % of total current tip fee								
Total facility operation, transfer & disposal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
County or city administration if publicly owned or fee is set in contract	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Capital improvements for publicly owned facilities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Estimated Program Costs examples of other sources include grants, surplus funds, and general fund monies								
	Base Year	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
% covered by all tipping fees	87.53%	87.53%	87.53%	87.53%	87.53%	87.53%	87.53%	87.53%
% covered by other sources	12.47%	12.47%	12.47%	12.47%	12.47%	12.47%	12.47%	12.47%

Operating and capital expenses

Discounted Rates Note Yes (Y) or (No) if you may request regulated haulers to establish discounted rates under RCW 81.77.195	
May request UTC-regulated haulers to charge discounted rates	Y
If yes, what year do you expect to make this request (if known)	unknown

STATE OF WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

621 Woodland Square Loop S.E. • Lacey, Washington 98503
P.O. Box 47250 • Olympia, Washington 98504-7250
(360) 664-1160 • TTY 1-800-833-6384 or 711

September 3, 2024

ERRATA TO ORDER 01

RE: Clark County Comprehensive Solid Waste Management Plan,
Docket TG-240544

TO ALL PARTIES:

On August 8, 2024, the Washington Utilities and Transportation Commission (Commission) entered Order 01, (Order 01) in the above-referenced docket.

It came to the Commission's attention that an incorrect version of Order 01 was posted to this docket following the open meeting. A corrected Order 01 is attached as Exhibit A to this Errata. Order 01 is hereby amended to read, in its entirety, as shown in the corrected Order 01 attached as Exhibit A.

/s/ James E. Brown II
JAMES E. BROWN II
Assistant Director, Administrative Law Division

Service Date: August 8, 2024

STATE OF WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

621 Woodland Square Loop S.E. • Lacey, Washington 98503

P.O. Box 47250 • Olympia, Washington 98504-7250

(360) 664-1160 • TTY 1-800-833-6384 or 711

August 8, 2024

Joelle Loescher
Solid Waste Operations Program Manager
Clark County Public Health
1601 E. 4th Plain Blvd., Bldg. 17
Vancouver, WA 98661

RE: Clark County Comprehensive Solid Waste Management Plan, Docket TG-240544

Dear Joelle Loescher,

Thank you for filing Clark County's 2023 – 2030 Comprehensive Solid Waste Management Plan.

The Washington Utilities and Transportation Commission (Commission) has completed its review of preliminary draft of the Clark County Comprehensive Solid Waste Management Plan (Plan).

The 2023 – 2030 Plan proposes to increase tip fees in 2024 by 5.27 percent and for years 2025 – 2030 by approximately 3.5 percent each year to keep up with inflation. As a result, there will be a minimal rate impact to ratepayers served by regulated solid waste collection companies in Clark County.

Projected Disposal Fees	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Per Ton Disposal Cost	$106.34	$111.94	$115.86	$119.91	$124.11	$128.45	$132.95	$137.60
Per Ton Increase		$5.60	$3.92	$4.05	$4.20	$4.34	$4.50	$4.65
Percentage Increase		5.27%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Projected Rate Increases	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Residential								
Monthly Rate for One 32-Gallon Can Per Week Service		$0.41	$0.29	$0.30	$0.31	$0.32	$0.33	$0.34

Commercial								
One Yard Per Pick Up		$2.12	$1.49	$1.54	$1.59	$1.65	$1.71	$1.76

The Plan speaks to RCW 81.77.195, which allows for discounts for low-income and low-income senior customers. However, the County has not requested such a rate in the Plan. Recently, the Commission has been receiving more public comments expressing a wish for such a rate and believe it may be worth the County to consider requesting discounted rates. We understand that it may not happen in the current Plan but offer the assistance we can provide when the time comes for such a proposal.

Commission Staff has no further comment on the Plan.

Please direct questions or comments about the Commission's plan review process to Jeanine Leggett at (360) 664-1230.

Sincerely,

Jeff Killip
Executive Director and Secretary

cc: Christina Kullberg
Department of Ecology
Regional Planner and Grants Manager
Christina.Kullberg@ecy.wa.gov
(360) 999-3769

D

APPENDIX D: Planning ILAs

INTERLOCAL AGREEMENT
HDC.2156
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
CITY OF BATTLE GROUND
109 SW 1st St, Battle Ground, WA 98604

Project: Update to Comprehensive Solid Waste Management Plan
Contract Name: CCPH City of Battle Ground CSWMP Interlocal HDC.2156
Contract Period: Upon Execution - Ongoing

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Holly Barnfather 360.949.6965 GCT@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Mark Herceg 360.342.5075 mark.herceg@cityofbg.org	Meagan Lowery 360.342.5025 meagan.lowery@cityofbg.org	Mark Herceg 360.342.5075 mark.herceg@cityofbg.org

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as County, and the City of Battle Ground, hereinafter referred to as City. County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY

Erin Erdman 10/23/23
Erin Erdman, City Manager Date

APPROVED AS TO FORM ONLY

Kirk Ellis 10/23/23
Kirk Ellis Date
City of Battle Ground Attorney

CLARK COUNTY

Kathleen Otto 11/08/23
Kathleen Otto, County Manager Date

APPROVED AS TO FORM ONLY

Amanda Migchelbrink 10/23/23
Amanda Migchelbrink Date
Deputy Prosecuting Attorney

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INTERLOCAL AGREEMENT
BETWEEN CLARK COUNTY AND CITIES OF
BATTLE GROUND, CAMAS, LA CENTER, RIDGEFIELD, VANCOUVER, WASHOUGAL, AND TOWN OF YACOLT
DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this lnterlocal Agreement (Agreement) is entered into between Clark County and the City of Battle Ground, establishing the obligations of the Parties for the maintenance and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS, RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and moderate risk waste planning to local government;and

WHEREAS, RCW 70A.205.040 and RCW 70A.300.350 require or authorize counties, in cooperation with the various cities located within such county, to prepare a coordinated comprehensive solid & hazardous waste management plan; and

WHEREAS, under RCW 70A.205.075, all solid waste management plans must be maintained in current condition by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the City and the County (Parties), recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS, RCW 70A.205.040(4)(c) outlines that cities may authorize the county to prepare a plan for the city's solid waste management; and

WHEREAS, the Parties previously entered into a Solid Waste lnterlocal Agreement on May 9, 2006 and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and collection issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in incorporated cities and towns within the county, be disposed of through the Regional Solid Waste System and that the City authorizes the County to designate a disposal site(s) and transfer sites for the disposal of solid waste generated within the corporate limits of the City; and

WHEREAS, the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling programs, and residential yard waste collection programs; and

WHEREAS, as part of this Agreement, the City agrees to authorize the county to prepare a plan for the city's solid waste management for inclusion in the comprehensive county plan. If the City chooses not to participate fully in the planning process or to pass a resolution adopting the CSWMP, they agree to adopt the final version. If within 90 days of receiving the final draft from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the CSWMP and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction; and

WHEREAS, the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling programs that reduce greenhouse gas emissions as appropriate from the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of agreement. The Parties intend this Agreement to provide for continued cooperation by both parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapters 70A.205 and 70A.300 RCW.

2. Authority and responsibilities.
   - 2.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.
   - 2.2. It is understood that the planning effort will be informed by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).
   - 2.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.
   - 2.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.
   - 2.5. No separate entity is being created by this Agreement.

3. Limitations.
   - 3.1. Nothing in this agreement shall supersede any authority granted to either the County or the City, or otherwise imply any control by one Party over the other Party.
   - 3.2. Nothing in this agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which either party operates.

4. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

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5. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.
   - 5.1. Revision process
     - 5.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Clark County Regional Solid Waste System. The County will make that draft available to the public for comments on their website.
     - 5.1.2. After good faith consideration of any responses from the public, cities and town, and Ecology, County staff will prepare a final draft. After consultation with the city/town, SWAC, and RSWSSC, County will have the discretion to decide whether to change the final draft as a result of the responses.
     - 5.1.3. Upon adoption, as defined herein, County will submit the adopted final draft to Ecology.
   - 5.2. Amendments and updates
     - 5.2.1. All proposed amendments will be evaluated per the process defined in the CSWMP.
     - 5.2.2. Cities and towns that have signed the Agreement to join the Clark County Regional Solid Waste System may send possible amendments to the County for formal proposal. Upon such proposal, the County shall conduct the plan development process as outlined in this section.
     - 5.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 70A.300 RCW, or by Ecology.

6. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the plan and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction. All participating jurisdictions will be notified by the County when the CSWMP is adopted and when the CSWMP is approved by Ecology.

7. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue until rescinded, terminated as herein provided, or as outlined in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations under this Agreement with the understanding that:
   - 7.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and

7.2. Prior to termination, a withdrawing City must have prepared and received approval from Ecology for their independent solid waste management plan; and

7.3. Termination will not absolve the City or County of responsibility for meeting financial and other obligations outstanding at the time of termination.

8. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

9. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each of the Parties.

10. Indemnification / Hold harmless. City shall defend, indemnify and hold County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of City in performance of this Agreement, except for injuries and damages caused by the sole negligence of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of City, its officers, officials, employees, and volunteers, City's liability, including the duty and cost to defend, hereunder shall be only to the extent of the City's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the City's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

11. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, each party agrees to maintain all records constituting public records and to produce or assist both parties in producing such records,

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within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

12. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or other electronically retrievable public source, as required by RCW 39.34.040.

13. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

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INTERLOCAL AGREEMENT
HDC.2157
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
CITY OF CAMAS
616 NE 4th Avenue, Camas, WA 98607

Project:	Update to Comprehensive Solid Waste Management Plan
Contract Name:	CCPH City of Camas CSWMP Interlocal HDC.2157
Contract Period:	Upon Execution-Ongoing

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Holly Barnfather 360.949.6965 GCT@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Steve Wall Public Works Director 360.817.7899 swall@cityofcamas.us	Cathy Huber Nickerson Finance Director 360.834.2462 chuber@cityofcamas.us	Ronda Syverson Procurement Specialist 360.834.2462 rsyverson@cityofcamas.us

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as County, and City of Camas, hereinafter referred to as City. County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY OF CAMAS

Steven C. Hogan, Mayor — Date 12/19/2023

Attest:

City Clerk

APPROVED AS TO FORM ONLY:

By: Shawn MacPherson, City Attorney

CLARK COUNTY

Kathleen Otto, County Manager — Date 12/20/23

APPROVED AS TO FORM ONLY:

Amanda Migchelbrink — Date 12/20/23
Deputy Prosecuting Attorney

DocuSign Envelope ID: 131E1D56-2CD5-41BA-B06C-14FC62381268

INTERLOCAL AGREEMENT
BETWEEN CLARK COUNTY AND CITIES OF
BATTLE GROUND, CAMAS, LA CENTER, RIDGEFIELD, VANCOUVER,
WASHOUGAL, AND TOWN OF YACOLT
DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF
THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this Interlocal Agreement (Agreement) is entered into between Clark County and the City of Camas, establishing the obligations of the Parties for the implementation and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS, RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and materials risk-based planning to local governments; and

WHEREAS, RCW 70A.205.010 and RCW 70A.300.050 require counties, in cooperation with the various cities located within such county, to prepare and conduct comprehensive solid waste management plans; and

WHEREAS, under RCW 70A.205.025, all solid waste management plans must be prepared and in current conformity by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the City and the County (Parties) recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS, RCW 70A.205.040(5)(c) outlines how cities may authorize the county to prepare a plan for the city's solid waste management; and

WHEREAS, the Parties previously entered into a Solid Waste Interlocal Agreement on May 9, 2006 and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and reduction issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in unincorporated cities and towns within the county, be disposed of through the Regional Solid Waste System; and that the City authorize the County to designate a disposal site(s) and transfer sites for the disposal of solid waste generated within the corporate limits of the City; and

WHEREAS, the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling programs, and residential yard waste reduction programs; and

WHEREAS, as part of this Agreement, the City agrees to authorize the county to prepare a plan for the city's solid waste management for inclusion in the comprehensive county plan. If the City chooses not to participate fully in the planning process or to pass a resolution adopting the CSWMP, they agree to adopt the final version. If within 90 days of receiving the final draft from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the CSWMP and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction; and

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WHEREAS, the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling programs that reduce greenhouse gas emissions as appropriate to the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of Agreement. The Parties intend this Agreement to provide for continued cooperation by both parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapter 70A.205 and 70A.300 RCW.

2. Authority and responsibilities.
   2.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.
   2.2. It is understood that the planning effort will be overseen by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).
   2.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.
   2.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.
   2.5. No separate entity is being created by this Agreement.

3. Limitations.
   3.1. Nothing in this agreement shall supersede any authority granted to either the County or the City, or otherwise imply any control by one Party over the other Party.
   3.2. Nothing in this agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which each party operates.

4. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

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5. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.
   5.1. Revision process.
      5.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Clark County Regional Solid Waste System. The County will make that draft available to the public for comments on their website.
      5.1.2. After good faith consideration of any responses from the public, cities and towns, and Ecology, County staff will prepare a final draft. After consultation with the city/towns, SWAC, and RSWSSC, County will have the discretion to decide whether to change the final draft as a result of the responses.
      5.1.3. Upon adoption, as defined herein, County will submit the adopted final draft to Ecology.
   5.2. Amendments and updates.
      5.2.1. All proposed amendments will be evaluated per the process detailed in the CSWMP.
      5.2.2. Cities and towns that have signed the Agreement to join the Clark County Regional Solid Waste System may send possible amendments to the County for formal projects. Upon such proposal, the County staff conduct the plan development process as outlined in this section.
      5.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 173-350 WAC, or by Ecology.

6. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the plan and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction. All participating jurisdictions will be notified by the County when the CSWMP is adopted and when the CSWMP is approved by Ecology.

7. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue until rescinded, terminated as herein provided, or as contained in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations under this Agreement with the understanding that:
   7.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and

7.2 Prior to termination, a withdrawing City must have prepared and received approval from Ecology for their independent solid waste management plan; and

7.3 Termination will not alleviate the City or County of responsibility for meeting financial and other obligations outstanding at the time of termination.

8. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

9. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each of the Parties.

10. Indemnification / Hold Harmless. City shall defend, indemnify and hold County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of City in performance of this Agreement, except for injuries and damages caused by the sole negligence of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of City, its officers, officials, employees, and volunteers, City's liability, including the duty and cost to defend, hereunder shall be only to the extent of the City's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the City's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

11. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as now in effect or hereafter amended, each party agrees to maintain all records constituting public records and to produce or assist both parties in producing such records within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, that within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

12. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or other electronically retrievable public source, as required by RCW 39.34.040.

13. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

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INTERLOCAL AGREEMENT
HDC.2158
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
CITY OF LA CENTER
210 E. 4th Street, La Center, WA 98629

Project: Update to Comprehensive Solid Waste Management Plan
Contract Name: CCPH City of La Center CSWMP Interlocal HDC.2158
Contract Period: Upon Execution-Ongoing

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Holly Barnfather 360.949.6965 GCT@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Bryan Kast 360.605.2269 bkast@ci.lacenter.wa.us	Maria Swinger-Inskeep 360-263-8663 mswingerinskeep@ci.lacenter.wa.us	Bryan Kast 360.605.2269 bkast@ci.lacenter.wa.us

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as the "County", and the City of La Center, hereinafter referred to as the "City". County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY OF LA CENTER

Thomas Strobehn, Mayor — Date

APPROVED AS TO FORM:

10/25/23
E. Bronson Potter — Date
City Attorney

CLARK COUNTY

Kathleen Otto — 11/08/23
Kathleen Otto, County Manager — Date

APPROVED AS TO FORM:

Amanda Migchelbrink — 11/08/23
Amanda Migchelbrink — Date
Deputy Prosecuting Attorney

DocuSign Envelope ID: 1BE36F16-D0C4-465E-96B9-7C20AAD6F88F

INTERLOCAL AGREEMENT
BETWEEN CLARK COUNTY AND CITIES OF
BATTLE GROUND, CAMAS, LA CENTER, RIDGEFIELD, VANCOUVER,
WASHOUGAL, AND TOWN OF YACOLT
DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF
THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this Interlocal Agreement (Agreement) is entered into between Clark County and the City of La Center, establishing the obligations of the Parties for the maintenance and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS, RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and moderate risk waste planning to local government; and

WHEREAS, RCW 70A.205.040 and RCW 70A.300.350 require or authorize counties, in cooperation with the various cities located within such county, to prepare a coordinated comprehensive solid & hazardous waste management plan; and

WHEREAS, under RCW 70A.205.075, all solid waste management plans must be maintained in current condition by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the City and the County ("Parties"), recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS, RCW 70A.205.040(4)(c) outlines that cities may authorize the county to prepare a plan for the city's solid waste management; and

WHEREAS, the Parties previously entered into a Solid Waste Interlocal Agreement on May 9, 2006 and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and collection issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in incorporated cities and towns within the county, be disposed of through the Regional Solid Waste System and

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that the City authorizes the County to designate a disposal site(s) and transfer sites for the disposal of solid waste generated within the corporate limits of the City; and

WHEREAS, the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling programs, and residential yard waste collection programs; and

WHEREAS, as part of this Agreement, the City agrees to authorize the county to prepare a plan for the city's solid waste management for inclusion in the CSWMP.; and

WHEREAS, the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling programs that reduce greenhouse gas emissions as appropriate from the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of agreement. The Parties intend this Agreement to provide for continued cooperation by both parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapters 70A.205 and 70A.300 RCW.

2. Authority and responsibilities.
   - 2.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.
   - 2.2. It is understood that the planning effort will be informed by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).
   - 2.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.
   - 2.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.
   - 2.5. No separate entity is being created by this Agreement.

3. Limitations.
   - 3.1. Nothing in this agreement shall supersede any authority granted to either the County or the City, or otherwise imply any control by one Party over the other Party.
   - 3.2. Nothing in this agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which either party operates.

4. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

5. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.
   - 5.1. Revision process
     - 5.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Clark County Regional Solid Waste System. The County will make that draft available to the public for comments on their website.
     - 5.1.2. After good faith consideration of any responses from the public, cities and town, and Ecology, County staff will prepare a final draft. After consultation with the City, SWAC, and RSWSSC, the County will have the discretion to decide whether to change the final draft as a result of the responses.
     - 5.1.3. Upon adoption, as defined herein, the County will submit the adopted final draft to Ecology.
   - 5.2. Amendments and updates
     - 5.2.1. All proposed amendments will be evaluated per the process defined in the CSWMP.
     - 5.2.2. Cities and towns that have signed the Agreement to join the Clark County Regional Solid Waste System may send possible amendments to the County for formal proposal. Upon such proposal, the County shall conduct the plan development process as outlined in this section.
     - 5.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 70A.300 RCW, or by Ecology.

6. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, the City does not pass a resolution either adopting or disapproving the plan and deliver that resolution to

the County, the City authorizes the County to include the city's solid waste plan prepared by the County in the CSWMP. All participating jurisdictions will be notified by the County when the CSWMP is adopted and when the CSWMP is approved by Ecology.

7. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue until rescinded, terminated as herein provided, or as outlined in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations under this Agreement with the understanding that:
   7.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and
   7.2. Prior to termination, a withdrawing City must have prepared and received approval from Ecology for their independent solid waste management plan; and
   7.3. Termination will not absolve the City or County of responsibility for meeting financial and other obligations outstanding at the time of termination.

8. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

9. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each of the Parties.

10. Indemnification / Hold harmless. County shall defend, indemnify, and hold City, its officers, officials, employees, and volunteers harmless from any and all claims, injuries, damages, losses, or suits including attorney fees, arising out of, or resulting from the negligent acts, errors or omissions of County in performance of this Agreement, except for injuries and damages caused by the negligence of City. City shall defend, indemnify, and hold County, its officers, officials, employees, and volunteers harmless from any and all claims, injuries, damages, losses, or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of City in performance of this Agreement, except for injuries and damages caused by the negligence

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of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the parties, the indemnifying party's liability, including the duty and cost to defend, hereunder shall be only to the extent of that party's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes each party's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

11. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, each party agrees to maintain all records constituting public records and to produce or assist both parties in producing such records, within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

12. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or other electronically retrievable public source, as required by RCW 39.34.040.

13. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

INTERLOCAL AGREEMENT
HDC.2159
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
CITY OF RIDGEFIELD
230 Pioneer Street
PO BOX 608
Ridgefield, WA 98642

Project: Update to Comprehensive Solid Waste Management Plan
Contract Name: CCPH City of Ridgefield CSWMP Interlocal HDC.2159
Contract Period: Upon Execution-Ongoing

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Holly Barnfather 360.949.6965 CntyHealthGrantContract@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Chuck Green, PE 360.857-5022 Chuck.Green@ridgefieldwa.us	Kirk Johnson 360.857-5008 kirk.johnson@ridgefieldwa.us	Kirk Johnson 360.857-5008 kirk.johnson@ridgefieldwa.us

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as County, and City of Ridgefield, hereinafter referred to as City. County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY

DocuSigned by: Steve Stuart 82CF8E4BB80C42D... 11/6/2023
Steve Stuart, City Manager Date
Steve.Stuart@ridgefieldwa.us

COUNTY

Kathleen Otto 11/09/23
Kathleen Otto, County Manager Date

CITY

DocuSigned by: Janean Parker 24233774297547... 11/6/2023
Janean Parker, City Attorney Date
jzparkerlaw@outlook.com

APPROVED AS TO FORM ONLY:

Amanda Migchelbrink 11/09/23
Amanda Migchelbrink Date
Deputy Prosecuting Attorney

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INTERLOCAL AGREEMENT
BETWEEN CLARK COUNTY AND CITIES OF BATTLE GROUND, CAMAS, LA CENTER, RIDGEFIELD, VANCOUVER, WASHOUGAL, AND TOWN OF YACOLT
DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this lnterlocal Agreement (Agreement) is entered into between Clark County and the City of Ridgefield, establishing the obligations of the Parties for the maintenance and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS, RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and moderate risk waste planning to local government;and

WHEREAS, RCW 70A.205.040 and RCW 70A.300.350 require or authorize counties, in cooperation with the various cities located within such county, to prepare a coordinated comprehensive solid & hazardous waste management plan; and

WHEREAS, under RCW 70A.205.075, all solid waste management plans must be maintained in current condition by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the City and the County ("Parties"), recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS, RCW 70A.205.040(4)(c) outlines that cities may authorize the county to prepare a plan for the city's solid waste management; and

WHEREAS, the Parties previously initially into a Solid Waste lnterlocal Agreement on May 9, 2006, and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and collection issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in incorporated cities and towns within the county, be disposed of through the Regional Solid Waste System and

that the City authorizes the County to designate a disposal site(s) and transfer sites for the disposal of solid waste generated within the corporate limits of the City; and

WHEREAS, the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling programs, and residential yard waste collection programs; and

WHEREAS, as part of this Agreement, the City agrees to authorize the county to prepare a plan for the city's solid waste management for inclusion in the CSWMP.; and

WHEREAS, the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling programs that reduce greenhouse gas emissions as appropriate from the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of agreement. The Parties intend this Agreement to provide for continued cooperation by both parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapters 70A.205 and 70A.300 RCW.

2. Authority and responsibilities.
   2.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.
   2.2. It is understood that the planning effort will be informed by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).
   2.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.
   2.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.
   2.5. No separate entity is being created by this Agreement.

3. Limitations.
   3.1. Nothing in this agreement shall supersede any authority granted to either the County or the

City, or otherwise imply any control by one Party over the other Party.

   3.2. Nothing in this agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which either party operates.

4. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

5. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.
   5.1. Revision process
      5.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Clark County Regional Solid Waste System. The County will make that draft available to the public for comments on their website.
      5.1.2. After good faith consideration of any responses from the public, cities and town, and Ecology, County staff will prepare a final draft. After consultation with the city/town, SWAC, and RSWSSC, County will have the discretion to decide whether to change the final draft as a result of the responses.
      5.1.3. Upon adoption, as defined herein, County will submit the adopted final draft to Ecology.
   5.2. Amendments and updates
      5.2.1. All proposed amendments will be evaluated per the process defined in the CSWMP.
      5.2.2. Cities and towns that have signed the Agreement to join the Clark County Regional Solid Waste System may send possible amendments to the County for formal proposal. Upon such proposal, the County shall conduct the plan development process as outlined in this section.
      5.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 70A.300 RCW, or by Ecology.

6. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, the City does not pass a resolution either adopting or disapproving the plan and deliver that resolution to the County, the City authorizes the County to include the city's solid waste plan prepared by the

County in the CSWMP. All participating jurisdictions will be notified by the County when the CSWMP is adopted and when the CSWMP is approved by Ecology.

7. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue until rescinded, terminated as herein provided, or as outlined in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations under this Agreement with the understanding that:
   7.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and
   7.2. Prior to termination, a withdrawing City must have prepared and received approval from Ecology for their independent solid waste management plan; and
   7.3. Termination will not absolve the City or County of responsibility for meeting financial and other obligations outstanding at the time of termination.

8. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

9. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each of the Parties.

10. Indemnification / Hold harmless. City shall defend, indemnify, and hold County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of City in performance of this Agreement, except for injuries and damages caused by the sole negligence of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of City, its officers, officials, employees, and volunteers, City's liability, including the duty and cost to defend, hereunder shall be only to the extent of the City's negligence. It is

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further specifically and expressly understood that the indemnification provided herein constitutes the City's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

11. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, each party agrees to maintain all records constituting public records and to produce or assist both parties in producing such records, within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

12. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or other electronically retrievable public source, as required by RCW 39.34.040.

13. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

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INTERLOCAL AGREEMENT
HDC.2160
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
CITY OF VANCOUVER
P.O. Box 1995, Vancouver, WA 98666

Project:	Update to Comprehensive Solid Waste Management Plan
Contract Name:	CCPH City of Vancouver CSWMP Interlocal HDC.2160
Contract Period:	Upon Execution - For Three Years

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Rebecca Addington 564.397.8415 GCT@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Julie Gilbertson 360.487.7162 julie.gilbertson@cityofvancouver.us	Shannon Turk 360.487.7132 shannon.turk@cityofvancouver.us	Anna Vogel 360.487.8429 anna.vogel@cityofvancouver.us

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as County, and City of Vancouver, hereinafter referred to as City. County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY OF VANCOUVER:

04/01/24
Date
Eric Holmes,
City Manager

CLARK COUNTY:

Kathleen Otto
04/02/24
Date
Kathleen Otto,
County Manager

CITY OF VANCOUVER:

04/01/24
Date
Jonathan Young,
City Attorney

APPROVED AS TO FORM ONLY:

Amanda Migchelbrink
04/01/24
Date
Amanda Migchelbrink,
Deputy Prosecuting Attorney

INTERLOCAL AGREEMENT

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BETWEEN CLARK COUNTY AND CITY OF VANCOUVER DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this Interlocal Agreement (Agreement) is entered into between Clark County and the City of Vancouver, establishing the obligations of the Parties for the maintenance and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS, RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and moderate risk waste planning to local government; and

WHEREAS, RCW 70A.205.040 and RCW 70A.300.350 require or authorize counties, in cooperation with the various cities located within such county, to prepare a coordinated comprehensive solid & hazardous waste management plan; and

WHEREAS, under RCW 70A.205.075, all solid waste management plans must be maintained in current condition by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the City and the County (Parties), recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS, RCW 70A.205.040(4)(c) outlines that cities may authorize the county to prepare a plan for the city's solid waste management for the inclusion in the CSWMP; and

WHEREAS, this Agreement serves to meet a common interest between Clark County and the Cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver and Washougal and the Town of Yacolt designating Clark County as the lead agency responsible for maintaining and updating the CSWMP and is part of other related agreements and understandings.

WHEREAS, the Parties previously entered into a Solid Waste Interlocal Agreement on December 19, 2005 and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and collection issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in incorporated cities and towns within the county, be disposed of through the Regional Solid Waste System and that the City and County agree that all waste generated in the corporate limits of the City shall be disposed of at Finley Buttes disposal site and transfer sites for the disposal of solid waste generated within the corporate limits of the City; and

WHEREAS, the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling diversion programs, and residential yard waste/organics collection programs; and

WHEREAS, as part of this Agreement, the City agrees to authorize the County to prepare a plan for the City's solid waste management for inclusion in the CSWMP; and

WHEREAS, the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling diversion programs that reduce greenhouse gas emissions as appropriate from the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of agreement. The Parties intend this Agreement to provide for continued cooperation by both Parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapters 70A.205 and 70A.300 RCW.

2. Public Ownership of Transfer Stations. In recognition that the Parties desire to continue to move toward a more regionalized and standardized solid waste management system.
   2.1. The COUNTY and CITY are committed to public ownership of the existing Central Transfer, West Van, and any future to-be-built transfer station(s) (excluding the existing transfer station in Washougal). These parties, along with any other municipal entity within the COUNTY that chooses to participate, will create a regional, multi-jurisdictional entity COUNTY successor to own and provide solid waste disposal and transfer services to those participating jurisdictions. As a statement of intent, both the COUNTY and CITY assert their strong preference for regional-entity ownership by a COUNTY successor, and that ownership by COUNTY or CITY is disfavored.
   2.2. In furtherance of this, the COUNTY and CITY shall negotiate the terms of an interlocal agreement pursuant to chapter 39.34 RCW that identifies a statutory mechanism for formation of the entity to be the COUNTY successor, a general initial framework for shared, representational governance by all participating jurisdictions, and establishes a transparent and accountable timeline for formation of the entity by December 31, 2029.
   2.3. In the event the COUNTY, CITY, and other participating jurisdictions are unable to form this anticipated regional entity by December 31, 2030, the COUNTY and CITY agree to meet and determine in good faith how one or both entities will temporarily own and govern the solid waste transfer facilities until such time as the regional entity can be formed and become operational, which is not anticipated to take longer than 24 months.

3. Authority and responsibilities.

   3.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.
   3.2. It is understood that the planning effort will be informed by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).
      3.2.1. The City, its staff and policymakers shall be partners and participants with the County and the SWAC and RSWSSC in the regularly scheduled plan review, update(s) and implementation and will be afforded opportunity to propose plan modifications.
   3.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.
   3.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.
   3.5. No separate entity is being created by this Agreement.

4. Limitations.
   4.1. Nothing in this Agreement shall supersede any authority granted to either the County or the City, or otherwise imply any control by one Party over the other Party.
   4.2. Nothing in this Agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which either Party operates.

5. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

6. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.
   6.1. Revision process
      6.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Regional Solid Waste System. The County will make that draft available to the public for comments on their website.
      6.1.2. After good faith consideration of any responses from the public, cities and town, and

Ecology, County staff will prepare a final draft. After consultation with the city/town, SWAC, and RSWSSC, County will have the discretion to decide whether to change the final draft as a result of the responses.

6.1.3. Upon adoption, as defined herein, County will submit the adopted final draft to Ecology.

6.2. Amendments and updates

6.2.1. All proposed amendments will be evaluated per the process defined in the CSWMP.

6.2.2. Cities and towns that have signed the Agreement to join the Regional Solid Waste System may send possible amendments to the County for formal proposal. Upon such proposal, the County shall conduct the plan development process as outlined in this section.

6.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 70A.300 RCW, or by Ecology.

7. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, the City does not pass a resolution either adopting or disapproving the plan and delivers that resolution to the County, the City authorizes the County to include the City's solid waste plan prepared by the County in the CSWMP. All participating jurisdictions will be notified by the County when the CSWMP is adopted by County Council and when the CSWMP is approved by Ecology.

8. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue for three years from the date of execution and may be extended upon mutual agreement and subject to City Council approval for an additional term. This Agreement may be rescinded, terminated as herein provided, or as outlined in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations under this Agreement with the understanding that:

8.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and

8.2. Prior to termination, a withdrawing City must have prepared and received approval from Ecology for their independent solid waste management plan; and

8.3. Each Party will remain responsible for its own costs, whether incurred during this Agreement or otherwise.

9. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the

event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

10. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each Party, following authorization by Vancouver's City Council.

11. Indemnification / Hold harmless. City shall defend, indemnify and hold County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of City in performance of this Agreement, except for injuries and damages caused by the sole negligence of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of City, its officers, officials, employees, and volunteers, City's liability, including the duty and cost to defend, hereunder shall be only to the extent of the City's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the City's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

12. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, each party agrees to maintain all records constituting public records and to produce or assist both parties in producing such records, within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

13. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or

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other electronically retrievable public source, as required by RCW 39.34.040.

14. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

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INTERLOCAL AGREEMENT
HDC.2161
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
CITY OF WASHOUGAL
1701 C Street, Washougal, WA 98671

Project: Update to Comprehensive Solid Waste Management Plan
Contract Name: CCPH City of Washougal CSWMP Interlocal HDC.2161
Contract Period: Upon Execution-Ongoing

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Holly Barnfather 360.949.6965 GCT@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Trevor Evers 360.835.8501 ext. 202 trevor.evers@cityofwashougal.us	Daniel Layer 360.835.8501 ext. 503 daniel.layer@cityofwashougal.us	Kelly Brown 360.835.2662 ext. 234 kelly.brown@cityofwashougal.us

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as County, and City of Washougal, hereinafter referred to as City. County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY

David Scott 01/24/24
David Scott, City Manager Date

CLARK COUNTY

Kathleen Otto 01/25/24
Kathleen Otto, County Manager Date

CITY

Robert Zeinemann 01/24/24
Robert Zeinemann Date
City Attorney

APPROVED AS TO FORM ONLY

Amanda Migchelbrink 01/24/24
Amanda Migchelbrink Date
Deputy Prosecuting Attorney

INTERLOCAL AGREEMENT BETWEEN CLARK COUNTY AND CITIES OF BATTLE GROUND, CAMAS, LA CENTER, RIDGEFIELD, VANCOUVER, WASHOUGAL, AND TOWN OF YACOLT DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this Interlocal Agreement (Agreement) is entered into between Clark County (County) and the City of Washougal (City), establishing the obligations of the Parties for the maintenance and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and moderate risk waste planning to local government; and

WHEREAS RCW 70A.205.040 and RCW 70A.300.350 require or authorize counties, in cooperation with the various cities located within such county, to prepare a coordinated comprehensive solid & hazardous waste management plan; and

WHEREAS, under RCW 70A.205.075, all solid waste management plans must be maintained in current condition by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the City and the County (Parties), recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS RCW 70A.205.040(4)(c) outlines that cities may authorize the county to prepare a plan for the city's solid waste management; and

WHEREAS, the Parties previously entered into a Solid Waste Interlocal Agreement on May 9, 2006, and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and collection issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in incorporated cities and towns within the county, be disposed of through the Regional Solid Waste System and that the City authorizes the County to designate a disposal site(s) and transfer sites for the disposal of solid waste generated within the corporate limits of the City; and

WHEREAS the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling programs, and residential yard waste collection programs; and

WHEREAS, as part of this Agreement, the City agrees to authorize the county to prepare a plan for the city's solid waste management for inclusion in the comprehensive county plan. If the City chooses not to participate fully in the planning process or to pass a resolution adopting the CSWMP, they agree to adopt the final version. If within 90 days of receiving the final draft from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the CSWMP and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction; and

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WHEREAS the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling programs that reduce greenhouse gas emissions as appropriate from the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of agreement. The Parties intend this Agreement to provide for continued cooperation by both parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapters 70A.205 and 70A.300 RCW.

2. Incorporation of Recitals. The recitals set forth above are true and correct and are incorporated by reference as if fully set forth herein and made a part hereof.

3. Authority and responsibilities.
   - 3.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.
   - 3.2. It is understood that the planning effort will be informed by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).
   - 3.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.
   - 3.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.
   - 3.5. No separate entity is being created by this Agreement.

4. Limitations.
   - 4.1. Nothing in this agreement shall supersede any authority granted to either the County or the City, or otherwise imply any control by one Party over the other Party.
   - 4.2. Nothing in this agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which either party operates.

5. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

6. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.
   6.1. Revision process
      6.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Clark County Regional Solid Waste System. The County will make that draft available to the public for comments on their website.
      6.1.2. After good faith consideration of any responses from the public, cities and town, and Ecology, County staff will prepare a final draft. After consultation with the city/town, SWAC, and RSWSSC, County will have the discretion to decide whether to change the final draft as a result of the responses.
      6.1.3. Upon adoption, as defined herein, County will submit the adopted final draft to Ecology.
   6.2. Amendments and updates
      6.2.1. All proposed amendments will be evaluated per the process defined in the CSWMP.
      6.2.2. Cities and towns that have signed the Agreement to join the Clark County Regional Solid Waste System may send possible amendments to the County for formal proposal. Upon such proposal, the County shall conduct the plan development process as outlined in this section.
      6.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 70A.300 RCW, or by Ecology.

7. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the plan and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction. All participating jurisdictions will be notified by the County when the CSWMP is adopted and when the CSWMP is approved by Ecology.

8. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue until rescinded, terminated as herein provided, or as outlined in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations

under this Agreement with the understanding that:
   8.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and
   8.2. Prior to termination, a withdrawing City must have prepared and received approval from Ecology for their independent solid waste management plan; and
   8.3. Termination will not absolve the City or County of responsibility for meeting financial and other obligations outstanding at the time of termination.

9. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

10. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each of the Parties.

11. Indemnification / Hold harmless. City shall defend, indemnify, and hold County, its officers, officials, employees, and volunteers harmless from any and all claims, injuries, damages, losses, or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of City in performance of this Agreement, except for injuries and damages caused by the sole negligence of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of City, its officers, officials, employees, and volunteers, City's liability, including the duty and cost to defend, hereunder shall be only to the extent of the City's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the City's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement. County shall defend, indemnify, and hold City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising

out of or resulting from the negligent acts, errors or omissions of County in performance of this Agreement, except for injuries and damages caused by the sole negligence of City. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of County, its officers, officials, employees, and volunteers, County's liability, including the duty and cost to defend, hereunder shall be only to the extent of the County's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the County's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

12. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, each party agrees to maintain all records constituting public records and to produce or assist both parties in producing such records, within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

13. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or other electronically retrievable public source, as required by RCW 39.34.040.

14. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

INTERLOCAL AGREEMENT
HDC.2162
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
TOWN OF YACOLT
PO Box 160, Yacolt, WA 98675

Project: Update to Comprehensive Solid Waste Management Plan
Contract Name: CCPH Town of Yacolt CSWMP Interlocal HDC.2162
Contract Period: Upon Execution-Ongoing

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Holly Barnfather 360.949.6965 CntyHealthGrantContract@clark.wa.gov

Town Contacts		
Program	**Fiscal**	**Contract**
Sean LaBarbera 360.553-0013 pwd@townofyacolt.com	Stephanie Fields 360.686-3922 clerk@townofyacolt.com	Katelyn Listek 360.686-3922 mayorlistek@townofyacolt.com

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as "County", and the Town of Yacolt, hereinafter referred to as "Town". County and Town agree to all terms and conditions, exhibits, and requirements of this contract.

TOWN OF YACOLT:

Katelyn Listek, Mayor

Date: 10/9/2023

CLARK COUNTY:

Kathleen Otto

Kathleen Otto, County Manager

Date: 10/12/23

TOWN OF YACOLT:

David Ridenour, Town Attorney

Date: 10/9/23

APPROVED AS TO FORM ONLY:

Amanda Migchelbrink

Amanda Migchelbrink,
Deputy Prosecuting Attorney

Date: 10/11/23

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INTERLOCAL AGREEMENT
BETWEEN CLARK COUNTY AND CITIES OF BATTLE GROUND, CAMAS, LA CENTER, RIDGEFIELD, VANCOUVER, WASHOUGAL, AND TOWN OF YACOLT
DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this Interlocal Agreement (Agreement) is entered into between Clark County and the Town of Yacolt, establishing the obligations of the Parties for the maintenance and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS, RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and moderate risk waste planning to local government; and

WHEREAS, RCW 70A.205.040 and RCW 70A.300.350 require or authorize counties, in cooperation with the various cities located within such county, to prepare a coordinated comprehensive solid & hazardous waste management plan; and

WHEREAS, under RCW 70A.205.075, all solid waste management plans must be maintained in current condition by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the Town and the County (Parties), recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS, RCW 70A.205.040(4)(c) outlines that cities may authorize the county to prepare a plan for the Town's solid waste management; and

WHEREAS, the Parties previously entered into a Solid Waste Interlocal Agreement on May 9, 2006 and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and collection issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in incorporated cities and towns within the county, be disposed of through the Regional Solid Waste System and that the Town authorizes the County to designate a disposal site(s) and transfer sites for the disposal of solid waste generated within the corporate limits of the Town; and

WHEREAS, the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling programs, and residential yard waste collection programs; and

WHEREAS, as part of this Agreement, the Town agrees to authorize the county to prepare a plan for the Town's solid waste management for inclusion in the comprehensive county plan. If the Town chooses not to participate fully in the planning process or to pass a resolution adopting the CSWMP, they agree to adopt the final version. If within 90 days of receiving the final draft from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the CSWMP and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction; and

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WHEREAS, the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling programs that reduce greenhouse gas emissions as appropriate from the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of agreement. The Parties intend this Agreement to provide for continued cooperation by both parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapters 70A.205 and 70A.300 RCW.

2. Authority and responsibilities.
   - 2.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.
   - 2.2. It is understood that the planning effort will be informed by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).
   - 2.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.
   - 2.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.
   - 2.5. No separate entity is being created by this Agreement.

3. Limitations.
   - 3.1. Nothing in this agreement shall supersede any authority granted to either the County or the Town, or otherwise imply any control by one Party over the other Party.
   - 3.2. Nothing in this agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which either party operates.

4. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

5. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.

5.1. Revision process

5.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Clark County Regional Solid Waste System. The County will make that draft available to the public for comments on their website.

5.1.2. After good faith consideration of any responses from the public, cities and town, and Ecology, County staff will prepare a final draft. After consultation with the Town/town, SWAC, and RSWSSC, County will have the discretion to decide whether to change the final draft as a result of the responses.

5.1.3. Upon adoption, as defined herein, County will submit the adopted final draft to Ecology.

5.2. Amendments and updates

5.2.1. All proposed amendments will be evaluated per the process defined in the CSWMP.

5.2.2. Cities and towns that have signed the Agreement to join the Clark County Regional Solid Waste System may send possible amendments to the County for formal proposal. Upon such proposal, the County shall conduct the plan development process as outlined in this section.

5.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 70A.300 RCW, or by Ecology.

6. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, a participating jurisdiction does not pass a resolution either adopting or disapproving the plan and delivers that resolution to the County, the CSWMP will be considered adopted by that jurisdiction. All participating jurisdictions will be notified by the County when the CSWMP is adopted and when the CSWMP is approved by Ecology.

7. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue until rescinded, terminated as herein provided, or as outlined in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations under this Agreement with the understanding that:

7.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and

7.2. Prior to termination, a withdrawing Town must have prepared and received approval from Ecology for their independent solid waste management plan; and

7.3. Termination will not absolve the Town or County of responsibility for meeting financial and other obligations outstanding at the time of termination.

8. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

9. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each of the Parties.

10. Indemnification / Hold harmless. Town shall defend, indemnify and hold County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of Town in performance of this Agreement, except for injuries and damages caused by the sole negligence of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of Town, its officers, officials, employees, and volunteers, Town's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Town's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Town's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

11. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, each party agrees to maintain all records

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constituting public records and to produce or assist both parties in producing such records, within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

12. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or other electronically retrievable public source, as required by RCW 39.34.040.

13. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

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INTERLOCAL AGREEMENT
HDC. 2183
between
CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666
and
CITY OF VANCOUVER
P.O. Box 1995, Vancouver, WA 9866

Project:	Solid Waste Coordination
Contract Name:	CCPH City of Vancouver ILA Solid Waste HDC.2183
Contract Period:	Upon Execution- December 31, 2032

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Rebecca Addington 564.397.8415 GCT@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Julie Gilbertson 360.487.7162 Julie.Gilbertson@cityofvancouver.us	Shannon Turk 360.487.7132 Shannon.Turk@cityofvancouver.us	Anna Vogel 360.487.8429 Anna.Vogel@cityofvancouver.us

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as County, and City of Vancouver, hereinafter referred to as City. County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY OF VANCOUVER:

04/01/24
Date
City Manager

APPROVED AS TO FORM ONLY:

04/01/24
Date
City Attorney

CLARK COUNTY:

Kathleen Otto 04/02/24
Date
County Manager

APPROVED AS TO FORM ONLY:

Amanda Migchelbrink 04/01/24
Date
Deputy Prosecuting Attorney

Pursuant to the Interlocal Cooperation Act, chapter 39.34 RCW, between the City of Vancouver "City", and Clark County, Washington "County". The City and County are occasionally referred to as the "Parties" or as a "Party".

WHEREAS, this Agreement serves to define a common understanding and outline obligations between the City and County and regarding efforts and activities related to the Regional Solid Waste System; and

WHEREAS, the Parties have jointly participated in planning for solid waste management since 1990 through previous interlocal agreements and have since enjoyed a lengthy, productive, and effective working relationship while coordinating and collaborating on a wide range of solid waste disposal and collection issues; and

WHEREAS, The Parties maintain a separate Solid Waste Interlocal Agreement for Planning on 04/02/2024 that designates the County as the lead agency for review of the Comprehensive Solid Waste Management Plan and for preparation of the revised plan, incorporating both solid waste and moderate risk waste elements consistent with chapter 70A.205 RCW. This Agreement is not intended to replace or otherwise alter the Solid Waste Interlocal Agreement for Planning; and

WHEREAS, the Parties recognize that our citizens and businesses, public policymakers and local government staff jointly benefit from cooperative, coordinated, and shared approaches to managing the Regional Solid Waste System; and

WHEREAS, the City and County have distinct responsibilities and authorities for oversight and operation of programs affecting the collection and disposal of solid waste, recyclables, and organics; and

WHEREAS, the coordination of waste reduction, recycling, and organics diversion programs between the County and City creates savings, addresses state diversion requirements, and provides other benefits for both Parties; and

WHEREAS, the Parties wish to continue working to facilitate capital improvements for the Regional Solid Waste System to enable more diversion and to develop and implement environmentally sound, cost-effective solid waste and hazardous waste management programs including waste reduction and diversion programs; and

WHEREAS, the County contracts for solid waste handling services, including development of local facilities for the receipt, recycling, and processing for out-of-county disposal of solid waste generated within the cities, towns, and unincorporated areas of the County with the City having had an historic and ongoing key partner role in the 1992 and 2006 disposal and transfer station services contracts with Columbia Resource Company (CRC); and

WHEREAS, the City and County have participated in negotiations with Columbia Resource Company (CRC) since December 2019 regarding a new Contract, anticipated to be completed in 2024, that better serves the ongoing needs of the region; and

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WHEREAS, the Guiding Principles for this Agreement include:

- Promotion of sustainable actions and behaviors that ensure resources and options for future generations consistent with goals for solid waste identified in state and local climate change initiatives.
- Maintaining a solid waste system that supports equity, economic vitality and conserves natural and fiscal resources.
- Achieving a reasonable balance among public convenience, cost to ratepayers, public health, and the environment.
- Maintaining flexibility to anticipate future changes and needs.
- Promoting source reduction, reuse, and recycling.
- Increasing local control of solid waste management and commitment to public ownership of the system.
- Maintaining accurate waste stream measurement and monitoring.
- Encouraging cooperative and coordinated efforts among government agencies, community members, and the private sector for managing solid wastes; and

WHEREAS, the Parties desire to accomplish a more regionalized and standardized solid waste management system. Significant progress was achieved on this by establishing the Regional Solid Waste System Steering Committee in 2016; and

WHEREAS, the approach for improved coordination as it relates to the Regional Solid Waste System and as detailed in this Agreement provides for sharing of information, assures greater transparency and accountability, allows City participation and support for Agreement Projects, and assures the delivery of consistent communication and outreach efforts.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Definitions.

   For purposes of this Interlocal Agreement, the following definitions shall apply.

   1.1. "Agreement" means the Solid Waste Coordination Interlocal Agreement pursuant to the Interlocal Cooperation Act, chapter 39.34 RCW, between the City of Vancouver (City), and Clark County, Washington (County).

   1.2. "Agreement Projects" means projects and programs that are intended by the Parties to be planned for and/or implemented during the Term of this Agreement.

   1.3. "City" means the City of Vancouver, Washington.

   1.4. "Comprehensive Solid Waste Management Plan" (CSWMP) means the Clark County Comprehensive Solid Waste Management Plan approved by the Department of Ecology and adopted and amended by the County pursuant to chapter 70A.205 RCW.

   1.5. "Contract" means the Transfer, Transportation and Out of County Disposal and Recyclables and Specified Processing Services Contract by and between Columbia Resource Company (CRC) and County to which the City is a signatory, as adopted or amended.

   1.6. "CRC" means Columbia Resource Company, LLC, a wholly owned subsidiary of Waste

Connections.

1.7. "County" means Clark County, Washington.

1.8. "County Solid Waste Fund" means the designated County operations and admin fund 4014 is an enterprise fund maintained by the County. All revenue received from the Administrative/Regulatory fees and the County Health Fee as adopted or amended (currently $1.43/ton) paid to the County by CRC under sections 12.3.5, 12.10 and 12.11 of the 2006 Solid Waste Recycling, Transfer, Transport and Out-of-County Disposal Contract (Contract) and any future new Contract, all Solid Waste Implementation revenue received by the County from the Washington Department of Ecology under its Local Solid Waste Financial Assistance (LSWFA) grant program or other programs intended to support regional planning, outreach and other implementation efforts of the Regional System. Administrative fees paid to the County from Yard Debris or Recycling Collection contracts administered by the County, the County's allocation of the Residential Recycling Revenue (based on volumes collected from County generators; see Section 6 below), and the Solid Waste Enforcement allocation of the Ecology LSWFA grants are specifically not regional and may be utilized at the County's discretion for purposes other than system-wide benefits.

1.9. "Designated Disposal Site" means Finley Buttes Landfill located near Boardman, Oregon or alternative sites as designated in the CRC Contract Operations Plan and events related to Alternative Methods or Uncontrollable Circumstance.

1.10. "Designated Organics Processing Site" means Dirt Hugger located in Dallesport, Washington or other City approved processor of comingled residential organics food waste and yard wastes, or commercial organics or food waste.

1.11. "Hazardous Waste" means any waste, material or substance that is not excluded from regulation as "hazardous waste" by application of hazardous waste or dangerous waste regulations adopted by the United States Environmental Protection Agency, the Washington State Department of Ecology, or the Oregon State Department of Environmental Quality and that now or hereafter:

1.11.1. Is required to be dealt with as hazardous waste under regulations promulgated by the United States Environmental Protection Agency at 40 CFR part 261;

1.11.2. Contains a radioactive material the storage or disposal of which is regulated by state or federal law or regulation; or

1.11.3. Is designated a "dangerous waste" or "extremely hazardous" waste pursuant to chapter 70A.300 RCW or applicable Oregon law.

Certain waste that is not as of the effective date of this Agreement within one of the subsections 1.11.11 through 1.11.3 above, may after that date come within the scope of one or more of those subsections as determined by a governmental entity with jurisdiction; certain other waste that is within one of those subsections may cease to be recognized as a Hazardous Waste as defined herein. Accordingly, any waste, material or substance shall be deemed Hazardous Waste only so long as and to the extent that it is included in at least one of subsections 1.11.11 through 1.11.3 above.

1.12. "Organics" means any organic waste material that is source-separated for processing or composting, such as yard debris and food scraps generated by any residential or commercial customers.

1.13. "Regional Solid Waste System" or "Regional System" means all facilities for solid waste

handling provided by the County, either directly or by contract with CRC or another private vendor, and all administrative activities related thereto. The term "Regional Solid Waste System" includes all sites designated by the County and City for the receipt or disposal of Solid Waste as well as the supporting practices and programs being operated within the region for waste collection, waste diversion and program promotion and administration.

1.14. "Regional Solid Waste System Fund (RSWSF) means the designated County fund 6318 and is an interest-bearing special revenue fund established and maintained by the County or County successor for the sole purpose of funding the Regional Solid Waste System as explicitly authorized by the forthcoming new disposal contract (i.e., MSA and Attachments.) Any interest earned must remain in the fund.

1.15. "Regional Solid Waste System Steering Committee" (RSWSSC) means the formalized group of agency directors representing local jurisdictions within Clark County that is described in this Agreement and as established through the adoption of Bylaws on May 19, 2016.

1.16. "Solid Waste" means:

1.16.1. Solid waste as defined by RCW 70A.205.015 with the exception of Hazardous Waste.

1.16.2. Solid waste, including recyclable material collected within the City by the City, a City contractor, or a private hauler under the authority of a "G" certificate granted by the Washington State Utilities and Transportation Commission under the provisions of chapter 81.77 RCW; and

1.16.3. Solid waste which is the residual waste remaining from a recycling facility located within the City or serving the City; and

1.16.4. Residential recyclable material collected by the City or pursuant to a contract with the City or with the Washington State Utilities and Transportation Commission under RCW 81.77.130.

1.17. "Special Waste" means Solid Wastes that require special handling and are collected, processed, recycled and/or disposed of separately from other Solid Wastes as defined in the Contract, CSWMP, chapter 6.12 VMC, or upon written mutual agreement of the Public Works Director of the City of Vancouver and the Director of Clark County Public Health or their designees. Special Waste may or may not be required to be disposed of through the Regional Solid Waste System as determined by the above listed Directors.

1.18. "Transfer Stations" or "Regional Transfer Stations" means the designated transfer facilities and parcel(s) upon which the station facilities sit and identified in the Plan including Central Transfer Station located at 11034 NE 117th Avenue, West Vancouver Transfer Station 6601 NW Old Lower River Road, Washougal Transfer Station located at 4020 S. Grant Street and any additional transfer stations to be constructed for the Regional System.

2. Purpose.

The purpose of this Agreement is to provide for continued coordination and collaboration between the City and County on targeted solid waste and diversion efforts, including identifying

Agreement Projects to be considered and agreed upon by the Parties and that may be relevant to other regional partner cities or town.

3. Term.
This Agreement shall commence upon execution and expire on December 31, 2032. This Term may be extended pursuant to Section 15.

4. Obligations.
This Agreement serves to memorialize the County and City as active partners in collaborating on regional and shared efforts, and coordination on contracts and programs related to regional priorities. Obligations of the County, City, or both are as follows:

4.1. City & County

4.1.1. The County and City shall have collaborative communications and hold regular meetings to discuss issues of mutual interest, such as discussing progress of capital improvement and maintenance projects arising from the CRC Contract, implementing CSWMP recommendations, coordinating projects identified in Section 5, matters of community education and outreach, and state laws or regulations.

4.1.2. The County and City will each be financially responsible for their own staff time.

4.1.3. The City and County agree to continued coordination and shared planning efforts working with Waste Connections in drafting work plans for Educators and Recycling Advocates pursuant to each Party's respective collection contracts and contamination reduction activities.

4.2. City

4.2.1. The City, at its own expense, may develop pilot projects and include County staff for review and input as necessary.

4.2.2. If the City implements a pilot program impacting Transfer Station services, the City will keep the County informed and afford the County ample opportunities to weigh in on design, approach, and messaging.

4.2.3. The City will continue to support the County through active participation on CSWMP updates, SWAC, and RSWSSC. The City will review and provide comments on preliminary draft procurements, studies, rate setting, and supplemental requests for maintenance or other reimbursement costs relating to the CRC Contract.

4.2.4. The City shall remain the lead for maintaining the RecycleRight app services, provided through a City-managed contract with Routeware (formerly Recollect) and bill pursuant to the 2014 MOU relating to the Regional Partner Agreement for Recollect for the appropriate cost sharing to the County and vendors (CRC or Waste Connections of Washington, Inc. (WCW).

4.3. County

4.3.1. The County will be responsible for all time and resources required to manage the CSWMP, develop and manage budgets relating to the use of County Solid Waste Funds and Regional Solid Waste System Funds, administration, oversight of the Contract, convening RSWSSC, and leading other regional matters.

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4.3.2. The County shall be responsible for assuring that the City is afforded regular opportunities to participate in providing oversight and decision-making regarding expenditures of Regional Solid Waste Funds.

4.3.3. The County will coordinate CSWMP planning activities and meetings and will consider City input on policy matters pursuant to the ILA for Solid Waste Planning and this Agreement.

4.3.4. If the County implements a pilot program impacting City managed collection services, the County will keep the City informed and afford the City ample opportunities to weigh in on design, approach, and messaging.

5. Agreement Projects.
The Parties agree the following are Agreement Projects to be evaluated and decided by the Parties and will be carried forward for SWAC, RSWSSC, or respective policy-maker input in a timely manner:

5.1. Update, approval, and adoption of the anticipated 2025 CSWMP. At the time of this Agreement, the County is actively preparing a Preliminary Draft.

5.2. Completion of a second feasibility study and comparative analysis to support a formal process of siting and construction of a fourth regional Transfer Station, consistent with the County's 2023 Preliminary Siting Report as identified in the County's Regional System Study. The new Transfer Station is anticipated to be paid for with Regional Solid Waste System Funds and will result in public ownership.

5.3. A final decision on public ownership of the existing Transfer Stations.

5.4. Execute a new Contract for Transfer, Transportation and Out of County Disposal Contract with CRC, including securing funding for capital improvements through CRC contributions, County Solid Waste Funds (4014) and Regional Solid Waste System Funds (6318), or other sources, and identification of future system maintenance and capital improvement projects.

5.5. Annexations – anticipated annexations by the City are likely to result in an increased role for the City in solid waste management.

5.6. The Parties will engage in regular discussions regarding budgets/cost sharing, in-kind contributions, and work plans to facilitate these Agreement Projects. Anticipated targets for collaboration may include but are not limited to coordination on identifying appropriate regional uses for budgeted County Solid Waste Funds, Regional Solid Waste System Funds, consideration for inclusion of City projects in LSWFA, and other grant applications and implementation.

5.7. Coordination on public outreach, messaging, and branding of regional solid waste programs and flexibility for Vancouver to differentiate its efforts from the general regional directions as appropriate to best serve its residents and businesses. Directions and goals of Vancouver's Climate Action Framework and Strategic Plan may also be furthered through how solid waste related messaging is shaped for City audiences.

5.8. Provide tailored education and outreach efforts to multi-family residents with the goal to increase participation in waste diversion and recycling practices, piloting new initiatives or programs to address service equity, and reach an underserved and growing segment of residents in the region.

5.9. Increase transfer and reload capacity to support increased organics diversion, including food waste, from residential and commercial sectors as required for the City pursuant to chapter 70A.205 RCW.

5.10. How the City can assist the County in its responsibilities for future facility capital improvement planning, design, and construction management until a suitable County successor assumes these duties.

5.11. Joint review of target materials for curbside and drop off collection and other diversion programs at Transfer Stations as well as extended producer responsibility management and funding.

6. Public Ownership of Transfer Stations.

In recognition that the Parties desire to continue to move toward a more regionalized and standardized solid waste management system.

6.1. The County and City are committed to public ownership of the existing Central Transfer, West Van, and any future to-be-built transfer station(s) (excluding the existing transfer station in Washougal). These parties, along with any other municipal entity within the County that chooses to participate, will create a regional, multi-jurisdictional entity County successor to own and provide solid waste disposal and transfer services to those participating jurisdictions. As a statement of intent, both the County and City assert their strong preference for regional-entity ownership by a County successor, and that ownership by County or City is disfavored.

6.2. In furtherance of this, the County and City shall negotiate the terms of an interlocal agreement pursuant to chapter 39.34 RCW that identifies a statutory mechanism for formation of the entity to be the County successor, a general initial framework for shared, representational governance by all participating jurisdictions, and establishes a transparent and accountable timeline for formation of the entity by December 31, 2029.

6.3. In the event the County, City, and other participating jurisdictions are unable to form this anticipated regional entity by December 31, 2030, the County and City agree to meet and determine in good faith how one or both entities will temporarily own and govern the solid waste transfer facilities until such time as the regional entity can be formed and become operational, which is not anticipated to take longer than 24 months.

7. Waste Reduction, Recycling and Organics Diversion.

The City and the County agree to cooperate to achieve the priorities for waste reduction and waste recycling and diversion set forth in the CSWMP, pursuant to chapter 70A.205 RCW and applicable collection contracts. The City shall establish and maintain commingled recycling, organics diversion and waste reduction programs in compliance with all applicable federal, state, and local laws.

8. Regional Solid Waste System

8.1. Regional Solid Waste Steering Committee.

8.1.1. The RSWSSC was created May 19, 2016. The RSWSSC is comprised of the Public Works Directors/designees for each of the seven cities and towns within the region and includes the Director of Clark County Public Health/designee.

8.1.2. The County will take the lead to solicit input from RSWSSC on major expenditures of impact or benefit to the region from either the County Solid Waste Fund or Regional Solid Waste System Fund and as consideration and planning is undertaken for future capital investments and in the evaluation of public ownership options and governance structures to manage key Regional Solid Waste System facilities.

8.1.3. The RSWSSC's purpose, activities, powers, and duties may continue to evolve with the needs of the region, and its members are anticipated to have an active role in helping to shape a Joint Municipal Utilities Services (JMUS) or other regional solid waste organizational structure to act as a County successor.

8.2. Regional System Oversight, and Management of Regional Funds and Program Grant Priorities.

8.2.1. As the lead agency, the County shall be responsible for assuring that members of the RSWSSC are consulted and afforded regular opportunities to participate in providing oversight and input regarding expenditures of County Solid Waste Funds and Regional Solid Waste Funds.

8.2.2. The County and City may jointly agree to collaborate on tasks and projects using revenue from the Local Solid Waste Financial Assistance (LSWFA) grant program or other outside funding sources to further regional planning, outreach, and other implementation efforts.

8.3. Regional Identity, Coordinated Outreach Messaging, and Branding for Local and Regional Solid Waste Programs.

8.3.1. The City will be consulted and given ample opportunities to develop outreach and messaging related to regional programs. The City retains authority to communicate directly with its residents and businesses on the topics it deems most relevant to its community members, including use of City-specific branding. The City may choose to differentiate its messages and information from that provided by the County which is more general and/or regional in nature.

9. Solid Waste Transfer and Disposal and Processing Sites for City Solid Waste.

9.1. Participation in the Regional Solid Waste System shall not reduce or otherwise affect the City's control over Solid Waste, Recyclables and Organics/Food Waste collection pursuant to applicable state law and City contracts with vendor(s) for services.

9.2. The Parties intend to enter into a separate Solid Waste Interlocal Agreement for Planning, which includes an understanding that City and County agree that all Solid Waste collected within the City will be delivered to the Designated Disposal Site. The transfer site or sites for City use shall be the Transfer Stations closest to the City – West Van Materials Recovery Facility and Central Transfer and Recycling Center. The County shall direct all Solid Waste delivered to these Transfer Stations, except recycled materials, to the Designated Disposal Site.

9.3. Solid Waste collected through contract in the City will not normally be directed to the Washougal Transfer Station without the City's prior permission, as waste disposed from that facility does not get disposed of at the Designated Disposal Site.

9.4. In the event of an emergency or upon the activation of an approved Operations

Contingency and Emergency Plan with notification to the City, waste collected from within the City may be disposed in an alternative approved facility for timeframes stated in the Contingency Plan.

9.5. Special Waste generated within the City may be exempted from these requirements upon written notice from the City's Public Works Director to the County.

9.6. Organics, Yard Debris and Food Waste materials collected through contracts in the City will be directed to City-approved processing sites. The City may approve changes to processing sites for Organics, Yard Debris, and Food Waste materials collected within the City, and in compliance with RCW 70A.205.540.

10. Fees.

10.1. The City Council is the rate setting authority for City customers, which includes evaluation of any County approved fees implemented under the Contract and any other County approved fees imposed on users of the Regional Solid Waste System. City staff shall be given reasonable notice of all proposed Tip Fee and Non-Tip Fee rate increases or decreases and shall have the right to comment and meet with the County staff regarding the proposed rate changes before adjustments are approved by the County, including timing and implementation of any fees considered. The CSWMP does not evaluate the impact of plan recommendations or actions on incorporated cities that exercise rate setting authority. If the City believes that the Tip Fees, adjustment requests or a component thereof are unreasonable or inappropriate, the City may request additional justification for the increase from the County. The City may review the issue with the County Council.

10.2. Transfer Station Host Fee. The City established a Host Fee in 2006 that CRC pays to the City. The current Host Fee is $185,485 for 2024 and will continue to be adjusted and paid to the City pursuant to the Contract.

10.3. Residential Recycling Revenue Calculation and Disbursement. On April 1, 2017, the City, County and CRC formally adopted, a memorandum of agreement (MOA) related to the Distribution of Revenue from the Sale of Recyclable Materials. That MOA provides an equitable methodology for the calculation and disbursement of quarterly revenue generated from the sale of residential (curbside and multi-family) recyclable materials from CRC. This MOA formalized and documented the prior revenue sharing arrangements, the application of the annual recyclables allocation study results, the roles in review of processing fee changes, and the scheduling of communications and coordination related to sharing regular reports between the agencies and residue study or other audits of the recycling processing system.

11. Enforcement.

The City shall maintain in effect and reasonably enforce chapter 6.12 VMC, Garbage Disposal, and chapter 5.62 VMC, Collection of Recyclable Materials, as those chapters are adopted or amended. Upon the request of the County, the City also may consider revocation or termination of licenses, franchises, or contracts previously granted by the City to persons who violate the VMC relating to the disposal of Solid Waste.

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12. Contracts with Vendors; No City Obligation.

The County and City may jointly enter a contract or contracts with a vendor(s) to provide Solid Waste handling and specified processing services.

13. Indemnification.

13.1. The City agrees to indemnify and hold harmless the County, its officials, officers, agents, employees, volunteers, and representatives from and against all claims, demands, damages, suits at law or at equity, liabilities, losses, judgments, liens, expenses, and costs arising out of or occasioned by the City's negligent or intentional conduct resulting from this Agreement. In such an event, the City shall pay any judgment or lien arising therefrom, including all related costs.

13.2. The County agrees to indemnify and hold harmless the City, its officials, officers, agents, employees, volunteers, and representatives from and against all claims, demands, damages, suits at law or at equity, liabilities, losses, judgments, liens, expenses, and costs arising out of or occasioned by the County's negligent or intentional conduct resulting from this Agreement. In such an event, the County shall pay any judgment or lien arising therefrom, including all related costs.

13.3. These obligations shall survive termination of this Agreement.

14. Public Records Act.

Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, chapter 42.56 RCW, as may hereafter be amended, each Party agrees to maintain all records constituting public records and to produce or assist both Parties in producing such records, within the time frames and parameters set forth in state law. Each Party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other Party of receipt of the request by providing a copy of the request to the other Party's Public Records Officer.

15. Entire Agreement.

This Agreement contains the entire agreement of the Parties with respect to the subject matter hereof, and no prior agreements shall be effective to the contrary.

16. Amendment or Supplementation.

This Agreement may be amended upon the prior written agreement of the County and the City. Any such amendment may be executed on the City's behalf by the authorized officers of the County and City.

17. Termination.

Notification of intended termination by either Party shall be provided with six months written advance notification of such intent to cancel and consent shall not be unreasonably withheld. Any controversy or claim arising out of or relating to the termination of this agreement shall be addressed first through mediation and, if still unresolved, then through binding arbitration, prior to the commencement of any legal proceedings. The parties shall equally share the cost of a

mutually acceptable mediator or arbitrator, as the case may be. The prevailing party in any arbitration or litigation shall be entitled to recover from the non-prevailing party all attorneys' fees, expert witness and consultant fees, paralegal fees, and arbitration fees and charges, and all litigation costs, including all such fees and costs on appeal.

18. Severability.
If any part of this Agreement is held by a court to be invalid, such action shall not affect the validity of any other part of this Agreement.

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CLARK COUNTY
STAFF REPORT

DEPARTMENT: Public Health **SR2024-1870**

DATE: March 26, 2024 @ 10:00 a.m.

REQUESTED ACTION:
Clark County Council approval to enter into an Interlocal Agreement with the City of Vancouver for improved coordination as it relates to the Regional Solid Waste System and for sharing of information to assure greater transparency and accountability and delivery of consistent communication and outreach efforts. Further, authorization for County Manager to execute the agreements and any resulting amendments.

_X_ Consent ____ Hearing ____ County Manager

BACKGROUND

Clark County and the City of Vancouver have many current and upcoming projects related to the regional solid waste system. In late February 2024, both councils approved entering into an Agreement In Principle with the current owner and operator of the regional transfer stations, Columbia Resource Company, (CRC). The County has collaborated with the City of Vancouver on past collection services and transfer & disposal contracts which has helped to ensure efficient management of solid waste services and yields resilient, environmentally responsible outcomes for our communities. Clark County and the City of Vancouver are currently negotiating a new transfer and disposal contract with CRC, (which is anticipated to be brought to Clark County Council for review in June 2024). The attached interlocal agreement references projects associated with the future contract and designates roles and responsibilities as well as intended outcomes.

Detailed in the attached interlocal agreement for solid waste coordination are key definitions, support for waste diversion, establishes a process for transparent and accountable fee setting, and affirms near-term agreement projects that are high-impact for our regional solid waste system.

Guiding Principles for this interlocal agreement include:

- Promotion of sustainable actions and behaviors that ensure resources and options for future generations consistent with goals for solid waste identified in state and local climate change initiatives.
- Maintaining a solid waste system that supports equity, economic vitality and conserves natural and fiscal resources.
- Achieving a reasonable balance among public convenience, cost to ratepayers, public health, and the environment.
- Maintaining flexibility to anticipate future changes and needs.
- Promoting source reduction, reuse, and recycling.
- Increasing local control of solid waste management and commitment to public ownership of the system.
- Maintaining accurate waste stream measurement and monitoring.
- Encouraging cooperative and coordinated efforts among government agencies, community members, and the private sector for managing solid wastes.

COUNCIL POLICY IMPLICATIONS
N/A

ADMINISTRATIVE POLICY IMPLICATIONS
N/A

COMMUNITY OUTREACH
N/A

BUDGET IMPLICATIONS

YES	NO	
	X	Operating Budget Impacts
	X	Capital Budget Impacts
X		Action falls within existing budget capacity.
	X	Action falls within existing budget capacity but requires a change of purpose within existing appropriation. If YES, please complete the budget impact statement. If YES, please route this Staff Report through the Budget Director and then to the County Manager.
	X	Additional budget capacity is necessary and will be requested at the next supplemental or annual budget. If YES, please complete the budget impact statement. If YES, please route this Staff Report through the Budget Director and then to the County Manager. This action will be referred to the county council with a recommendation from the county manager.

BUDGET DETAILS

Dollar Amount	
Fund	4014
Cost Center	
BASUB	
Program	

_____
Emily M. Zwetzig, Budget Director *(if applicable)*

DISTRIBUTION:
Council staff will post all Consent/Separate Business/Hearing staff reports to The Web.
https://www.clark.wa.gov/council-meetings

Rebecca Addington 03/13/24
Rebecca Addington
Management Analyst, Sr

Alan Melnick 03/13/24
Alan Melnick, MD, MPH, CPH
Public Health Director

Primary Staff Contact Name and Extension: Jeff Harbison ext. 8475

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APPROVED:_____
CLARK COUNTY, WASHINGTON
CLARK COUNTY COUNCIL

DATE: _____

SR#_____

APPROVED:_____
Kathleen Otto, County Manager

DATE: _____

E

APPENDIX E: Solid Waste Management Plan Adopting Resolution

To be added upon finalization.

F

APPENDIX F: Regulations governing the management of solid waste

Legislation / Laws / Regulations / Codes	Description
Architectural Paint Stewardship Program ***Chapter 70A.515 RCW***	Requires the establishment of a product stewardship program for recycling leftover paint in Washington, funded by a small fee added to the sale of new paint.
Batteries – Environmental Stewardship ***Chapter 70A.555 RCW***	Outlines requirements for proper handling, recycling, and end-of-life management of used batteries.
Biosolids Management ***Chapter 173-308 WAC***	Outlines requirements for managing the disposal of biosolids.
Camas Washington Municipal Code – Refuse Collection and Disposal ***Camas Chapter 13.80 Division III***	Regulates collection and disposal in the City of Camas
Clark County Code – Solid Waste Management ***Chapter 24.12***	Regulates and control solid waste management within Clark County.
Clark County Code — Shoreline Master Program ***Chapter 40.460***	Governs activities on and near lakes, streams, and rivers in Clark County.
Clark County Code — Solid Waste Disposal ***Chapter 9.32***	Regulation for county designated transfer stations; removal of recyclables from containers and litter control.
Clean Air Act ***42 U.S.C. §7401 et seq. (1970)***	Regulates air pollutant emissions; establishes emissions standards for solid waste landfills. Includes regulations concerning the safe management of asbestos and asbestos containing material to protect public health.
Clean Water Act ***33 U.S.C. §1251 et seq. (1972)***	Regulates discharges to waters through: (a) the NPDES permit program and (b) pretreatment standards that regulate discharge to publicly owned wastewater treatment facilities.
Comprehensive Procurement Guideline for Products Containing Recovered Materials ***40 CFR Part 247***	Procurement requirements for government agencies using federal funds. Including requirements for procurement of construction materials containing recycled content.
Consumer Product Safety Commission (CPSC) ***16 CFR Part 1305*** and ***16 CFR 1304***.	Legislation including regulations on the use and disposal of asbestos and asbestos containing material.
Criteria for Municipal Solid Waste Landfills ***Chapter 173-351 WAC***	Establishes criteria for municipal solid waste landfills.
Dangerous Waste Regulations ***Chapter 173-303 WAC***	Regulation of dangerous and extremely dangerous wastes. Includes standards for the handling, disposal, designation, treatment, reporting and monitoring of dangerous waste.
Department of Labor and Industries ***Title 296 WAC***	Various state codes for workplace safety rules on toxic exposures to arsenic, lead, hazardous waste, and other toxins.
Drug Take-Back Program ***Chapter 69.48 RCW***	Requires pharmaceutical manufacturers to fund a safe system for the collection and disposal of unused, unwanted, and expired medicines in Washington.

Legislation / Laws / Regulations / Codes	Description
Electronic Product Recycling ***Chapter 70A.500 RCW***	Requires a manufacturer-funded recycling program for covered electronic products. Products include televisions, computers, monitors, tablets, portable DVD players, E-readers and laptops.
Endangered Species Act (ESA) ***16 U.S.C. §1531 et seq. (1973)***	A federal law designed to protect and promote the recovery of plants and animals in danger of becoming extinct.
Federal Asbestos Requirements ***40 CFR Part 61 Subpart M***	Regulations concerning the safe management of asbestos and asbestos containing material to protect public health.
General Regulations for Air Pollution Sources ***Chapter 173-400 WAC***	General regulations for air pollution sources. Includes commercial and industrial solid waste incineration requirements.
EPA Administered Permit Programs: National Pollutant Discharge Elimination System (NPDES) ***40 CFR Part 122***	Washington NPDES permits are issued by Ecology to regulate and monitor businesses and municipalities that discharge wastewater to prevent pollution of surface water, stormwater, and groundwater.
Hazardous Substance Tax — Model Toxics Control Act ***Chapter 82.21 RCW***	Authorizes and outlines the rules for taxation of hazardous substances.
Hazardous Waste Cleanup — Model Toxics Control Act ***Chapter 70A.350 RCW***	Requires local government to prepare and implement a plan for the management of hazardous waste, including specific elements for collections and public education. Funds and directs the investigation, cleanup, and prevention of sites that are contaminated by hazardous substances.
Hazardous Waste Management Act ***Chapter 70A.300 RCW***	Requires local government to prepare and implement a plan for the management of hazardous waste, including specific elements for collections and public education.
Incinerator Ash Residue ***Chapter 70A.315 RCW***	Requirements for incinerator ash handling and disposal.
Interlocal Cooperation Act ***Chapter 39.34 RCW***	Allows local government agencies to cooperate with other localities through mutual agreement.
Joint Municipality Utility Services ***Chapter 39.106 RCW***	Aims to improve the ability of local government utilities to plan, finance, construct, acquire, maintain, operate, and provide facilities and utility services to the public, and to reduce costs and improve the benefits, efficiency, and quality of utility services.
Landfill Methane Emissions ***Chapter 173-408 WAC***	Establishes requirements to reduce methane emissions from both active and closed MSW landfills that have received solid waste after January 1, 1992.
Landfills – Methane Emissions ***Chapter 70A.540 RCW***	Makes methane emission monitoring and capture requirements stricter at certain landfills.
Residential Property Renovation ***40 CFR Part 745, Subpart E***	An EPA rule requiring certification in lead-safe work practices for companies performing construction, demolition, renovation, painting or other work on buildings and homes with lead- based paint.

Legislation / Laws / Regulations / Codes	Description
Local Solid Waste Financial Assistance ***Chapter 173-312 WAC***	Outlines the procedure for and limitation of the local solid waste financial assistance grant.
Mercury-Containing and Rechargeable Battery Management Act ***Public Law 104-142***	Federal legislation setting requirements for the safe manufacturing and recycling of batteries, with emphasis on lead-acid battery recycling and phasing out production of batteries containing mercury.
Mercury-Containing Lights — Proper Disposal ***Chapter 70A.505 RCW***	Establishment of a product stewardship program for recycling mercury-containing lights.
Metropolitan Municipal Corporations ***Chapter 35.58 RCW***	Enables cities and counties to act jointly to ensure essential services with the growth and development of metropolitan areas.
Minimum Functional Standards for Solid Waste Handling ***Chapter 173-304 WAC***	Regulations for solid waste handling facilities existing prior to 2/10/03.
Miscellaneous Provisions ***RCW 35.21.120 through RCW 35.21.157***	Regulates how cities and counties contract for solid waste services and how they generate revenues to fund solid waste management activities.
Moderate Risk Waste Handling ***WAC 173-350-360***	Standards for collection and transportation of moderate risk waste, including permitting requirements.
Motor Freight Carriers ***Chapter 81.80 RCW***	Outlines requirements for collection and transport of recyclable materials from nonresidential generators; regulated by WUTC.
National Emission Standards for Hazardous Air Pollutants (NESHAP) ***40 CFR Part 61, Subpart M***	Legislation including regulations on the use and disposal of asbestos and asbestos containing material.
Noxious Weeds Control ***Chapter 17.10 RCW***	Rules relating to the control of noxious weeds.
Reuse and Recycling ***ORS Chapter 459A***	As Clark County uses a solid waste disposal facility located in Oregon, we must meet the applicable Oregon recycling requirements.
Pollution Prevention Act ***42 USC § 13101 et seq. (1990)***	Legislature directing Ecology to establish a source pollution reduction program (now known as Pollution Prevention Assistance).
Recyclable Materials – Transporter and Facility Requirements ***Chapter 173-345 WAC***	Rules for businesses that transport recyclable materials from commercial or industrial generators that are required to have a common carrier permit from the WUTC.
Resource Conservation and Recovery Act (RCRA) ***42 U.S.C. § 6901 et seq. (1976)***	Federal law establishing the national hazardous waste management program, replacing earlier solid waste acts. RCRA sets hazardous waste management standards that states must meet or exceed.
Ridgefield Municipal Code – Garbage Collection ***Chapter 8.12***	Regulates garbage collection in the City of Ridgefield.

Legislation / Laws / Regulations / Codes	Description
Ridgefield Municipal Code – Collection of Recyclable Materials ***Chapter 8.13***	Regulates collection of recyclable materials in the City of Ridgefield.
Ridgefield Municipal Code – Compost Procurement ***Chapter 8.35***	Regulates compost procurement in the City of Ridgefield.
Solid Waste Collection Companies ***Chapter 81.77 RCW***	State legislation directing the WUTC to supervise and regulate private solid waste collection companies. This includes issuance of regulated carrier permits.
Solid waste disposal district—Powers—Restrictions—Fees ***RCW 36.58.130***	Gives authority to counties to impose fees upon solid waste collection services.
Solid Waste — General Provisions ***ORS 340-93***	Regulates solid waste in the state of Oregon. Outlines requirement that all jurisdictions that use the Oregon waste system must adhere to Oregon laws. The standards are enforced by the Oregon Department of Environmental Quality (DEQ).
Solid Waste Handling Standards ***Chapter 173-350 WAC***	Establishing minimal performance standards for proper handling and disposal of solid waste. Identifying functions necessary to assure effective solid waste handling programs at state and local levels. Adopted under the authority of chapter 70A.205 RCW.
Solid Waste Management — Reduction and Recycling ***Chapter 70A.205 RCW***	Solid waste legislation including requirements for inert waste landfills, county solid waste management plans, WUTC assessments of rates, solid waste permits, requirements for recycling of construction aggregate, and more.
Solid Waste and/or Refuse Collection Companies ***Chapter 480-70 WAC***	State legislation for the enforcement of chapter 81.77 RCW, and establishment of various fair practice and safety standards for solid waste collection companies. Includes exempt operations.
Southwest Clean Air Agency (SWCAA) ***SWCAA-425, SWCAA 476, SWCAA 490, SWCAA 491***	SWCAA rules for asbestos control in demolition and renovation projects; outdoor burning; and emissions of volatile organic compounds and gasoline vapors. Regulations concerning the safe management of asbestos and asbestos containing material to protect public health.
Standards for Universal Waste Management ***40 CFR Part 273***	Streamlines regulation of certain hazardous/universal wastes including batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans.
Standards for Universal Waste Management ***WAC 173-303-573***	Establishing Washington standards for universal waste management. Defines batteries, mercury- containing equipment, and lamps as universal wastes.
Standards for the Use of Disposal of Sewage Sludge ***40 CFR Part 503***	Regulations and establishes classifications and handling requirements of sewage sludges.

Legislation / Laws / Regulations / Codes	Description
State Environmental Policy Act (SEPA) ***Chapter 43.21C RCW***	An act requiring environmental impact assessments associated with government decisions, including construction of public facilities.
Toxic Substances Control Act (TSCA) ***15 U.S.C. §2601 et seq. (1976)***	An act addressing the production, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.
Used Oil Recycling Act ***Chapter 70A.224 RCW***	Requires local government to include used motor oil recycling elements to hazardous waste management plans and activities. Includes requirements the collection, recycling, and reuse of used oil.
Vancouver Municipal Code – Collection of Recyclable Materials ***VMC 5.62***	Regulates the collection of recyclable materials in the City of Vancouver.
Vancouver Municipal Code – Garbage Disposal ***VMC 6.12***	Regulates garbage disposal in the City of Vancouver.
Vehicle Battery Disposal ***RCW 70A.205.505*** through ***70A.205.535.***	Legislation requiring recycling of lead-acid batteries, establishing the core charge, and outlining requirements for lead-acid battery retailers.
Washington Organics Management Law ***HB-1799***	Requires diversion of organic materials away from landfill disposal and towards food rescue program and organics management. Being formally embedded into RCW 70A.205
Washougal Municipal Code – Garbage ***Chapter 7.04***	Regulates garbage collection in the City of Washougal
Washougal Municipal Code – Recyclable Solid Waste Collection ***Chapter 7.06***	Regulates collection of recyclables in the City of Washougal.
Washougal Municipal Code – Yard Debris Collection ***Chapter 7.10***	Regulates collection of yard debris in the City of Washougal.
Waste Reduction ***Chapter 70A.214 RCW***	Outlines public and private efforts to focus on reducing the generation of waste.
Waste Reduction, Recycling, and Model Litter Control Act ***Chapter 70A.200 RCW***	Delegates authority to accomplish litter control, increase waste reduction, and stimulate all components of recycling and composting.



G

APPENDIX G: Operating, non-operating, abandoned, and closed disposal sites

Operating, non-operating, abandoned, and closed disposal sites

Closed and abandoned landfills litter the state and pose potential risks to human health and the environment. The following is an inventory of the permitted, operating, abandoned, and closed disposal sites in Clark County, WA. This inventory is limited to the historical information available; accuracy is not guaranteed. **The rows in bold are actively monitored by the Clark County Solid Waste Enforcement program.**

Landfill name	Operations	Location	Comments
79th Street Landfill (Hallstrom Landfill)	**to 1989**	**78th St. east of 94th Ave.**	**Clarifier solids (Boise Cascade) and CDL — including tires. Currently under post-closure permit through CCPH. Gas collection and groundwater monitoring.**
Al Angelo's Landfill	late 1960s	NE 18th St., near Evergreen High School	None
Alcoa-Vancouver	Unknown	5701 NW Lower River Road	***Cleanup complete. Active O&M/monitoring***
Allied Chemical Corporation (General Chemical Corp Vancouver Works)	Unknown	West 26th St.	***Awaiting cleanup***
Bill Fleming site	Unknown	5600 NE 78th St.	None
Bridges Dump site	Unknown	4200 NE 62nd Ave.	None
Camas Landfill	1920s to 1950s	Near Camas High School	Residential and industrial waste
Carl L. Meyer site	Unknown	2818 NE Cherry Road	None
Cherry Grove Landfill	1963 to 1975	NE 249th St. near NE 92nd Ave.	Originally closed in 1970 by order of Southwest Washington Health District. ***No further action.***
Circle "C" Landfill	**to 1990**	**31313 NW Paradise Park Road, Ridgefield**	**Closed limited purpose landfill. Currently under post-closure permit through CCPH. Gas collection and groundwater monitoring through 2022. The landfill is currently the focus of site assessment work under a Brownfields grant obtained by the City of Vancouver in conjunction with Clark County.**
Clark County Landfill I	1920s to 1940s	NE 192nd Ave. near SE11th St.	Filled old gravel pit
Clark County Landfills II and III	mid 1970s	SE15th St. & SE164th Ave	Filled two gravel pits
Columbia Pest Control Dump	Unknown	8405 Calef Road	Site reported to Ecology as potential hazardous substances site
County Dump site	Unknown	Hazel Dell Road	Waste dumped in a large pit
Dewils Industries Dump	Unknown	6307 NE 127th Ave.	None
Dietrich Demolition Pit	1950s to 1992	11034 NE 117th Ave.	Operator ceased accepting waste in March 1992. Closed CDL Landfill
Doyle Gravel Pit	Unknown	NE 142nd Ave.	None
English Pit Landfill	1940 to 1979	192 NE 92nd Ave.	MSW Landfill site has received "engineered" final cover. Gas and groundwater monitoring program terminated in 2010.

Landfill name	Operations	Location	Comments
Fort Vancouver site	1845 to 1930	Covered by intersection of Highway 14 and I-5	Probably the first landfill in Clark County
George Sellinger Landfill	Unknown	25212 NE 77th Ave.	None
Hillside (Nieme) Landfill	mid-1970s	Nieme Road	None
International Paper Landfill	1954 to 1979	Healy Road in Amboy	Site ranked by Ecology as "Contaminated". ***Awaiting cleanup***
Kelly Road Landfill	Unknown	NE Kelly Road	Filled old gravel pit
Lady Island (James River Wood Waste Landfill) (Georgia-Pacific (GP)-Camas)	**1987 to currently open and operating**	**Lady Island, Camas**	**Fiber Mill wastes. Private landfill, currently under Limited Purpose Landfill permit through CCPH. Gas collection and ground water monitoring.**
Larch Mountain site	Unknown	15314 NE Dole Valley, Yacolt	Site ranked by Ecology as part of toxics cleanup program, due to confirmed presence of hazardous substances. ***Cleanup started.***
Leichner Landfill	**1937 to 1991**	**9411 NE 94th Ave.**	**Currently under post-closure permit through CCPH. Gas collection and groundwater monitoring; purchased by Clark Co. in 2012; a master plan for the landfill site was approved in 2019. The landfill is a cleanup site under MTCA, and is currently in performance monitoring to confirm that the cleanup action has attained cleanup standards.**
Leonard Ek	Early 1990s	15800 NE 99th Ave.	5-acre gravel mine filled w/unknown demolition waste
Pacific Wood Treating	1979 to 1983	3700 NW 289th St. Ridgefield	***Cleanup started***
Plew's Disposal (Turnbull Landfill)	1960s to 1974		***No further action.***
Roy Elmer Landfill	1930s to 1970s	27000 NE 269th St.	Ravine filled with waste
Rufener Landfill (a.k.a. Boise Cascade Landfill, Fruit Valley Landfill, Portside Landfill)	Unknown	NW Lower River Road, Vancouver	Landfill was transferred to Laframbois Properties, LLC; solid waste handling permit and financial assurance expired; property sold to 2600 LLC in Aug. 2013; all parties entered into a Consent Decree; Landfill was decommissioned in 2017 and redeveloped for industrial use.
Toftdahl Drum site	Unknown	22033 NE 189th St., Brush Prairie	***No further action.***
Vancouver Barracks and Veterans Hospital site	Unknown	under I- 5	Wastes from the Vancouver Barracks and Veterans Hospital. ***No further action.***
Vancouver City Landfill 1	1951 to 1953	North of Fourth Plain & west of Clark County Building	Student housing built over and/or in the area
Vancouver City Landfills 2 and 3	1934 to 1937	North of 39th St. near "S" St	None
Walz Demolition	to 1988	NE Sixth St. near Garrison Square	Filled old gravel pit — closed CDL Landfill gas monitoring

Adapted from Issue Paper #9: Landfills, prepared by the Ground Water Advisory Committee of the Intergovernmental Resource Center in August 1990. Updated in 2024 referencing the Ecology *All Cleanup Sites in Washington State* database.

H

APPENDIX H:
Siting guidelines for solid waste handling facilities

Introduction

The siting guidelines for solid waste handling facilities contained in this appendix and incorporated into the comprehensive solid waste management plan (CSWMP) update consists of the following four sections: Facility categories, General consideration, General siting process, Public information and involvement program. The section on facility categories establishes standard definitions and categories for handling facilities that may be sited in Clark County in the future. The definitions also identify types of handling facilities that are not recommended by this CSWMP or are recommended only as an essential public facility. The general locational considerations section establishes the potential physical, environmental, and institutional impact areas that must be considered and specifically addressed in the siting process for each type of facility. The third section on generic siting process establishes a standard sequence of activities for investigating and selecting a solid waste handling facility site. The last section on public information and involvement program establishes recommended guidelines for communicating with and involving the public and the affected local community in the site investigation and selection process.

To carry out their solid waste management planning responsibilities, the county, and the participating cities in this CSWMP must provide for the proper and uniform development of handling facilities to meet future solid waste management needs. The selection and community approval of a site is often the most public, controversial, and difficult step in the overall development process.

The siting guidelines described in this appendix are applicable to potential facilities that are being either publicly or privately developed. The siting guidelines include, by reference, any locational criteria or location related design requirements established by the federal ***Resource Conservation and Recovery Act*** (RCRA—Subtitle D), the state Solid Waste Management — Recovery and Recycling Act (***RCW 70A.205***), state for Solid Waste Handling Standards (***WAC 173-350***), and Criteria for Municipal Solid Waste Landfills (***WAC 173-351***).

These siting guidelines are intended to promote a proper and uniform siting process that can be consistently applied throughout all participating local government jurisdictions in Clark County. These guidelines will provide resource for environmental agencies and the public with the assurances that the siting process will consider all relevant factors and site selections will be made from an objective basis. In addition, the guidelines will identify how the public, the local community, potentially impacted parties, and others can provide input into the siting process.

The siting process covered in these guidelines includes both the initial site investigations leading up to the selection of a specific site and the public involvement and education activities associated with these initial investigation activities. Land use permitting (with the local government jurisdiction), solid waste facility permitting (with the jurisdictional health department) and other permitting activities, are not directly covered by these guidelines.

Planning for and siting a solid waste facility is an integrated part of the county's waste management strategy and this CSWMP. Planning for future facilities incorporates and utilizes the county programs for waste prevention, recycling, and recovery of waste; capacity at existing contracted solid waste facilities; and capacity at private waste and recovery facilities.

Facility categories

This section defines and establishes standard categories for solid waste handling facilities. These definitions and categories are listed below. Note that no facility category or definition has been established for recyclable materials receiving centers that accept only source-separated materials. This plan recommends that no privately owned and operated inert waste landfills or limited purpose landfills be sited in the county. Any municipal solid waste landfills to be sited in the county will be a part of the regional solid waste management system, specifically recommended by the CSWMP, and designated as an essential public facility. Such a landfill could be opened to assist in response to a disaster or major event. In 2006, US Environmental Protection Agency (EPA) designated the Troutdale Aquifer (which underlies much of Clark County) as a ***Sole Source Aquifer***. This designation greatly inhibits the likelihood that any landfill will be sited in the county for any purpose.

- **Conditionally exempt small quantity generator collection facility.** A facility that receives, sorts, temporarily stores, and processes for safe transport extremely hazardous waste and dangerous waste from conditionally exempt small quantity generators.
- **Household hazardous waste collection facility.** A facility for receiving, sorting, temporarily storing, and processing (for safe transport) household hazardous waste from residential generators.
- **Inert waste landfill.** A land disposal site for receiving and disposing of inert materials only as defined in WAC 173-350.
- **Limited purpose landfill.** A land disposal site for the receiving, sorting and disposing of limited types of solid wastes (other than unseparated municipal solid wastes) including, but not limited to, asbestos, treated and untreated petroleum contaminated soils, construction, demolition, and land clearing wastes, wood wastes, treated sludges from municipal and industrial processes, and other waste requiring special handling, as defined in WAC 173-350.
- **Mixed construction, demolition, and land clearing waste recycling facility.** A facility that receives, temporarily stores, processes, and recovers recyclable materials from mixed construction, demolition, and land clearing wastes, wastes for reuse, sale, or further processing.
- **Mixed municipal solid waste landfill.** A land disposal site for the receiving, sorting, and disposing unseparated municipal solid wastes.
- **Municipal solid waste storage facility.** A facility, not open to the public, where sealed containers are received, stored up to 72 hours, staged, and/or transferred from one transportation mode to another.
- **Petroleum-contaminated soil processing facility.** A facility that receives and processes petroleum contaminated soils to remove contaminates through chemical, biological, or other treatment methods.

- **Resource recovery facility.** A facility for receiving, temporarily storing, and processing solid wastes to obtain useful material or energy.
- **Small-scale specialized incinerator.** A relatively small-scale facility that receives, processes, temporarily stores, and burns a separated special solid waste material, including, but not limited to, incinerators for disposal of infectious wastes, municipal and industrial sludges, and other waste requiring special handling.
- **Solid waste composting facility.** A facility that receives, temporarily stores, and processes solid waste by decomposing the organic portions of the waste by controlled biological means to produce useful products, including, but not limited to, compost, mulch and soil amendments.
- **Solid waste transfer station.** A facility that receives, processes, temporarily stores, and prepares solid wastes for transport to a final disposal site, with or without materials recovery before transfer.
- **Wood waste recycling facility.** A facility that receives, temporarily stores, and processes untreated wood, scrap lumber, timbers, and natural wood debris (e.g., logs, limbs, and tree trunks) into products such as hog fuel, fuel pellets, chips, or fireplace logs.
- **Yard debris collection facility.** A facility that receives yard debris for temporary storage, awaiting transport to a composting or processing facility.
- **Yard debris processing facility.** A facility that receives, temporarily stores, and processes yard debris into a soil amendment, mulch or other useful product through a chipping, screening, or grinding process other than biological decomposition (composting).

General considerations

Consideration must be given to the physical, environmental, and institutional impact areas that need to be specifically addressed for each category of handling facility. No specific locational standards or requirements are established as part of these guidelines except those federal, state, and local siting restrictions already in existence. Instead, these guidelines establish potential impact areas for each type of handling facility that must be specifically considered and evaluated as part of the siting process.

An integral part of a siting process is public input and involvement. Public involvement takes places during the entire process. Guidance for ensuring public participation is discussed in the public information and involvement program section below. The EPA has many resources and documents to help with siting and public involvement of solid waste facilities. These resources are available online; a few are listed below:

- *Waste Transfer Stations: Involved Citizens Make the Difference (EPA530-01-003)*
- *Waste Transfer Stations: A Manual for Decision-Making (EPA530-R-02-002)*
- *Criteria for Solid Waste Disposal Facilities A Guide for Owners/Operators (EPA530-SW-91-089)*

General siting process

The primary goal of the solid waste handling facility siting process described in this appendix is to provide decision makers with a choice of sites that maintain solid waste service levels, are environmentally acceptable, are feasible from an engineering and cost perspective, and are acceptable to the local community and public. This generic approach has been developed with uniform procedures that will result in an efficient and streamlined process and will provide for the proper comparisons of alternative sites.

The process begins with the development of "facility-specific" site screening criteria, as outlined in Step 1. Possible sites are then identified and screened with clearly unsuitable sites dropped from further consideration. This leads to preliminary feasibility and environmental evaluations on the reduced number of candidate sites. For publicly developed facilities, the evaluations may produce a preferred set of alternatives for the jurisdictional local government to pursue for development. For privately developed facilities, that same process should be followed with the lead permitting agency for the jurisdictional local government coordinating the development of the site screening criteria and assisting in the selection process.

No facility siting process should proceed unless a demonstrated need or recommendation exists in the most recently adopted solid waste management plan update. If the need or recommendation is not in the current solid waste management plan, the need must be demonstrated and recommended by the jurisdictional local government to be included in the CSWMP. A plan amendment must be adopted before proceeding further in the siting process.

There are eight steps in the siting process:

- Step 1: Submit a notice of intent to site solid waste handling facility
- Step 2: Development of site screening criteria
- Step 3: Candidate site identification
- Step 4: Broad site screening
- Step 5: Focused site screening
- Step 6: Comparative site evaluations
- Step 7: Developer and local government decision making
- Step 8: Environmental review and permitting process

Step 1—Submit a notice of intent to site solid waste handling facility

Before beginning the siting process, the developer should formally notify the local government jurisdiction ***Clark County Solid Waste Enforcement*** and the ***Solid Waste Advisory Commission (SWAC)*** of their intent to begin the siting process. This notification will provide the local government with the lead time required to properly respond to the needs and effects of the siting process and trigger the public involvement process of the affected local governments.

Step 2—Development of site screening criteria

The facility developer and the jurisdictional local government should establish a set of site screening criteria to eliminate candidate sites with "fatal flaws" and rank sites with the highest potential for successful development. These criteria should be specific to the facility category being sited and should consider those impact areas identified in exclusionary siting criteria below. The criteria should also reflect the standards established in Resource Conservation and Recovery Act (RCRA)—Subtitle D, Revised Code of Washington (RCW) 70A.205, Washington Administrative Code (WAC) 173-350 and 173-351, and any other applicable federal, state, or local laws and regulations. Site screening criteria is discussed in more detail below.

Step 3—Candidate site identification

The level of effort expended by the developer in identifying possible sites should depend upon the size and type of facility being sited as well as the nature of the service area. However, a considerable effort should be made countywide to inform citizens and businesses that a facility siting effort is under way and that the developer will be accepting nominations for possible sites. These nominations will allow sites that have other ongoing or temporary uses (that might not otherwise be considered) to be included as candidate sites.

Large landholders (such as the county, cities, federal and state agencies, major commercial enterprises, and institutions) with potential land parcels appropriate in size and zoning for the intended facility can be contacted directly or through letters of inquiry. Also, real estate firms dealing in appropriate land parcels can be sent a letter of inquiry and a site selection criteria report. Other sources for identifying candidate sites include previous siting studies, use of former and present waste handling sites, aerial surveys and inventories, and countywide listings of land parcels with GIS programs.

Step 4—Broad site screening

During this initial screening step, the strategy should be to quickly evaluate candidate sites using both the siting criteria and preliminary descriptions of each of the sites. Site-screening criteria may include regulatory, environmental, physical, land use, and other locational factors. The outcome of Step 4 is a prioritized list of candidate sites. In addition, Step 4 will also identify those sites with clear fatal flaws that should be eliminated from further consideration. Depending on the number of higher ranked sites, a decision may be made to drop the lower-rated sites from subsequent Step 5 evaluations.

Step 5—Focused site screening

Step 5 will further evaluate and re-rank, as necessary, the remaining candidate sites. These evaluations may require additional field investigations, conceptual facility planning, and environmental studies. As in Step 4, the intent is to examine sites for characteristics which would preclude them from further consideration before in-depth site evaluations are performed. SWAC will review and recommend the highest ranked sites and the number that should be carried forward to the detailed comparative evaluations in Step 6.

Step 6—Comparative site evaluations

Step 6 further evaluates and directly compares the remaining candidate sites based on their ability to satisfy facility-specific siting criteria, community-specific criteria, operational requirements, and potential impacts on the surrounding environment. Step 6 is somewhat more qualitative than Steps 4 and 5, with the highest-ranked sites re-examined from environmental, constructability, operational, cost, land use, and public policy perspectives in a final feasibility appraisal. In this and later steps, the screening criteria should not be exclusively utilized. Instead, all site related characteristics and impacts should be considered and assessed. SWAC will be involved in this evaluative process.

Step 7—Developer and local government decision making

The potential developer of the facility and the local government jurisdiction should then select a preferred site for consideration for permitting by the governing body of the local jurisdiction. If the preferred site is acceptable, the local government should support the permitting process, if necessary.

Step 8—Environmental review and permitting process

As a part of the handling facility siting permit process, an environmental review must be done as a part of the ***SEPA*** process. A SEPA determination is to be made by the permitting jurisdiction. This environmental review process will be used to establish the potential environmental impacts of the candidate site. This may require the preparation of an ***Environmental Impact Statement*** depending on the level of determination issued by the reviewing jurisdiction and whether the project will generate significant adverse environmental impacts.

Acquisition of necessary state, local, and federal permits must be completed once a specific site is selected. Potential problems in permit acquisition should be identified and resolved as early as possible in the siting process. However, if a permit is deemed unobtainable at any point in the process, the second or third ranked sites can be pursued for development.

Public information and involvement program

A sound public information and community involvement program is vitally important to successful solid waste facility siting efforts. Such a program must be tailored to fit the size and category of facility and the intended service area. A siting process includes continuous public participation to integrate community needs, concerns and influence the decision-making process. Addressing public concerns is also essential to building integrity and instituting good communications with the community. The community should be informed as to why a solid waste facility is needed. Technical information and assistance in understanding the information should be provided. Information should be relayed in various formats and should consider language barriers, literacy levels and preferred types of communications. The public needs to know why a facility is needed and what the consequences will be if no facility is sited. The public needs information about the alternatives to choose between and need to know the facts about a proposed decision to decide whether or not they support it.

There are five steps in the public involvement process:

- Step 1: Identify who and why
- Step 2: Determine the information needed
- Step 3: Identify the interest groups and organizations with whom the information must be exchanged
- Step 4: Describe any special circumstances that could affect selection of public involvement techniques
- Step 5: Identify appropriate techniques and their sequence to accomplish the information exchange

Step 1 — Identify who and why

Different groups and interests will participate at different stages in the siting process, with different levels of interest and intensity of involvement. For each stage of the process, staff should identify the public involvement objectives. Objectives will be determined by deciding what is to be accomplished with the public during this step in the siting process.

Step 2 — Determine the information needed

Each step of the siting process will have different information needs. An exchange of information includes what information the public needs to participate and what the county needs to ask to solicit information about the process.

Step 3 — Identify the interest groups and organizations with whom the information must be exchanged

Interest groups and organizations for each stage of the siting process must be defined. Reviewing the kind of information needed from the public at each step will help define who should be involved.

Step 4 — Describe any special circumstances that could affect selection of public involvement techniques

Special circumstances may change during the course of the process. A periodically review of the public involvement strategy is necessary and the strategy may adapt to changing circumstances. Example of special circumstances may include: the site may be in an area a short distance from a school or dust may be of concern for communities that believe they experience unusually high asthma rates.

Step 5 — Identify appropriate techniques and their sequence to accomplish the information exchange

The preceding steps provide the information to complete this step. Some of the major techniques for communicating with the public include briefings, feature stories, news conferences, newsletters, newspaper inserts, news releases, paid advertisements, presentations to civic and technical groups, press kits and public service announcements. Forums though which the public can express feelings, thoughts or concerns include advisory groups/task forces, focus groups, hotlines, interviews, hearings, meetings, workshops and polls.

Depending on the specifics of the siting process, the following elements should be used in the public involvement process:

- **Early notification.** The public and local communities, including affected advisory committees and business groups, should be notified as soon as the intention for siting a facility has been reviewed and determined by policymakers. The public and community should be informed of the goals, procedures, and timeliness of the process as well as when the facility would be constructed and become operational.
- **Appoint a project contact person.** A single, designated contact person affiliated with the project should be appointed and made known to the public. This individual will ensure that consistent, correct information is given out and that the public and media know the sources of accurate information.
- **Update the public.** Meetings, newsletters, press releases, and other information mechanisms should be used to provide status updates to the public on a regular basis. It is unlikely that too much information about a potential project will cause problems. However, too little information can often cause surprises that lead to problems.
- **Provide opportunity for public interaction and input.** During development of the siting criteria, identification of sites, and candidate site screening activities, the public and local community should be given opportunities to provide input. These opportunities include providing comment on siting criteria; allowing the public to nominate potential sites; and providing information about potential and screened sites, including those features which the public views to be unfavorable.
- **Despite extensive public information efforts, public response and participation may be initially low.** However, as the siting process continues and candidate sites are further evaluated and the number of sites is reduced, citizens may respond that they were not informed of the siting effort or given opportunity to participate in the process. Public information and involvement activities will not eliminate these types of complaints, but reasonable efforts will keep these responses to a minimum.
- **Utilize appropriate facilities and materials.** Public meetings should be staffed with persons knowledgeable about the siting process. Meeting facilities should be of a size and layout that all persons attending can see and hear speakers. It is better to overestimate the number of attendees rather than underestimate the number that will attend an informational meeting to provide adequate seating. In addition, attendees may be unhappy with the siting process, so materials and speakers should be provided that are even-tempered, objective, and conciliatory.

- **Acknowledge site- and program-specific concerns.** Site- and program-specific concerns will emerge as the siting process unfolds. Programmatic concerns that relate to broad questions of the efficiency and appropriateness of the technology to be used and management priorities will predominate in the early phases of siting process. Local community groups that form in and around individual candidate sites will articulate the concerns of many individuals through a few leaders and form an important part of the public information and involvement effort. As the process continues, local groups with site-specific focuses will be joined by individuals and organizations with more programmatic interests and focuses. It is important to acknowledge the different types of concerns so that presentation materials can be developed in response to both types of concerns.

Siting criteria

Criteria should be developed for identifying and evaluating potential sites. Three categories of criteria are applied during various stages of the siting process. These are exclusionary, technical, and community-specific criteria. It is important to note that no site may meet all the criteria, in which case, each criterion's relative weight and importance should be considered.

Exclusionary siting criteria

Exclusionary criteria are often defined by federal, state or local laws or regulations and might include such areas as:

- Wetlands and floodplains
- Endangered and protected flora and fauna habitats
- Protected sites of historical, archeological or cultural significance
- Prime agricultural land
- Parks and preserves
- Proximity to airports

Technical criteria

Technical criteria are used to ensure that sites selected for evaluation meet required engineering, operational and transportation needs. These criteria address the following issues:

- Central location to collection routes
- Access to major transportation routes
- Site size requirements
- Sufficient space for on-site roadways, queuing and parking
- Truck and traffic compatibility
- Ability for expansion
- Space for recycling, composting and public education
- Buffer space
- Gently sloping topography
- Access to utilities
- Zoning designations and requirements

Community-specific criteria

Community-specific criteria address impacts that the facility may have on the surrounding community. These criteria are typically less technical in nature and incorporate local, social and cultural factors. Examples of these criteria include:

- Environmental justice considerations
- Impact on air quality
- Impact on the local infrastructure
- Adjacent land uses
- Proximity to schools, churches, recreation sites, and residences
- Prevailing winds
- Number of residences impacted
- Presence of natural buffers
- Impacts on existing businesses
- Expansion capability
- Buffer zones and screening measures
- Traffic compatibility
- Impact on historic or cultural features
- Impact on neighborhood character

First, exclusionary criteria are applied to potential sites. Once unsuitable areas are eliminated, the technical criteria and community-specific criteria are applied to all remaining options. Information for each potential site should be developed so the sites can be ranked. Based on the ranking, the top two to four sites should undergo more rigorous analysis to determine technical feasibility and compliance with the environmental and community objectives.

I

APPENDIX I: Regional Solid Waste System Study Final Report

Regional Solid Waste System Study

Phase 2 Report: Regional System Facilities Plan

July 31, 2023

Final







Prepared for

Environmental Health

JRMA

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Appendix B: Basis of Master Plans: West Vancouver Materials Recovery Center, Central Transfer and Recycling, Washougal Transfer Station

Appendix C: CIP Spreadsheet

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Chapter 1 – Introduction

Regional Solid Waste System Study (RSWSS) Phase 1 Report, completed in October 2021, provided a comprehensive assessment of the County's transfer stations and recycling infrastructure. It resulted in identifying the needs and opportunities to make necessary improvements in the current infrastructure and investments necessary to provide the capacity to cost effectively manage waste over the next 20 years. It also included an evaluation of alternatives for serving fast growing areas of the County, the north/central portion of the County, a feasibility analysis for new materials recovery facility, and thorough financial analysis of the current cost of services.

Considering the findings and recommendations of the Phase 1 RSWSS, Phase 2 provides a more detailed analysis of the necessary system improvements using updated waste projection data based on the recently released 2020 census. This resulted in preparing facility master site plans for each of the three transfer stations. The investments for each facility are focused on short-term needs over the next five to seven years. Construction cost estimates have been updated and are presented in a six-year capital improvement plan (CIP).

Additionally, the master plans identify the investments needed to build out the facilities to meet future growth. Several of these investments depend on decisions with options to serve the north/central part of the County currently served by Central Transfer and Recycling Station (CTR). These options were described in Phase 1 RSWSS and updated in this Phase 2 Facilities Plan (Facility Plan). The County will need to decide a course of action prior to making major improvements to serve that portion of the County.

Likewise, major investments in the West Vancouver Materials Recovery Center (West Van) facility are dependent on a decision whether to relocate and build a new materials recovery facility (MRF). The Facility Plan includes a financial plan that demonstrates how future investments can be funded.

Chapter 2 – Summary of Phase 1

2.1 Background of Phase 1 RSWSS

Phase 1 RSWSS provided a comprehensive assessment of current operations and conditions of existing infrastructure. The facility conditions assessment found that generally the transfer station primary structures are in satisfactory to good condition with some minor improvements needed. However, the assessment of the operating conditions indicates that each of the three transfer stations needs significant modifications and expansions to efficiently handle the increased customer traffic and amount of waste received each day. Notably, since 1992 when the County began operating the transfer stations and loading containers to barge waste for disposal at the Finley Butte landfill in eastern Oregon in 1992, the population has increased by more than 100%. No major improvements have been made to either CTR or West Van transfer stations since then. The one change to the system occurred in 2009, when the third transfer station was constructed at the Port of Washougal, however, this facility will also need to be expanded.

During the preparation of the Phase 1 Report, the County entered negotiations with Columbia Resource Company (CRC), a wholly owned subsidiary of Waste Connections Inc., to extend the contract for operating the transfer station system. A key element of these negotiations was the decision on whether the County should execute its right to purchase and own the transfer station system. The current contract provided a second five-year extension until December 31, 2026. Due to timing considerations, the County and CRC initially extended the contract for one year to carry out further negotiations. The contract has been extended until December 31, 2027.

As part of the Phase 1 scope of work, the consultant team prepared an evaluation of the ownership options comparing the advantages and disadvantages of various institutional arrangements for ownership and operations of the transfer station system. The County has stated they are not interested in ownership of the MRF and would prefer it to be relocated to another site. The decision regarding ownership is under consideration.

2.2 Summary of Findings – Capital Improvement Needs

The Phase 1 RSWSS Report provides a list of key findings for the County and cities to make decisions on regarding building the facilities needed to manage the region's solid waste system and recyclables for the next 20 years. Although the three transfer stations have been well maintained, there have been no significant investments at either CTR or West Van in nearly 25 years.

The past 10 years the amount of waste being generated increased from 230,000 tons in 2010 to nearly 400,000 tons per year in 2020, an increase of 75%. The Office of Financial Management (OFM) projected Clark County may grow to as much as 612,000 population or 22% by 2035 (data from Phase 1 RSWSS Report is based on previous census information). OFM released new 2020 census data that shows the 2040 population is now estimated to increase to almost 720,000 by 2040. This will be discussed in the Updated Population Projections section of this report.

CTR receives 60% of all the waste generated in the County and has the largest number of self-haul customers. CRC recently completed a modification to improve the entrance to the CTR facility. This will improve the safety of ingress and egress for customers onto Hwy. 503. However, more improvements are needed to eliminate offsite queue problems and to increase transfer station capacity.

CTR not only receives the largest amount of waste currently, but it is located such that it serves the central and north part of the County, which is expected to have the largest growth over the next 20 years. Thus, the Phase 1 Report evaluated several options to meet this need. This includes expanding CTR on the adjacent parcel owned by Waste Connections of Washington (WCW) or perhaps building a new transfer station elsewhere in the region. Part of the rationale to relocating the facility is related to issues with access off Hwy. 503 and the transition of the adjacent property from rural commercial to residential uses.

Specific RSWSS Phase 1 Report findings include:

1. The County will need to decide on a long-term solution for serving the north central part of the County either by planning further expansion of CTR and/or by siting a new transfer station.
2. Over the next 10 years the County and its partners will need to invest an estimated $25 million (M) to $50M to upgrade and expand the existing transfer stations and MRF. The broad range is created by the fact that the County could decide to replace CTR and build a new transfer station.
3. Phase 1 of the CTR improvements include extending the inbound traffic lane and adding a new scale on the property's west side. The improvements will eliminate inbound customer traffic from queuing onto Hwy. 503. This could also include building an access ramp to the south end of the existing transfer station. This improvement is estimated to cost about $3M assuming the underlying soil conditions of the adjacent west property are acceptable.
4. Improvements to upgrade and expand the Washougal Transfer Station will need to be made over the next five years.
5. CRC has made some initial improvements to the West Van MRF processing system that will enhance system performance. A new processing system will be needed for the long term.

Note: Cost estimates for specific improvements have been updated in this Facility Plan.

The three transfer stations operating today were not designed to handle the current volume of traffic and waste quantities being received. Decisions to make improvements have been stalled by the current contractual arrangements with CRC. The County notified CRC of their intent to extend the operating contract for five years as stipulated in the current agreement. No decision has been made regarding the question of ownership. The County has the right to purchase the transfer stations by notifying CRC prior to December 31, 2027.

2.3 Findings - Financial Analysis to Address Capital Improvements Needs

In completing the Phase 1 Report, the JRMA consulting team completed a review of the total cost of operating the regional system. Working in cooperation with CRC, the financial analysis examined the current cost of operating the system for 2019. The purpose was to determine the actual cost of just operating the transfer station and recycling facilities. The financial review was conducted within the guidelines provided in the contract between the County and CRC. The analysis provides information that will enable the County to evaluate impacts on rates for making capital improvements.

1. The total operating cost for the three transfer stations is reported to be $8.9M in 2019. This includes full services from operating the gatehouses, managing traffic and waste volumes, and loading transfer trailers. It also includes CRC's internal transport operations to shuttle boxes and stage rolling stock and maintaining the physical infrastructure of each facility. It does not include long haul transportation to either the Wasco Landfill in The Dalles, Oregon by truck or the Finley Butte Regional Landfill in Boardman, Oregon by barge.
2. Based on the financial information provided it appears that the transfer stations have been fully depreciated. However, there may be some equipment that CRC is still depreciating.
3. Based on these financial conditions, the current operating margin, which is revenue in excess of direct and indirect operating expenses, is about 44%. Assuming facilities have been fully depreciated and paying an operating margin of 15%, the current rates generate about $5M/year that could be allocated to make capital improvements at the facilities. Over a ten-year period, this would generate approximately $50M.

4. Establishing a dedicated capital improvement fund from funds generated from current rates may negate or significantly reduce the need to borrow monies or raise rates for the needed capital improvements.

2.4 Phase 1 Recommendations

The Phase 1 Report identified three scenarios for developing the infrastructure needed to meet the needs of the solid waste system for the next 20 years. In addition to the capital improvements required for the system, it provides the background information necessary to understand the critical issues related to the current contract extension and system ownership. Listed below are key recommendations.

1. The County should establish a fair operating margin to compensate CRC for continuing with operations of solid waste facilities for the next five years or for a set period to be determined.
2. Revenues generated in excess of the cost of services plus the established operating margin should be remitted to the County. The remitted revenues will be encumbered for future solid waste system facilities and improvements.
3. The County should establish a facility Renewal and Replacement (R&R) evaluation process and a dedicated fund that will maintain system assets.
4. The County should approve funds for implementing Phase 1 of the CTR site improvements to eliminate any potential for inbound customers from queueing onto the public right of way on state Hwy. 503. The improvements include extending the entrance road and new scale onto the adjacent property located west of the current transfer station. Details of these improvements should be negotiated as part of the contract extension.
5. The County should establish a minimum rate for all customers using the transfer stations. Under the current tip fee policies, customers that bring less than 300 lbs. are not paying the cost of services. Implementing this policy may also provide an incentive to subscribe to regular collection services or cause customers to make fewer trips by consolidating their loads.
6. The County should extend the hours of operations at both the West Van and Washougal.

The results of the Phase 1 Report have detailed specific operational and master planning questions that need to be addressed as part of completing the CIP.

The key questions to be answered are as follows:

1. Should CTR continue to operate as the primary transfer station over the next 20 years or should a new transfer station facility be built?
2. Should the MRF continue to operate at West Van or should the MRF be sited at a more central location to where materials are generated, thus reducing overall collection and transportation costs, and using the vacated space for other system needs?

There were also additional recommendations to be addressed in the Phase 2 Report or in a future work plan as follows:

1. Complete the search to locate a new transfer station to serve the north/central parts of the County. The siting study should identify the preferred site for building a new station.
2. Complete subsurface investigations on the property west of CTR to determine the conditions or limitations for consideration of the option to expand CTR.
3. Complete a detailed plan for expanding the Washougal Transfer Station.
4. Complete the Renewal and Replacement (R&R)/CIP financial plan for the regional system.

Recommendations 3 and 4 above were included in the JRMA's work scope for the Phase 2 Report. These master plans will identify improvements to be constructed over the next five to seven years and should be incorporated into the longer-term master plans to complete improvements and expansions as required to provide service over the next 20 years. A CIP will be prepared using the specific projects identified in the Facility Plan. For CTR, the County will need to review the updated cost of each option and proceed to evaluate which option to implement.

2.5 Ownership: RSWSS Task 7 – Evaluation of Ownership Options

The County is considering key contractual decisions regarding the current transfer station system and ownership structure (i.e., public ownership scenarios vs. continued private ownership and operation). These contractual decisions are framed by the current agreement for the services provided by CRC. The services include processing of residential recycling materials, operation of transfer stations, transport, and disposal at an out-of-county landfill. The original contract was renewed in 2006 for a period of ten years and provided for two five-year extensions. The second extension was for the period ending December 31, 2026. However, the County and CRC negotiated an extension to this contract to provide for operations of the transfer station system until December 31, 2027.

A Technical Memorandum and RSWSS Task 7 report on public ownership and private operation of the County solid waste system was completed in February of 2023. This document highlighted the following information.

The County contract with CRC provides the option for the County to purchase West Van and CTR stations for $1.00 with the right to purchase Washougal if the City of Washougal does not exercise the City's contractual option to purchase it. The soonest the County option can be exercised is December 31, 2027. The soonest the Washougal option can be exercised is December 31, 2027.

The RSWSS Task 7 provides an analysis of the advantages and limitations of the following ownership options for consideration:

- Owned and operated by a private company (status quo option).
- Publicly owned and operated by a private company under contract.
- Publicly owned with limited public operation (scale house only) with facilities operated by a private company under contract.
- Publicly owned and operated.

The County and cities support further evaluation of the formation of a multi-jurisdictional organization to manage the regional transfer system. The RSWSS Task 7 analysis focused on the types of organizational structures available under the Revised Code of Washington (RCW). The available options evaluated included:

- Interlocal Cooperation Act (ILA) – Chapter 39.34 RCW
- Joint Municipal Utility Services (JMUS) – Chapter 39.106 RCW
- Metropolitan Municipal Corporations (MMC) – Chapter 35.58 RCW
- Disposal District –Chapter 36.58 RCW

The Technical Memorandum also included background information related to potential implementation tasks for a public ownership model as follows:

- JMUS organizational details
- Conceptual organizational chart
- Salary ranges for staff

- Financial plan and budget considerations
- Draft implementation schedule
- Steps for implementation

At the Solid Waste Advisory Commission (SWAC) meeting on May 4, 2023, County staff recommendations were presented and voted on. SWAC adopted the following recommendations related to ownership.

- Solid waste staff recommend the County and or City of Washougal exercise the available contractual options to purchase the facilities when the option of public ownership becomes available.
- Solid waste staff recommended the option to publicly own and privately operate the regional transfer facilities under contract to be further evaluated. The evaluation should focus on the advantages and disadvantages of public operation of the scale houses versus fully contracted services.
- Solid waste staff recommend further evaluation of JMUS model. The evaluation should include an extensive stakeholder outreach and input process prior to the formation of a multi-jurisdictional organization.

The issue of ownership will continue after the completion of this report, and it is the County's intent to continue working with their elected officials and other jurisdiction to educate them on these considerations and inform them on a preferred direction.

Chapter 3 – Updated Population Projections

3.1 Background

In the Phase 1 Report, JRMA used 2010 census data to make projections for the future population increases in Clark County by 2040. Since then, the 2020 census data was released and JRMA updated its numbers to reflect the change. The 2010 census data shows the population of the County at 425,363 and projected it would grow to 488,500 by 2019. The new 2020 census data shows the population size of Clark County at 503,211 in 2020. This is an 18.3% increase in population size since 2010. Based on this information, OFM projects that by 2040 Clark County will have a population of 720,128, a 43.1% increase from the 2020 population. This data is used for forecasting how much waste may be generated in the coming years, and to ensure Clark County is prepared with well-equipped transfer stations that have the capacity to support the growing needs of the County.

Table 1 presents the updated population projections for the County based on the 2020 census as forecasted by OFM. It includes the projection of reach for the cities and the unincorporated portions of the County.

Table 1: Clark County Population Projections

Clark County Population Projections					
City or Area	**2010 Census**	**2020 Census**	**% Increase**	**2040**	**2020 to 2040 % Increase**
Battle Ground	17,571	20,743	18.05%	29,698	43.2%
Camas	19,355	26,065	34.67%	37,712	44.7%
La Center	2,800	3,424	22.29%	5,060	47.8%
Ridgefield	4,763	10,325	116.78%	16,716	61.9%
Vancouver	161,791	190,915	18.00%	272,837	42.9%
Washougal	14,095	17,039	20.89%	24,140	41.7%
Woodland (part)	0	84		119	42.0%
Yacolt	1,566	1,668	6.51%	2,344	40.5%
Incorporated Clark County:	**221,941**	**270,263**	**21.77%**	**388,625**	**43.8%**
% Incorporated:	52.2%	53.7%	2.91%	54.0%	0.5%
Unincorporated Clark County:	**203,422**	**233,048**	**14.56%**	**331,503**	**42.2%**
% Unincorporated:	47.8%	46.3%	-3.18%	46.0%	-0.6%
Clark County:	**425,363**	**503,311**	**18.33%**	**720,128**	**43.1%**

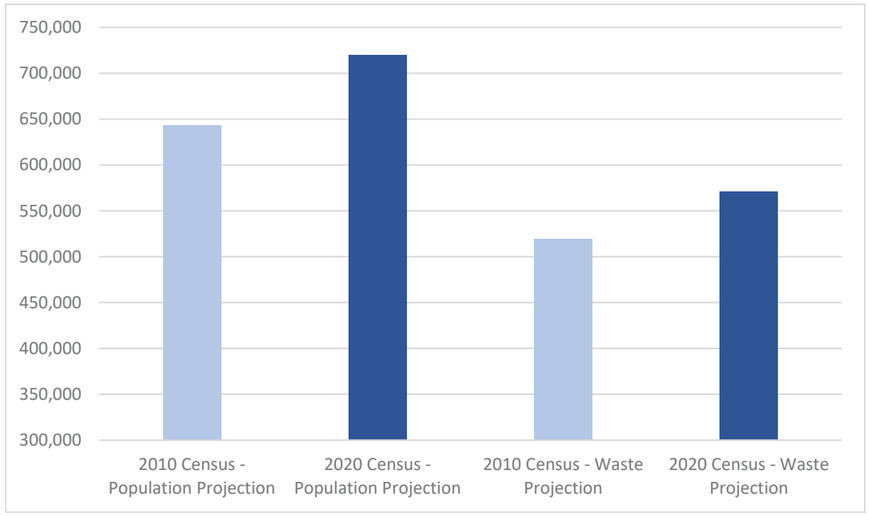
Source: Washington State - Office of Financial Management, Forecasting and Research Division

The population data was then used to update the projections of waste generated by each jurisdiction shown in **Table 2** on the next page. The projections are made by assuming each person generates on average 1,587 pounds of waste annually based on 2021 data. This generation rate was arrived at by considering past data. **Table 2** shows the estimated amount of waste that might be generated by each jurisdiction by 2040.

Table 2: Clark County – Municipal Solid Waste (MSW) Projections

Clark County – MSW Projections			
City or Area	**2021**	**2040**	**% Increase**
Battle Ground	16,790	23,565	28.7%
Camas	21,321	29,924	28.7%
La Center	2,861	4,015	28.7%
Ridgefield	9,451	13,264	28.7%
Vancouver	154,256	216,497	28.7%
Washougal	13,648	19,155	28.7%
Woodland (part)	67	95	28.7%
Yacolt	1,325	1,860	28.7%
Incorporated Clark County:	219,720	308,374	28.7%
% Incorporated:	54.0%	54.0%	0.0%
Unincorporated Clark County:	187,484	263,048	28.7%
% Unincorporated:	46.0%	46.0%	0.0%
Clark County:	**407,204**	**571,422**	**28.7%**
Note: *Projected Waste Generation Rate - 1,587 pounds/capita /yr.*			

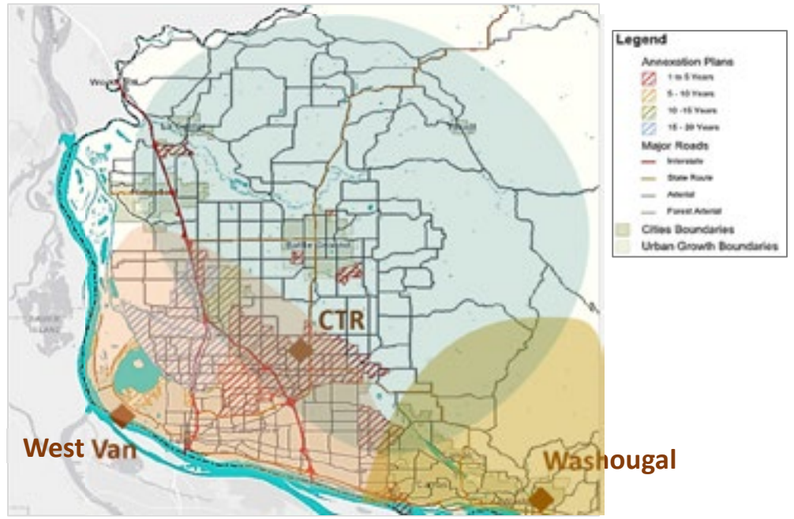
Figure 1: 2010 and 2020 Census Data Population and Waste for 2040 Projections



As shown in **Figure 1**, using the 2020 census, the population in 2040 is projected to be 12% higher or about 77,000 more than the previous projection. Consequently, the amount of waste generated is estimated to be more than previously forecasted in Phase 1.

A key to ensuring the necessary infrastructure and capacity to manage this future growth is to determine how the increase will impact the current transfer station system. In the Phase 1 RSWSS, an assessment was completed to demonstrate areas where growth is expected to occur to estimate impacts to the volume of waste received at each facility. The assessment used the County's growth management plan to prepare a map of the services areas for each station shown in **Figure 2**. These service areas are shown as circles and the crossed hatched areas are where the largest growth is expected to occur. As population increases in these assumed service areas one cannot predict precisely where collection trucks will take waste or what facility self-haulers will take their waste. Typically, customers will base their decisions on the driving time.

Figure 2: Map of County with Annexation



Based on the County's growth management plan, a large portion of the growth is expected in the central and northern cities of Ridgefield and Battle Ground. **Table 3** on the next page was prepared for estimating the amount of waste that each transfer station may receive. Much of the growth is expected in the urban growth boundary as shown in the crossed hatched areas. To provide a range of these future waste projections it is assumed that between 50% and 70% of the growth will impact the north services area or what might be received CTR. The difference largely would use West Van. Growth in the eastern part of the County serviced by Washougal is expected to be the same under either assumption.

Table 3: Estimated Transfer Station Service Area Waste Projections

Transfer Station Service Area	Assuming 50% UGB Growth in Central Area			Assuming 70% UGB Growth in Central Area		
	Population	% Change of Waste	Additional Waste (TPY)	Population	% Change of Waste	Additional Waste (TPY)
Service Areas						
Growth in City of Vancouver in North/Central County	40,961		41,780	57,706		58,860
Growth in Unincorporated North/Central County	49,227		50,212	49,227		50,212
Growth in North Cities	26,968		27,507	26,968		27,507
CTR Service Area:	**117,156**	**54%**	**88,734**	**133,901**	**62%**	**101,416**
Growth in City of Vancouver (25% of City & County)	20,840		21,257	20,480		20,890
Growth in unincorporated East County – Assume 20%	19,112		19,494	19,112		19,494
Growth in East Cities	18,748		19,123	18,748		19,123
Washougal Service Area:	**58,700**	**27%**	**44,459**	**58,340**	**27%**	**44,187**
West Van Service Area:	**40,961**	**19%**	**31,024**	**24,576**	**11%**	**18,614**
Total:	**216,817**	**100.0%**	**164,217**	**216,817**	**100%**	**164,217**

As shown above, the additional amount of waste expected to be received at CTR over the next 20 years may vary from 88,000 tons per year to more than 101,000 tons. Likewise, the additional waste to be received at West Van would inversely vary from a high of 31,000 tons to 18,000 tons per year with Washougal expected to experience about 44,000 tons more per year. In planning for the future capacity of each facility it is desirable to consider the worst-case scenario. **Table 4** below uses the service area assumptions presented in **Table 3** above to identify the worst-case scenario for how much waste may be received at each transfer station.

Table 4: Estimated Transfer Station Demand

Transfer Station Service Area	Estimated Transfer Station Capacity Analysis	
	Existing 2021 TPY	Projected Worse Case 2040 TPY
CTR Service Area	**251,847**	**353,263**
Washougal Service Area	**38,638**	**83,097**
West Van Service Area	**116,719**	**147,743**
Total:	**407,204**	**584,103**

It is understood that these are the best guesses at predicting what amount would be delivered to each transfer station as there are many factors that influence a decision on which facility to travel. The travel time for each customer and/or changes in collection practices and routes can change the location where customers will deliver waste. However, flexibility to handle variability in the amount of waste is considered in the master planning process.

3.2 Summary of Population and Waste Flow Projections

The population and corresponding waste projections have been updated from the Phase 1 RSWSS considering the impact of the new 2020 census results. OFM continues to review this data annually and therefore it is subject to change. However, this new data is the basis for projecting the amount of waste to be received and managed by the transfer station and recycling facilities. Keeping in mind the existing facilities are currently receiving significantly more customers and waste quantities than they were designed for and that no major improvements have been made since 1993. The master plans must address deficiencies in current operations as well as ensure there is capacity to manage the future waste generated in the service areas. This updated data will be the basis for preparing the master site plans to make improvements and expansions at each facility to provide safe, reliable, and cost-effective services for the next 20 years or longer.

Chapter 4 – Phase 2 Report - Update Regional Facilities Plans

4.1 Introduction

The Phase 1 transfer station assessments and needs and opportunities review resulted in developing preliminary facility plans for both CTR and Washougal. Regarding West Van, it was recommended a master plan be prepared once a decision on the future MRF has been made. Based on the stated intent of the services provider (CRC) and the County, it is assumed the MRF will be relocated to a new facility in five years. Thus, the West Van Master Plan is included in this Phase 2 RSWSS Report.

Since completion of the Phase 1 RSWSS in October 2021, a full evaluation of alternatives for serving the north service area has not been completed. Considering that further evaluation of the north service alternatives is necessary, the Phase 1 facility plans have been updated to provide information for deciding on which option should be recommended. For Phase 2, each facility has been re-evaluated considering updated waste projections.

Other factors that will impact the plans to implement improvements include the status of negotiations between the County and CRC. This includes continued discussions about the future ownership options.

4.2 Organics Management

The other factor that will impact future operations will be developing the infrastructure necessary to manage organics. In March 2022, the State of Washington passed HB 1799 that directs local jurisdictions to reduce organic materials disposed in landfills by 75% before 2030 and widely expand collection programs. Organic material includes food waste, yard debris, and wood.

Starting in 2024, businesses with at least eight cubic yards of weekly organic material will be required to have on-site management or collection service in place. By 2027, local governments will also have to offer collection services for organic waste generated by businesses.

Residential collection will be required on January 1, 2027, for every other week or at least 26 weeks a year. These collection requirements will apply to Vancouver and the areas in County just north of Vancouver. Other areas are exempt from the requirements.

In 2021, the County generated 407,204 tons of MSW. Based on a waste composition study prepared for the City of Tacoma (2014) food waste represents about 20% of MSW. This data indicates the County may have discarded as much as 80,000 tons of food waste in 2021. If 75% is removed, the County would need to find an alternative for 60,000 tons of food waste. The City of Vancouver offers a voluntary commercial food waste collection program that collects approximately 1,500 tons annually and any County resident that has yard debris service may also add food waste to their yard debris bin. There was also a little over 18,000 tons of source separated yard debris collected in 2021 at the transfer stations. The sum of the two material categories (60,000+18,000) represents an approximate 78,000 ton opportunity for the County.

The facilities plan anticipates providing space for the management of organics at all three transfer stations. The assumptions are that the County in the near term will continue to use composting as its preferred method of processing yard waste and mixed organics. The designs will also provide flexibility in the event that method was to change.

Further evaluation of the feasibility of alternatives for implementing best management practices and implementing the most cost-effective strategy for handling organics is needed. As such it is recommended that the County and its partners complete a feasibility study to determine a course of action for meeting the goals established under HB 1799. This includes considering both collections services for organics, processing, and technologies to convert organics into renewable energy and/or new products.

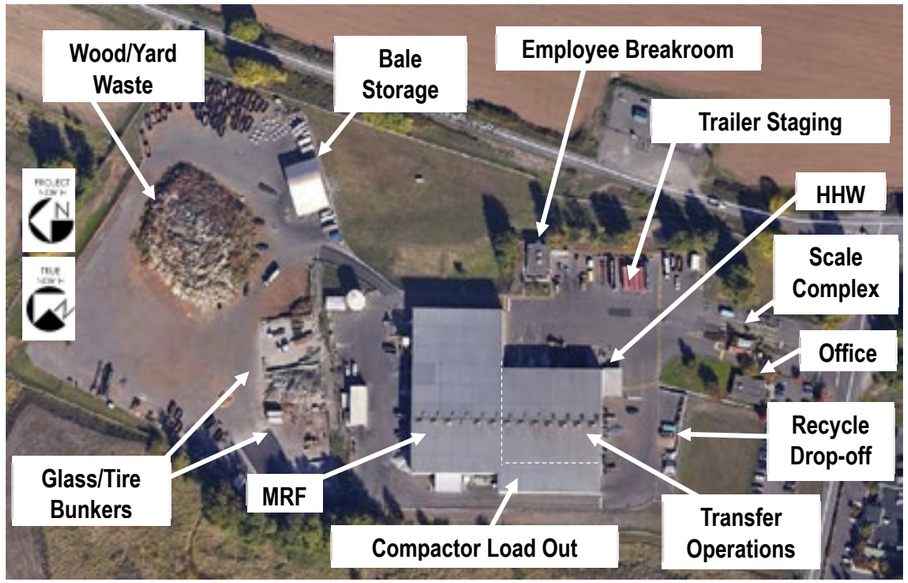
Chapter 5 – West Vancouver Materials Recovery Center (West Van)

5.1 Introduction

West Van is located on a 21+ acre site off Old Lower River Road at the Port of Vancouver as depicted in **Figure 3** below. It was constructed in 1993 to receive MSW from commercial collection trucks and self-haul customers. MSW is loaded into containers that are shuttled half a mile to a barge loading facility located on the Columbia River. Waste is then barged more than 200 miles to the Finley Buttes Regional Landfill in Boardman, Oregon.

The property includes a large 91,100 square foot (sf) pre-engineered metal building (PEMB) that receives waste from self-haul customers and WCW collection trucks from residential and commercial accounts. The transfer operations occupy 46,000 sf of the structure while the MRF receiving and processing operations use the remaining 45,100 sf.

Figure 3: West Vancouver Materials Recovery Center



In addition to the transfer station and MRF operations, West Van provides approximately seven acres on the north side of the site for managing other waste streams. This includes space for receiving and processing yard debris and wood waste and dedicated bunkers to receive mixed glass and inert waste such as concrete and rock deposits. Tires are also received and temporarily stored before being transferred for processing. It also provides supplemental storage for baled materials in a canopied area and for parking rolling stock and container storage. These operations are performed outdoors except for the bale storage that is stored under canopies.

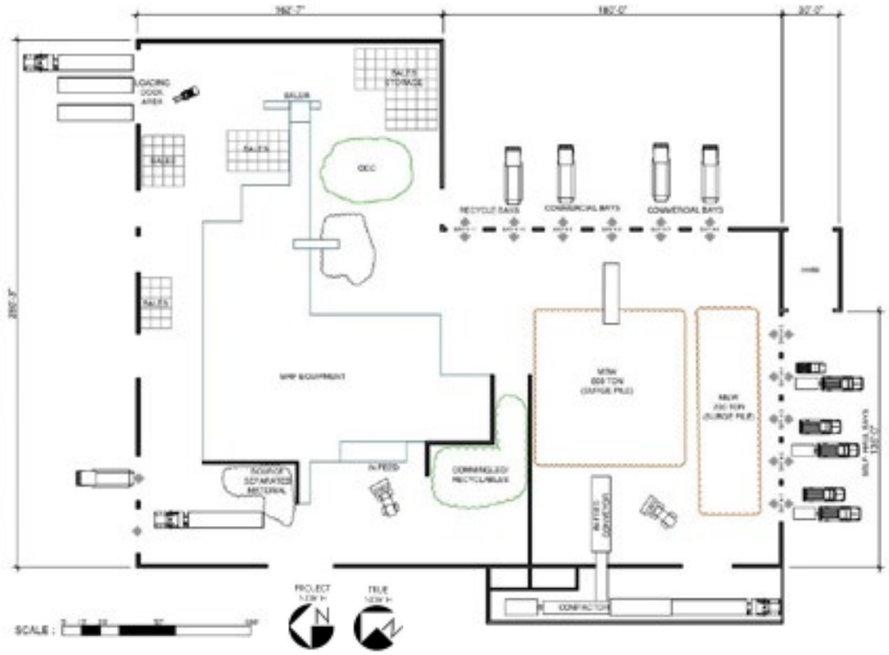
5.2 Summary of Phase 1 RSWSS – Assessment

Existing Tip Floor Operations

Since the facility was constructed in 1993 there has been no major expansion to the transfer station tip floor area. CRC has replaced the original compactor in recent years. When the facility was first opened the total amount of waste generated in the County was 173,000 tons per year (TPY) or about 600 tons per day (TPD). In 2021 the transfer station system received over 400,000 TPY or roughly about 1,400 TPD. In 2021, West Van received over 116,000 tons of waste or roughly 30% of all waste generated in the County. The percentage of waste received at West Van has remained fairly constant over the past six years. Assuming West Van continues to receive a similar percentage of the total waste generated, by 2040 the total waste delivered to West Van is estimated to be about 150,000 TPY or 600 TPD under peak periods. This is consistent with the service area analysis presented previously.

The current tip floor arrangement shown in **Figure 4** demonstrates that the facility does have sufficient space to receive and temporarily store 400 TPD. However, the amount of space needed is dependent on the load out capacity or time needed to remove all waste from the tip floor. A single compactor can load a container/trailer with 30 tons of waste in about 25 minutes or about 60 tons per hour (TPH). The amount of waste for each container could be more or less than 30 tons depending on the materials being loaded. It takes between eight to ten hours of continuous loading operations to remove 600 tons and does not include interruptions in services whether it be equipment downtime or availability of containers to load. Also, West Van has no contingency if the compactor is out of service for extensive repairs.

Figure 4: Existing West Van Floor Plan



Another factor related to the capacity of the transfer station is the number of stalls available for customers to unload. As shown in **Figure 4** there are currently five-20 feet (ft) roll up doors (referred to as Bays 1-5) located

on the south side of the building for self-haul or cash customers to unload. Each door opening may accommodate two self-haul vehicles to unload thus providing 10 stalls to unload. However, the door farthest to the west (Bay 1) is currently dedicated to accepting mixed organics (i.e. food waste and yard debris) collected in both the Cities of Vancouver and Ridgefield and is not available for self-haul customers. Bay 5 is limited for unloading as it must remain unavailable when the household hazardous waste (HHW) is open to accept materials. This leaves only three bays and six stalls that can be used to unload self-haul customers. Based on information in the Phase 1 RSWSS, during peak hours from 9 a.m. to 3 p.m. West Van experiences between 40 and 45 vehicles per hour. On average the typical self-haul customer will use 10 minutes to unload including the time to back in and exit. This means that a stall can handle five (5) vehicles per hour. With only six stalls available on a consistent basis, the facility can handle on average 30 vehicles per hour, which is much less than what is needed. The result is that at times traffic will back onto NW Old Lower River Road.

The County is considering opening West Van to self-haul customers on Sundays which may help spread out the current volume. It could also result in more traffic, particularly if some of CTR's current customers decide to use West Van. If all doors are dedicated to accepting self-haul customers, it appears there would be 10 stalls available and sufficient to handle the current volume of customers. But changes to the circulation pattern should be considered to assure there is adequate on-site queue space between the scales and the stalls. Furthermore, these conditions contribute to off-site queue issues onto public right of way.

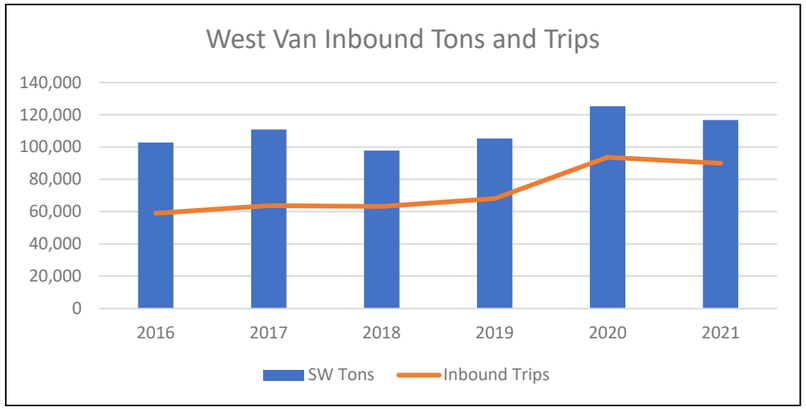
On the east side of the transfer station there are six (6) twenty foot doors (referred to Bays 6-11) for collection trucks to unload. One bay is used for access to the front loader equipment. All compactor and roll off trucks hauling waste use three bays (Bays 7-9) thus providing four to six stalls to unload. These vehicles will unload in approximately five minutes thus, conservatively each bay can receive about eight vehicles per hour. Currently, 50 to 60 collection trucks enter the facility each day with possibly 16 vehicles at peak hours. Thus, a minimum of three stalls are needed to unload.

Bays 10 and 11 are used by trucks with commingled recyclables that serve the entire County. There are about sixty collection trucks with recyclable materials that arrive at West Van five days per week. A few trucks (less than 10) also deliver recyclables on Saturday. As long as the MRF continues to operate at West Van these stalls must remain dedicated to unloading the recycling collection trucks. If the MRF is relocated, then these stalls can be used by other customers.

Waste Quantities and Traffic Counts

Tons received and traffic volume at West Van were updated with 2021 data. **Figure 5** illustrates that both waste received and number of trips to the transfer station declined from 2020, however remain above the previous four years. This data was used to make projections for the Basis of Master Plan recommendations.

Figure 5: West Van Historic Waste Quantities and Traffic



Existing Traffic Circulation

Access to the West Van facility is from a local service road used by several local businesses including the barge loading operations to transport waste to the Finley Butte Regional Landfill. The facility entrance is just 200 ft west of NW Old Lower River Road. All traffic entering and exiting the facility uses this one access point as shown in **Figure 6** below.

Figure 6: West Van Entrance and Scale Complex



When entering the site all traffic is directed to a single scalehouse complex that has three inbound and two outbound lanes. All inbound customers must use a single lane with a scale to weigh in. CRC recently installed a second scale dedicated to allowing commercial collection trucks to use a separate lane to weigh in. The third lane is a bypass lane used by transfer trailers and commodity trucks to enter the facility without being weighed. The commodity trucks are used to ship recycled materials to markets.

After weighing in at the scale complex, self-haul customers are directed to turn left where they queue up for an available stall to unload at the transfer station. Self-haul customers can also access either or both the recycling

drop off and the HHW facility when it is open. WCW collection trucks will enter the same access lane and proceed to unload on the east side of the transfer station and MRF.

Currently, traffic can back up off the service road and onto Old Lower River Road. Since this road has very little through traffic it does not create a significant congestion problem at the intersection for through traffic, but it is not a desirable condition. When traffic does back onto public right of way, transfer trucks delivering waste from CTR to the barge loading facilities are impacted. Since 60% of the waste generated in the County is received at CTR this off-site queue directly impacts loading operations at that facility. The new scale serving the commercial trucks may help to relieve the potential for backup onto the Old Lower River Road.

All traffic including self-haul customers, collection trucks, transfer trailers, and commodity trucks must exit at this same entrance. Vehicles that need to weigh out use the outbound scale lane while other vehicles needing not to weigh out can use the bypass lane and must cross through the outbound scale traffic.

Site circulation for the various customers using the facilities has evolved over the many years of operation as new services and programs have been adopted. **Figure 7** below captures the complexity of their traffic patterns. The site circulation near the entrance is quite congested at times. This is a result of the close proximity of the entrance to the main transfer station building and where vehicles unload. It is further complicated due to the location of the HHW and the recycle drop off area.

Figure 7: West Van Traffic Patterns



In Phase 1 RSWSS a conditions assessment was conducted in 2019. From this review it was determined there were no immediate facility deficiencies to be addressed other than to improve circulation. The main transfer station and MRF structure were determined to be in good condition. However, many of the support structures were constructed in the 1990s and may be obsolete or in need of major renovation in the longer term. It was recommended that a site Master Facilities Plan be prepared to consider what improvements were needed to existing facilities and what modifications and expansions were needed to address long term solid waste services for the regional system.

Since this assessment there have several new developments that need to be considered in preparing a master plan as follows:

1. The 2020 census data reveals the population in Clark County is higher than previous data and projections.
2. The number of self-haul stalls for unloading will need to be increased. The number of cash customers using the facility has increased significantly in the last two years. In 2021 the number of cash customers increased from 68,000 in 2019 to about 90,000, an increase of 22,000 vehicles (shown in **Figure 5**).
3. The State recently passed HB 1799 requiring local governments to reduce the amount of food waste being disposed of in landfills by 2030.
4. The current food/yard waste collection programs in the City of Vancouver continue to grow and the City of Ridgefield has also started a similar program. This will require more space to be dedicated to handling food waste and/or mixed organics.
5. The County, Vancouver and CRC need to evaluate relocating the MRF to another site to increase room for organics management.
6. The City and County are considering public ownership options for the regional transfer station system.
7. The City has extended water service to this area. Assuming the facility can connect to provide water service, the existing well and pump system can be replaced and relocated.

These new developments need to be included in updating the operational assessment and considered in preparing facilities plan for addressing the long-term service needs of the solid waste system.

In summary, all customer traffic and transfer activities relying on a single point of ingress and egress causes bottlenecks and congestion that impact the site circulation and detracts from operating most efficiently. CRC employees attend to monitoring the conditions to route customers safely while on-site. With growth in the service area, circulation problems will only be exacerbated. Also, the HHW and recycle drop off area should be reconfigured to improve services. This will be even more urgent if and when the MRF is relocated.

5.3 Basis of Master Plan for Facility Improvements

Based on the findings from Phase 1 RSWSS and the recently passed HB 1799, the design data in the following **Table 5** is recommended to be the basis of the West Van Master Plan.

Table 5: West Van - Basis of Master Plan Design Data

Category		Existing	2040 Projection	% Change
Waste Quantities (MSW)				
Annual	Tons	116,719	150,000	29%
Ave Daily	Tons	400	550	38%
Peak Daily	Tons	450	600	33%
Customer Trips				
WCW				
All Commercial	Annual	25,428	33,000	30%
	Daily	110	127	15%
	MSW	50	65	30%
	Recycle	60	75	25%
Self-Haul/Cash	Annual	64,554	96,000	49%
	Daily	227	350	54%
Organics		**Tons/Year**	**Tons/Year**	
Yard Waste				
	County	5,514	7,200	31%
	Metro*	11,800	N/A	
Wood				
	County	5,465	7,100	30%
	Metro*	245		
Mixed Organics				
	Source Separated	1,416	1,840	30%
Food Waste – MSW				
	Vegetative	13% 15,173	22,230	47%
	Other	8% 9,200	13,700	49%
		24,373	35,930	47%
Total Organics				
	Source Separated	12,395	16,140	30%
	MSW + SS	36,768	52,070	42%

*Material that originates from the Portland Metro region

Organics Management

West Van received 24,000 tons of yard debris and wood waste in 2021. Of this total 11,800 tons were reported to be received from Portland Metro. Therefore, only 11,200 tons of these organic materials were collected in the County. The facility also received almost 1,500 tons of mixed organics (yard debris with food waste) collected from residences in the cities of Vancouver and Ridgefield and source separated commercial food waste. These organics must be received inside the transfer station. The commercial food waste collection program is voluntary. Residential food waste is processed with yard debris collection. A waste characterization study of yard debris has not been conducted by the County but this collection method traditionally accounts for about 5% of the yard debris weight in other communities. These materials are reloaded and then transported to the Dirt Huggers Compost Facility near Dallesport, Washington. As mentioned, the State recently passed HB 1799. One component of the West Van Master Plan will be to design options for managing organics in response to this new legislation. This could include construction of organics processing that can be used as a reload center for organics being processed for compost or enough spacing to handle preprocessing equipment for perhaps an aerated static pile compost system (ASP) or anaerobic digestion (AD) on or off-site. Traditionally, post consumer commercial food waste is highly contaminated. Both composters and operators of anaerobic facilities desire material that is low in contamination so this waste stream presents issues and will require processing to remove contaminants. A feasibility study should be conducted to establish the best option for processing organic material at West Van that emphasizes the highest and best use as well as producing a feedstock that has high market demand.

Near Term Issues

1. A critical need is to establish a location and facilities needed for top loading operations. An immediate need is to have capabilities to top load food waste/mixed organics.
2. Develop plans to reduce congestion and eliminate offsite queue issues.
    a. Consider adding a new access for transfer trailers/containers off Old Lower River Road.
    b. Consider a new exit road for containers being shuttled to the barge facility.
3. Extend the City of Vancouver waterline to provide water service and replace the current ground water pump and tank system used for fire suppression.
4. Conduct a feasibility study to research options for processing organics material at the station including relocating the MRF.
5. Consider the location for the second compactor.

Longer Term Issues

The West Van facility is located on 21 acres. The back seven acres are currently used for receiving and processing yard debris and wood waste. It also includes a bale storage structure and container/bin storage and other support activities. The County should consider how this space can best be used to provide waste management and recycling services in the future.

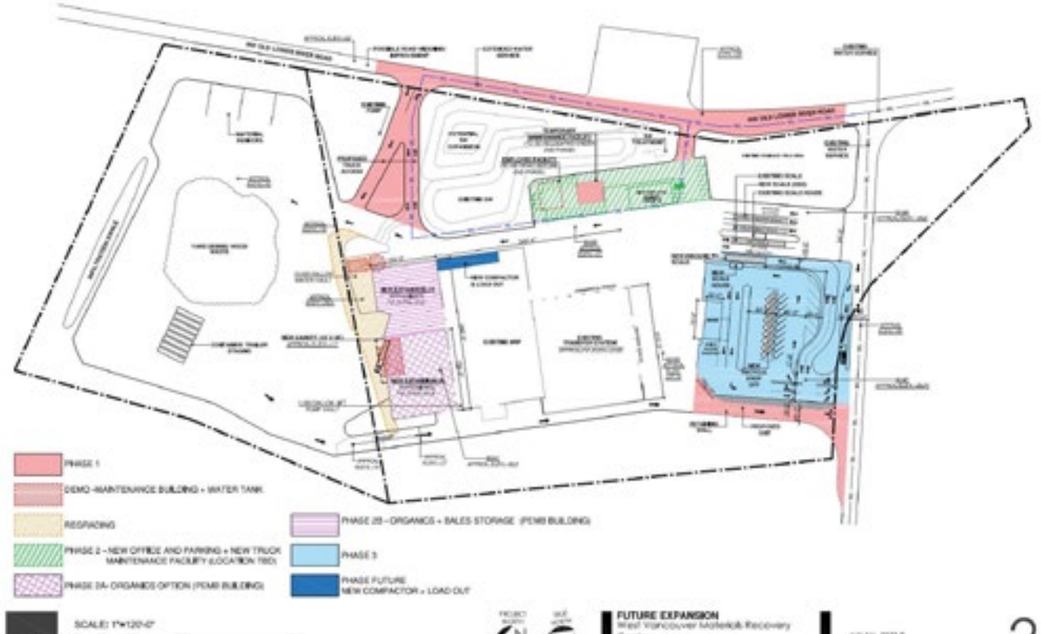
Also, the MRF processing operations are expected to be relocated to a new facility. Once the equipment line is removed the space can possibly be used for other services. Options may include:

1. Receive and process construction and demolition (C&D) materials.
2. Process organics, including food waste, green waste, and wood waste.
3. Other operations as deemed necessary for providing waste management and recycling services. This should include:
    a. Provide a location onsite for an expanded recycle drop off for self-haul customers.
    b. Provide a new location for a HHW to alleviate the conflicts with self-haul customers unloading at the transfer station.
    c. Recovery of materials from other waste streams such as self-haul or targeted commercial loads

5.4 Description of Improvements of Master Plan

The Facility Plan includes a Basis of Master Plan design for West Van. It takes into consideration the conditions and operations assessment from Phase 1 and the updated waste flow projections. The plan was developed considering that certain improvements can be implemented in the near term while space is provided for making future longer-term improvements. The plan is presented as a phased development plan that also considers the importance of maintaining operations while construction of improvements is being made.

Figure 8: West Van Site Plan



Phase 1

These improvements are designed to eliminate congestion and site circulation problems with the current operations. They are also consistent with providing longer-term improvements for expanding operations.

1. Add a new commercial route truck entrance and exit NW Old Lower River Road.
2. Add a new staff entrance to future new office.
3. Temporarily relocate the maintenance facility next to the employee facility.
4. Add a separate exit for transfer trucks going onto the private access road to the Tidewater Barge dock.
5. Add a new water line to service the property for fire and domestic uses.
6. Remove the existing water tank and maintenance facility.
7. Regrade the area near the existing maintenance facility.

And Phase 2A

1. Construct a new mixed organics receiving, and top load out bay off the existing MRF with partial enclosure to capture fugitive debris.
2. Collect runoff water in existing or expanded water vault system for treatment.

Phase 2B (Optional)

1. Expand mixed organics receiving and top load out bay and add bale storage.

2. Runoff collected from the organics area will be stored in existing or upgraded vaults.

Phase 2

1. Construct a new office facility and parking area.
2. Build a permanent maintenance facility (location TBD).

Phase 3

1. Build a new HHW and public recycling area.
2. Add a new public entrance and new scale option for public customers.

Phase 4

1. Using the previous commodities load dock area reconfigure the space to install a second compactor load out. Alternative locations can be evaluated.

5.5 Estimated Construction Cost for West Van Capital Improvements

The West Van master plan identifies specific improvements to upgrade current facilities to meet immediate needs. It also recognizes that once the MRF is relocated there is a large, enclosed building space (approximately 45,000 sf) that can be repurposed for future operations and new services. The improvements represent preliminary design concepts requiring final programming and design development prior to producing construction documents.

Construction cost estimates were made for each phase of the capital improvements for the West Van Transfer and Recycling Facility. These estimates are based on construction costs for specific items from projects completed in Clark County or similar projects in the Pacific Northwest in 2023. The cost estimates represent a “Class 3 planning level” cost estimate meaning it carries a variance range of plus 30% to minus 20%.

Table 6: Construction Cost Estimate – Capital Improvement Plan

West Van Transfer Station Construction Cost Estimates	
New Access Improvements (Phase 1) Description: 1. Expand NW Lower River Rd to provide separate access for transfer trailers and exit for collection trucks. 2. Construct a new south access ramp direct to the private road to the barge facilities. 3. Regrade the backyard to accept new traffic pattern as needed. 4. Address long term improvements to stormwater management system.	**$1,400,000**
Site Improvements (Phase 1) Description: 1. Extend the city water line to replace the current well and tank system for fire protection. 2. Construct a grade separation/wall system to provide for new top load stations. 3. Relocate rolling stock maintenance facility (temporary location).	**$2,000,000**
Option 2A – Building Expansion – Organics Load Out / Bale Storage Includes: 1. Construction PEMB (120'x150') and canopy (10'x80') for top load station to be used for organics load out.	**$3,600,000**
Option 2B – Building Expansion Option – Organics Top Load + Bale Storage (2A) Description: 1. Construct a larger PEMB (120'x280') to provide organics load out and covered bale storage. 2. NOTE: This option is dependent on timeline to relocate MRF.	**$6,700,000**
New Employee Center (Phase 2) Description: 1. Construct new office and employee center with adequate employee parking and associated utilities.	**$2,200,000**
Recycle Drop Off and HHW (Phase 3) Description: 1. Build new and expanded recycle and HHW drop off facility. Update scale configuration to provide adequate onsite queue and safe circulation of self-haul customers.	**$3,000,000**
Total All Phases – Option 2A	**$12,200,000**
Total All Phases – Option 2B	**$15,300,000**
CIP Budget	**$15,300,000**

5.6 Recommended Implementation Schedule

The County should **proceed with construction of Phase 1 and 2 of the West Van improvements in the next three years.** These projects will improve on-site circulation, minimize congestion at the gatehouse and help alleviate off-site queue issues. The top load for organics load out (Option 2A) can be completed subsequent to the site improvements. However, a final decision on the expansion should be assessed in conjunction with the evaluation of the option and estimated schedule to relocate the MRF. If this equipment is removed in the next four years, the current space occupied by the equipment may be repurposed for managing organics and the building expansion may not be necessary as conceived in the master plan.

The construction schedule is presented in the CIP section of this report.

Chapter 6 – Central Transfer and Recycling (CTR)

6.1 Introduction

CTR is located on State Highway 503 in central Clark County near Brush Prairie. It serves the largest area of the County and is the area projected to have the most growth over the next 20 years.

Figure 9: Current CTR Site Plan



The facility resides on an irregularly shaped parcel of land and includes three main structures that make up the facility operations. The solid waste transfer station is the main structure. There is also a combined recycling building and HHW building, and an administrative and operations office building. The facility was originally constructed circa the 1970s. In 1991, a new 38,000 sf transfer station was added to replace the original transfer building. MSW is loaded into containers that are shuttled 13 miles to a barge loading facility located at the Port of Vancouver on the Columbia River near West Van. Waste is then barged more than 200 miles to the Finley Buttes Regional Landfill in Boardman, Oregon. In addition to managing the area's waste, CRC operates a recycling and HHW waste drop-off center. **Figure 9** above provides an aerial photo of the site operations.

The original transfer station building was expanded and converted to the recycling and HHW building. An automatic scale system for route trucks was installed in 2012.

6.2 Summary of Phase 1 RSWSS – Assessment

Conditions Assessment

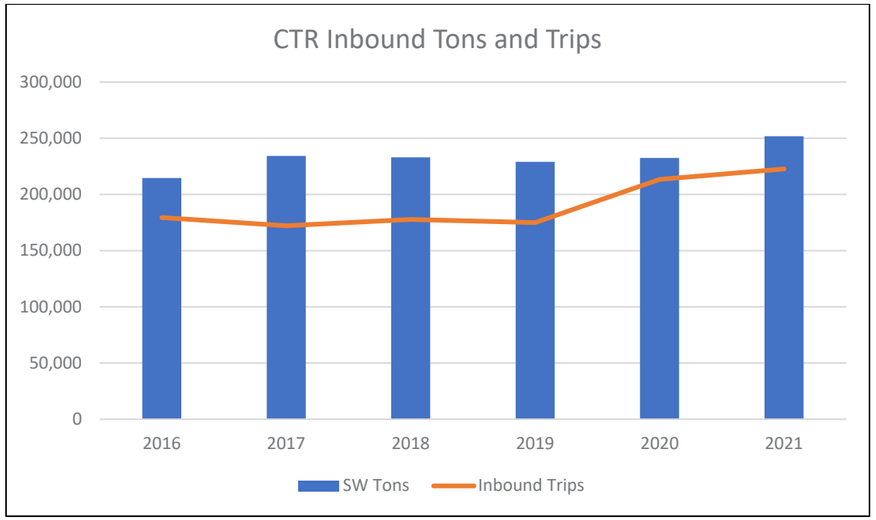
The limited structural and site improvement condition assessment reveals that most of the assets at the site are in fair to good condition, except for the recycling building, paved areas east of the boundary retaining wall, and the infiltration portion of the stormwater system. The complete report is included as Appendix B, *Conditions Assessment* in the Phase 1 RSWSS Report.

Structural and civil condition assessments were limited to those areas that are readily accessible and visible to the field staff. Concealed conditions that become exposed in the future may change our current recommendations.

Waste Quantities and Traffic Counts

Tons received and traffic volume at CTR were updated with 2021 data. **Figure 10** illustrates that both waste received and traffic on-site continue to grow at CTR. This data was used to make projections for the Basis of Master Plan recommendations.

Figure 10: CTR Inbound Tons and Trips



Site Circulation and Unloading Stall Capacity

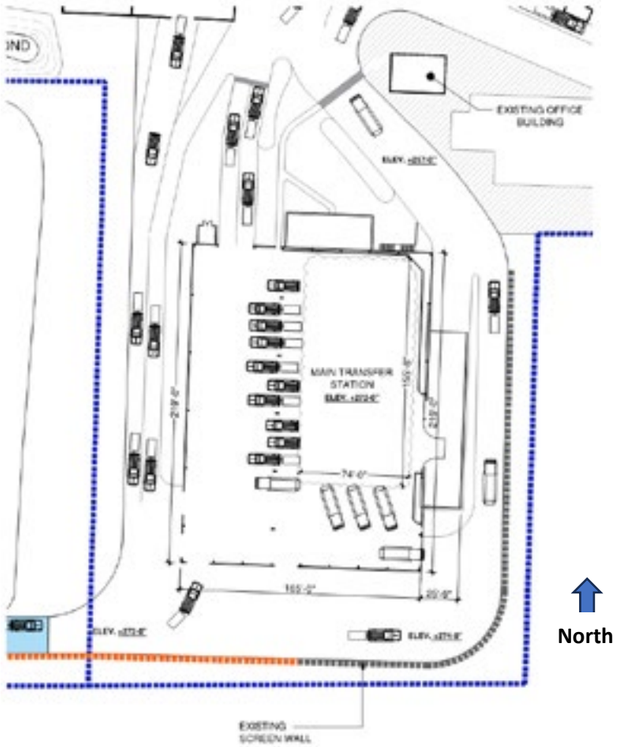
When CTR was constructed in 1991, it was not designed to accommodate the current levels of traffic, or the different activities and services currently provided.

Daily traffic at CTR averages 50 to 60 vehicles per hour. An unloading stall is expected to handle six vehicles per hour, giving 10 minutes per vehicle to maneuver into the stall, unload, and exit. Some vehicles, such as cars and pickups with less waste, will unload faster. However, vehicles with trailers and those with hydraulic tippers typically take longer. Therefore, in non-peak times, 10 to 12 stalls are sufficient for unloading.

During peak times, customer traffic can increase from 80 to as many as 100 vehicles per hour. At this volume, the facility would need to dedicate a minimum of 13 stalls for unloading during peak weekday times and 17 to 20 stalls during peak weekend times. **Figure 11** on the next page shows the tipping floor and vehicle unloading capacity (north is the left side of the figure). With the two northernmost stalls dedicated to source-separated cardboard, green waste, and clean wood (red circled area), there are only 11 stalls for unloading waste. On weekends, CTR can use the south drive aisle to route vehicles to unload. After unloading, these vehicles will exit the southeast door (blue circle) and drive to the outbound scale (green circle).

Also depicted in **Figure 12** is how transfer trucks, when loaded, exit the facility. The truck and trailer must intersect with other outbound traffic and will need to access the scale.

Figure 11: Tipping Floor Capacity



CRC does a good job managing traffic and ensuring vehicles can safely unload in the transfer station. Spotters are located at the entrance and on the tipping floor to guide customers to the appropriate stalls. Although the current facility does not have enough stalls to unload quickly during peak times, there is space for customers to queue onsite before entering the transfer station. However, when exiting the transfer station from the southeast door, there is approximately 550 ft before the outbound scale, queue space for 20 to 22 vehicles. Routing vehicles in this direction can reduce the traffic queue exiting the transfer station. However, there is only one scale dedicated to processing all outbound customers and to weighing out transfer trucks.

The amount of customer traffic on weekends and during peak seasons also impacts the overall site circulation. The primary place of congestion is the outbound lanes before the scales. As shown on the site circulation map in **Figure 12**, all traffic must converge on two lanes including transfer trucks loaded with containers bound for the Tidewater loading dock.

Figure 12: CTR Site Circulation



Outbound traffic conditions may be improved by decreasing the time to process customers; however, the physical space for vehicles to line up to be weighed out as well as those to use the bypass lane is very limited. If the station is to make improvements to eliminate the off-site queue, it would also be desirable to consider modifications to remedy both the outbound scale capacity issues and the site circulation restrictions.

Impacts of Growth Management in CTR Service Area

Clark County has grown about 2% per year since 2010 (approximately 78,000 people from 2010 to 2020), and based on recent data from OFM, it is expected to continue at this rate for the next 20 years. The central and northern portions of the County, served by CTR, are expected to experience most of this growth, as predicted in the Growth Management Plan. The updated waste projections show that projected growth for this area could result in more than 100,000 tons of additional waste being generated per year in the next 20 years.

Growth has resulted in increased development of adjacent properties around CTR. The apartment complex on the northside of CTR has expanded, and now sits within 15 ft of the north retaining wall. Property on the west side of 112th street has been developed with new single-family houses. On the south side of the transfer station, a storage unit facility and private school were recently constructed. CRC owns eight acres located on the west side of CTR, providing a buffer between the new residential development and the transfer station. A new scale complex designed to eliminate off-site queueing problems is proposed by CRC for this property. These recent changes in the development of adjacent properties will need to be considered in deciding future changes to operations and future facility improvements.

CTR continues to experience increases in total waste volumes and the number of customers using the facility. The following is updated data that shows the increase over the past two years. Also, CTR is the only transfer station open on Sundays and therefore must serve the entire County. The traffic on weekends may be impacted if the County decides to expand the hours of operations at the Washougal and West Van transfer stations.

Considering the increase in volume and number of self-haul customers, CTR is currently at operating capacity. This operating capacity is based on current waste quantities and hours of operation at about 900 TPD. If the waste exceeds the capacity, CRC will process the waste to ensure it is removed from the tip floor and not stored overnight. There were several observed deficiencies during the consultant team's site visits and review of data. It is important to understand that these deficiencies are a result of the physical conditions and limitations of the original design to handle the increase in customers and waste volume experienced over the past 30 years. CRC executes day-to-day operations to manage the current waste streams and traffic in a safe and efficient manner, given these physical constraints.

Based on the assessment of current operations, the following site constraints and deficiencies were noted (as shown in **Figure 13**).

1. **Scale Capacity:** CRC is considering adding a second in-bound scale to increase thequeuing for in-bound traffic.
2. **Tipping Floor Space:** The current facility does not have sufficient space for vehicles to unload and limited space to handle surges in waste volumes.
3. **Congestion at Exit Lanes:** All traffic exiting the site must make a left turn into two outbound lanes. Transfer trucks are subjected to a hairpin-like turn and therefore use both lanes to access one outbound scale. The competition for the outbound scale and exiting is not a desirable condition and is exacerbated by the increase in waste quantities and increase in self-haul traffic.
4. **Compactor Load-Out Capacity:** With the current operating hours (12 per day), the compactor can only loud out about 900 TPD. CTR averages between 800 and 900 TPD. There are some days during peak periods where CTR receives between 900 and 1,100 tons. CRC reported that on occasions when waste of more than this capacity is received, they will load this material into trailers/containers to ensure it is not stored overnight.

Figure 13: CTR Operations Assessment



6.3 Summary of Phase 1 CTR Conditions and Recommended Improvements

The CTR was not designed to handle the current waste volume and traffic conditions. The demand for services has increased greatly, particularly in the past five years. CTR is centrally located, has been well-maintained, and is in relatively good condition. There are improvements that can be made to not only deal with the current off-site queue, but also to improve overall site circulation and enhance the material handling needs. Changes could include expanding the transfer station building to provide space for unloading and floor storage. The additional areas would provide space for unloading C&D waste for processing that could divert this material from the landfill. Added space to handle green waste and wood could also contribute to higher material recovery. The key question to address is what level of investment should be made at CTR in conjunction with other regional service needs.

The answer to this question remains to be determined. In Phase 1 RSWSS, Chapter 5 – North Area Service Options presented what facilities are needed to serve this area. In Chapter 5, four options were developed.

Drawings for those can be found in Appendix A of the RSWSS. The report identified two short-term improvements and settled on Option 1.

The most immediate need identified in the system was to make improvements at CTR to address safe ingress and egress off Hwy. 503. The first step was to modify the entrance to allow for two separate lanes entering the facility. This improvement was completed in 2022 and there are no left turns permitted when exiting the station. Now all vehicles exiting CTR can only turn right and travel south on Hwy. 503. Customers originating from north of CTR, such as Battle Ground, Ridgefield, La Center, and Yacolt must find a route to return to the north county.

The second improvement recommends extending the inbound lane to the back of the site and installing a new scale. The lane would extend to the south side and ramp up to the existing transfer station as shown. It would provide the added queue space needed to eliminate any vehicles from queuing off-site onto the highway. This would allow customers to travel a much longer entrance road to a new scale for weighing in. The perimeter screening would also be extended to mitigate visual impacts to adjacent properties.

6.4 Basis of Master Plan for Facility Improvements

Based on the findings from Phase 1 RSWSS and the recently passed HB 1799, the updated design data in the following **Table 7** is recommended to be the basis of the CTR plan. This Basis of Master Plan considers that new census data and waste quantities received have resulted in new projections.

Table 7: CTR - Basis of Master Plan Design Data (Updated per 2020 Census)

Category		Existing Transfer Station	Future (20 Years)
Building Space			
		38,000 sf - 36,136 excl. loadout	Space need defined by criteria
Waste Quantities			
Annual	Tons	251,847	353,263
Average	Tons/Day	900	1,200
Peak	Tons/Day	1,100	1,400
Traffic/Unloading Capacity			
Commercial	Ave Per Day	100	130
	Ave Per Hour	25	30
Commercial Stall		4 to 5	5
Self-Haul Weekday	Peak	600	780
	Per Hour	70	90
Weekday Stalls		14	18
Self-Haul Weekend	Per Hour	100	130
Weekend Stalls		20	26
*Assumes 1 stall is 5 cars an hour	-	-	-

Category		Existing Transfer Station	Future (20 Years)
Operating Space			
Available area to stack waste, handle surge, and load trailers. Excludes maneuvering and stall for unloading			
Need		13,000 sf	18,000 sf (1 day storage + 10% operations)
Available		11,000 sf	
Average		900 TPD	1,200 TPD
		30 ton payload	
		30 trailer loads	
		25 minutes 12.5 hours*	16 hours @ existing
Peak		1,100 TPD	1,400 TPD
Required load out w/single compactor		15 hours*	20 hours @ existing
*Assumes no disruptions			
Trailer Parking			
		Space for 4	Assume 8 trailers for staging
		Minimum 6,000 sf	12,000 sf
Scale Capacity/Transactions			
Inbound - 1 - SH scale		80 vehicle/hour	120 vehicle/hour
Outbound - 1 SH scale shared with transfer trailers		80 vehicle/hour	120 vehicle/hour
*Note both inbound and outbound scales at 45 seconds/transaction		-	-

The data shows it will be necessary to provide a second compactor in the future to allow load out of materials in reasonable operating hours. It is also needed to have redundancy in the load out operations.

Organics Management

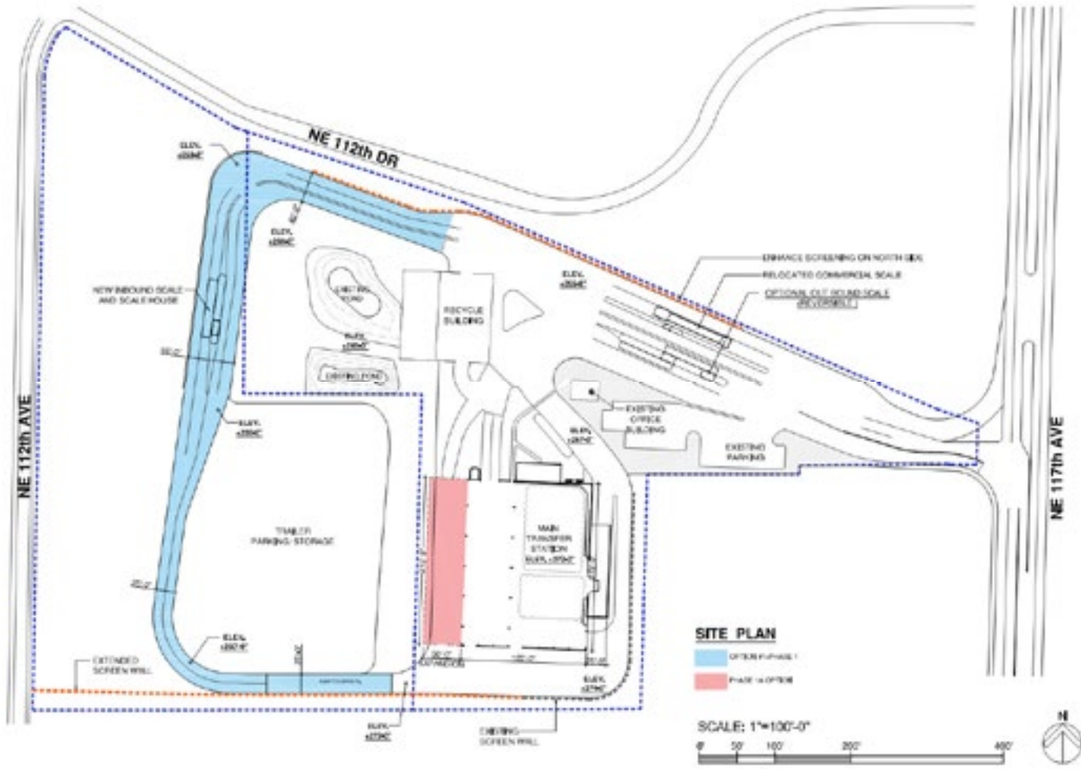
CTR processed approximately 1,500 tons of yard debris in 2021 and no source separated commercial food waste. This material is reloaded and sent to Dirt Hugger, a compose facility in Dallesport, WA. With the passed HB 1799, the design for CTR will include the continued collection of yard debris and provide options for expanding reload capacity in the future. The site as currently used is not supportive of any preprocessing options for organic material.

Prior to making any large investments at CTR a decision on which option is best for serving the north/central county should be implemented. However, each of the options will require several years to site and permit. Even after permits are secured final design and construction will require a minimum of two to three years.

6.5 CTR - Phase 1 Improvements

Given the timeline to decide on the future facilities needed to serve the north service area, improvements at CTR should be implemented to eliminate potential for offsite queueing onto Hwy. 503. Also, the option to expand the existing structure and provide added tip floor space may be beneficial in both the short run and for the long term if Option 1A is selected. See **Figure 14** below.

Figure 14: CTR Improvement Option



Phase 1

1. Add two new inbound lanes to a new scale house to increase curing length for vehicles entering the site. The road will extend and wrap around the landfill portion of the site and reduce traffic backing up onto Hwy. 503.
2. Install a new scale (relocated) and scale house in the east portion on the new road improvement.
3. Extend concrete wall along south side of site where improvements have been made.
4. Improve site screening along the north side of the property.

Phase 1A (Optional)

1. Conduct comparative site analysis and expand the transfer station building with a 11,000 sf addition in the event a new station is not sited or delayed in the North Service Area.

Table 8: Phase 1 Construction Cost Estimate

CTR Construction Cost Estimates	
New Perimeter Road and Gatehouse Description: 1. Site Work 2. New Scale and Scale House 3. New Access Road	**$3,500,000**
Option 1A – Transfer Station Expansion Description: 1. Demolition and Site Prep 2. Optional Outbound Scale House 8'x8'	**$3,000,000**
Total Estimated Construction Cost Excluding Option 1A	**$3,500,000**
Total Estimated Construction Cost Including Option 1A	**$6,500,000**

6.6 CTR - North Service Area Options

Implementing the construction of the recommended improvements is a priority for the County to mitigate queueing onto public right of way. To address the question of how to best serve the north and central portion of the county, the Phase 1 report evaluated the options for serving the north service area. These three options were compared to the options for making improvements at CTR. The north-central portions of the County are projected to experience the largest percentage of growth over the next 20 years. This growth has resulted in increased waste volumes and traffic at CTR and the need to make investments in facilities to manage the current conditions. However, to improve current deficiencies at CTR and manage future growth in this service area, additional investments in the system will be necessary. Updated projections show an increase in volumes to all County facilities with CTR expected to experience an increase of more than 100,000 TPY or 40% by 2040. The options for meeting the future infrastructure needs of the northcentral County were identified in the Phase 1 report.

The three distinct options identified are summarized as follows:

1. Make major improvements at CTR to address current and future service needs.
2. Make minimal improvements at CTR and site and build a new satellite transfer station to serve the northernmost portion of the County and relieve some of the customer traffic using CTR.
3. Replace CTR with a new transfer station designed to handle future growth. This alternative recognizes the need to minimize impacts to the residential properties adjacent to CTR; it is important that CTR be a good neighbor.

For each option, conceptual facility plans were developed to provide planning level construction cost estimates.

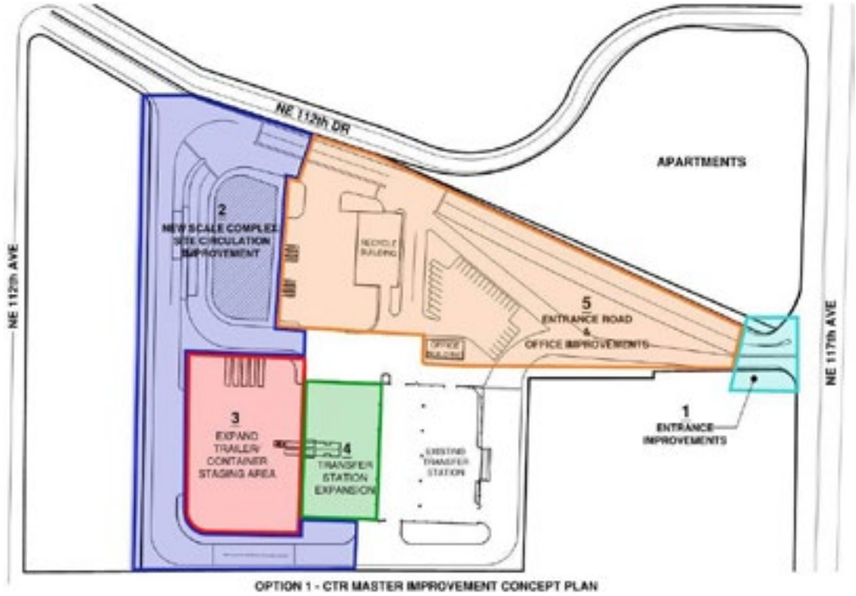
Decisions on a new transfer station and whether to move the MRF to a new location from its current location at West Van have not been made since the Phase 1 report was finalized. There has also been no decision made on the ownership of the facilities, so a summary of each developed option is as follows.

Option 1: Make Major Improvements at CTR to Address Current and Future Service Needs

This option assumes the CTR Transfer Station will make major improvements to address the current operational deficiencies and provide the infrastructure to manage waste resulting from growth in the central and northern part of the County. Improvements at CTR will be made to meet capacity needs for the next 25 plus years.

JRMA prepared several concept site plans that incorporate significant improvements to meet the needs of CTR's future conditions. These have been reviewed by the County and CRC and are the basis of the improvements listed; however, more analysis is needed to develop a final site master plan. A primary guiding principle in developing the new site plan has been the need to construct the facilities while maintaining the current operations. Therefore, the intent of the infrastructure improvements is to meet the capacity needs in a phased approach so that the facility can remain open to customers during the construction period. These improvements are captured in **Figure 15** below.

Figure 15: Option 1 – CTR Improvements



OPTION 1 - CTR MASTER IMPROVEMENT CONCEPT PLAN

The option to expand CTR was used in the Phase 1 RSWSS to identify the capital investments needed to address near term deficiencies in current operations and to evaluate the best approach for expanding the facility to meet demands of the north services area. To meet this demand, the facility would require expansion onto the adjacent property owned by CRC. As a result, the report identified several issues that need to be addressed prior to making a final decision on whether to expand CTR.

First, this adjacent property would need to obtain a land use permit to allow the planned expansion. This may also require that a lot line adjustment to enjoin the two properties be approved. Recognizing that the adjacent

properties are now zoned for residential and have been developed will need to be considered if CTR is to expand onto adjacent property. In contrast, if a decision was to close CTR and build a new transfer station it also is subject to a siting and permitting process.

Second, the adjacent property is believed to have been part of an old landfill that closed many years ago. This raises questions as to what impacts these conditions may have in redeveloping the adjacent parcel. Further investigation into the subsurface conditions should be completed.

Third, the only access to the facility is off Hwy. 503, a major north/south transportation corridor in the County. The entrance to CTR has been improved to enhance safe ingress and egress by eliminating the left turn for outbound traffic. Also, the Washington Department of Transportation will not permit a traffic signal to be installed. Thus, the site will need to contend with the high traffic volume on a long-term basis with the current entrance. Although certain improvements included in the site plan can relieve queueing onto the public right of way, traffic on Hwy. 503 will increase as the north area of the county grows.

Option 2: Make Minimal Improvements at CTR and Site/Build a New North SatelliteTransfer Station to Accept Primarily Waste from Self-Haul Customers

This option assumed minimal investments at CTR as described in Phase 1 and 1A improvements. The improvements will enhance onsite conditions to handle existing traffic. It recognized that adding any more traffic with access off Hwy. 503 and accepting more waste at CTR as the region grows is less desirable. However, CTR is centrally located and with minimal investments, the facility can handle current traffic more efficiently. **Figure 14** on page 36 depicts the proposed improvements to the existing CTR facility to address the immediate needs.

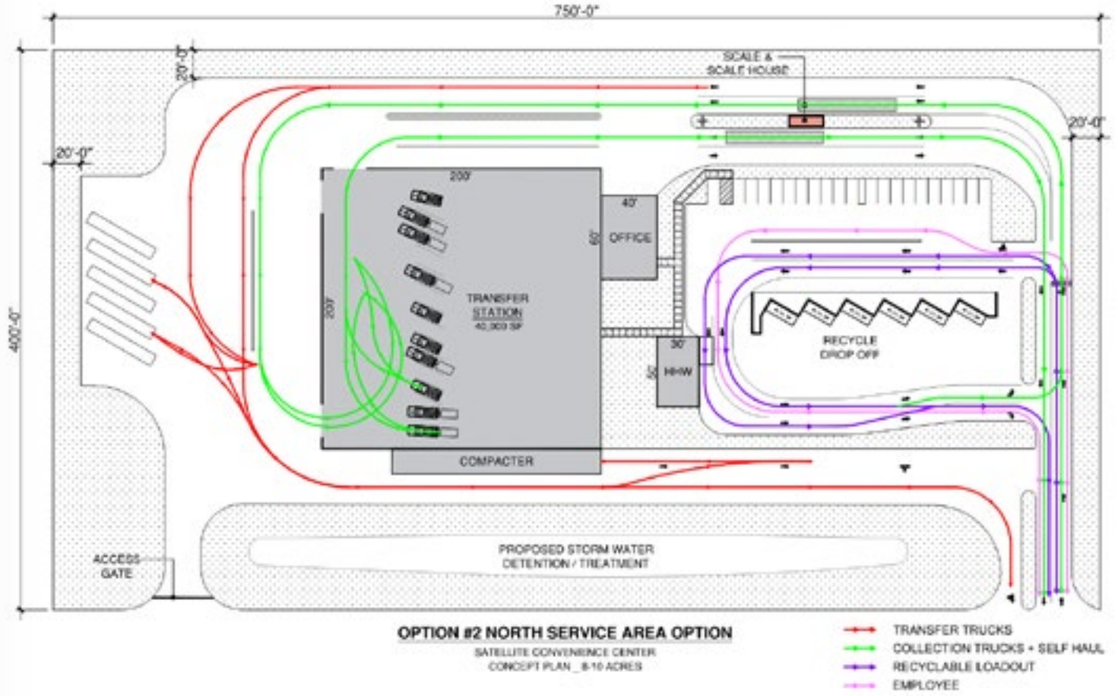
These are minimal improvements to mitigate near-term operating deficiencies, assuming a long-term plan of siting and building a new satellite transfer station /convenience center to serve the north area.

The expanded transfer station would serve to improve overall operations until a satellite station was sited and constructed. Under this approach once the satellite station is operational, CTR would only receive waste from commercial collection trucks. This would positively impact neighbors by reducing traffic since the facility would not receive waste from self-haul customers. Also, impacts on neighboring properties would be greatly reduced on weekends with no self-haul traffic and limited operations. These improvements will mitigate current traffic issues until a new satellite or convenience center is operational.

Option 2 includes siting a satellite transfer station often referred to as a “convenience center” to receive waste from self-haul customers. The new convenience center would be a smaller structure but large enough to ensure capacity to handle future growth. Typically, convenience centers are open seven days per week but the days and hours for operations can vary depending on the local jurisdiction’s policies and practices.

Figure 16 on the next page shows a concept plan for a typical satellite facility. This concept plan has been updated from the previous plan included in Phase 1. The actual size and site configuration will vary based on local conditions and determined by the desired services to be provided.

Figure 16: Option 2 – CTR Satellite Station



Features for a new northern area satellite transfer station may include:

1. A minimum site of six acres of commercial/industrial zoned property is located on a minor arterial road. However, it would be desirable to have seven to ten acres.
2. A new convenience center/transfer station (estimated to be approximately 16,000 to 20,000 sf building) to handle up to 400 TPD.
3. Recycling/HHW drop-off center.
4. Scale complex with one inbound and one outbound scale and gatehouse.
5. Top load trucks from the floor and no compactor.

It would be expected to take a minimum of three years to site and permit the new facility, but this is just an estimate, and permitting a new site could be longer depending on local zoning requirements. This assumes that conducting the siting process with public involvement would take 12 to 18 months. The timeline for zoning approval would be similar (12 to 18 months) considering it would require a conditional use process. Design and construction would occur over two years meaning a new facility may take a minimum of five years before it would be operational.

Benefits of this new north area facility include:

1. Improves onsite queue and circulation issues at CTR.
2. Increases scale capacity and assumes new scale house software to improve transaction times.

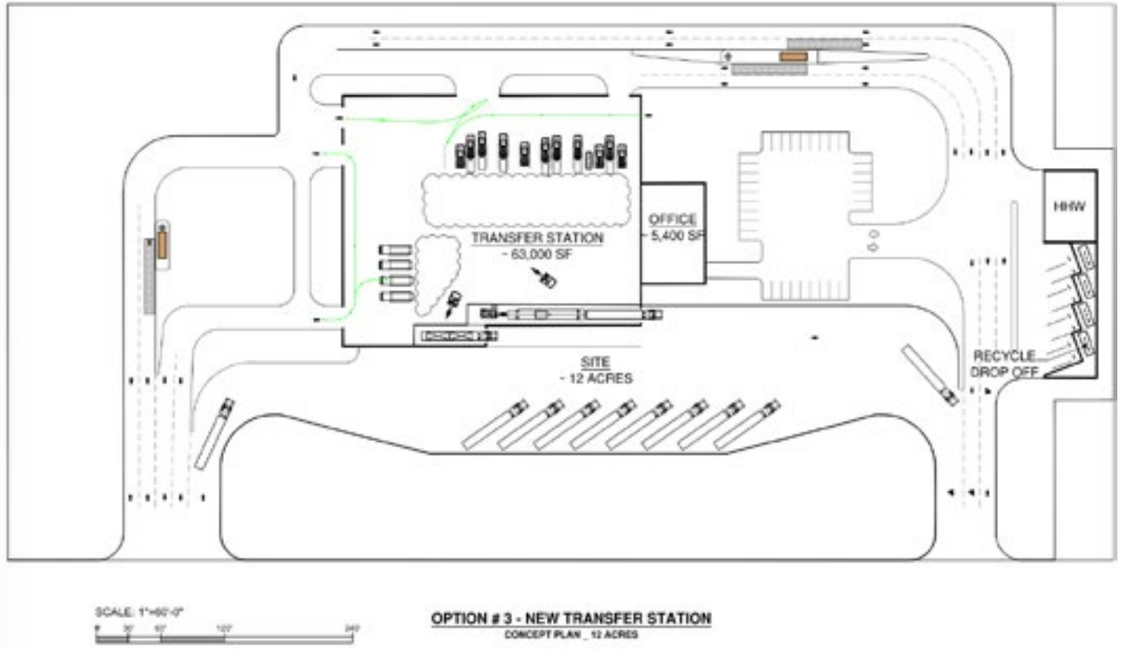
3. Increases space to provide needed stalls for self-haul and cash customers to unload more safely during peak conditions.
4. Provides some separation of self-haul vehicles from WCW collection trucks under peak conditions.
5. May increase needed capacity to loadout waste.
6. Provides additional floor space for flexibility in managing different waste streams.
7. Adds new facility to serve the fastest growing area of the County.
8. Eliminates self-haul customers at CTR which reduces operating hours and days, benefiting neighbors.
9. Reduces overall traffic at CTR and may reduce drive times for self-haul customers when a satellite facility is operational.

Option 3: Replace CTR with New Transfer Station at a New Location

The CTR Transfer Station was not designed to handle the traffic and quantities of waste currently received. Over the past five years, there have been many new developments in the surrounding properties. This includes new residential developments as well as a new school and church. With the expected growth, the County may decide that it may not be the best long-term site to invest in. One option is to make minimal investments in CTR to address immediate operational needs and establish a new location to serve the long term.

To provide future waste management and recycling services, a modern transfer station would be sited and constructed. Ideally, the new station would still be somewhat central to most of the population it serves and be located on commercial /industrial zoned property with access off an arterial or major collector street. It would be located to serve the current service area as well as the growing area of the North County cities. **Figure 17** on the next page shows the proposed concept site plan for a new transfer station to replace CTR.

Figure 17: Option 3 – New Transfer Station



The following describes the key features of a new transfer station:

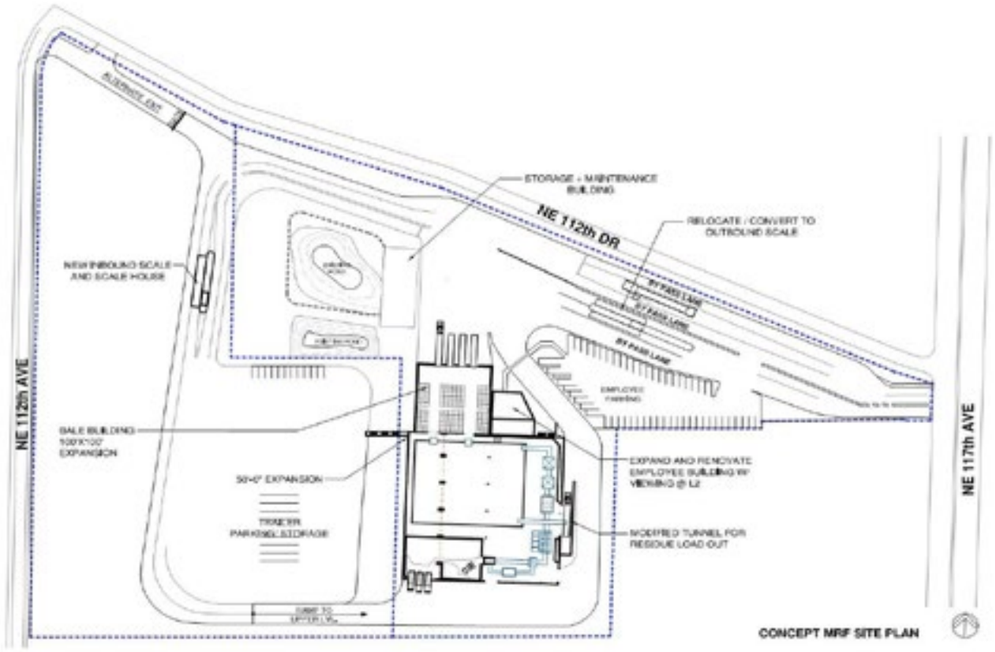
- A minimum site of 12-acres of commercial/industrial zoned property located on a minor arterial road.
- A new transfer station building (approximately 70,000 sf building) to handle up to 1,500 TPD.
- Minimum of two (2) load-out ports equipped with compactors and one top load port to be used as backup and for other materials.
- A recycling/HHW drop-off center.
- Preferably a separate or split access drive for collection trucks to separate from self-haul traffic for safety reasons.
- Separate scales for weighing collection trucks with RFID readers and the capability to weighout vehicles.
- Parking area for staging trailers and containers.
- Office and employee break/restroom and training area.
- Possible education center for tours.

This facility would also incorporate green design features such as natural lighting, recycled-content building materials, water conservation features, renewable energy features, modern odor, and dust control systems.

6.7 Option to Convert CTR into a Materials Recovery Facility

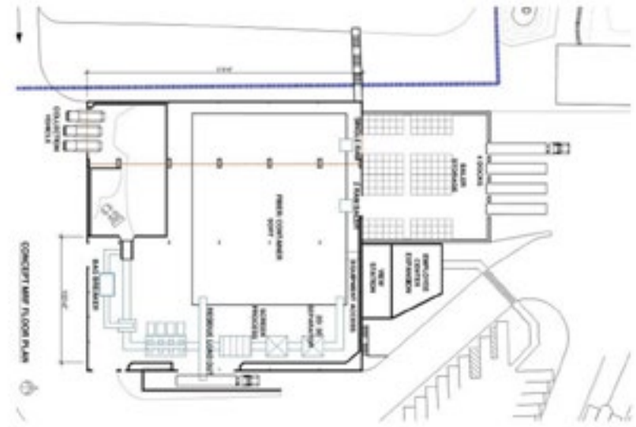
If Option 3 was implemented and CTR was closed to receiving MSW from both commercial collection trucks and self-haul, one option to consider would be to repurpose the facility into a MRF. Re-purposing CTR would result in lower system costs since to site, permit and construct a MRF at a new location would require more capital. **Figure 18** shows a concept for converting CTR to a new MRF.

Figure 18: Concept MRF Site Plan



As shown on the conceptual floor plan the primary expenditure to convert CTR would be to expand the structure by adding a bale storage and shipping building on the north side.

Figure 19: Convert CTR to MRF - Floor Plan



Organics Management for North Service Area

Pending an organics feasibility study, it is recommended that space be allocated for the collection of both yard debris and source separated commercial food waste for reloading in any proposed facility. In the event of the siting of a full service transfer station, proper space should be allocated for preprocessing equipment to provide flexibility.

Estimated Construction Cost for North Service Area Options

Investments in the future needs of CTR beyond Phase 1 and Phase 1A (optional) will need to be made depending on the negotiations with CRC and the County and consideration of options relating to the North Service Area Options. The options for consideration have been described previously. The summary of the three options are:

- Option 1: Make Major Improvements at CTR to Address Current and Future Service Needs.
- Option 2: Make Minimal Improvements at CTR and Site/Build a New North SatelliteTransfer Station to Accept Primarily Waste from Self-Haul Customers.
- Option 3: Replace CTR with New Transfer Station at a New Location.

Option one has some issues that would make it an unlikely choice. At the back of the property is an old inert landfill and stability for building is questionable on this part of the site. There is also a different zoning for the back lot of CTR meaning a conditional use review would be needed to develop it and the neighborhood characteristics have changed since the site was first developed making any expansion much more difficult. It is recommended that the County conduct further evaluation of these options once negotiations are complete. A decision on the MRF could also influence preference for one option over another. With the second two options being the most likely of the three, preliminary costs of those were developed.

North Service Options (New Transfer Station or Satellite Convenience Center)

Construction costs are estimated to be $18M to expand CTR. This does not include the cost for the Phase 1 improvements to add a new perimeter road and scale at CTR of $3.5M. The options to site a new transfer station range from an estimated $25M for a smaller convenience center to $34M for a totally new transfer

station to serve the north service area for the next 25 years. It is recommended to proceed with the Phase 1 improvements at CTR and further evaluate the North Service Options in order to develop a planned approach for future growth and needs in the County.

Construction cost estimates were made for each phase of the capital improvements for the West Van Transfer and Recycling Facility. These estimates are based on construction costs for specific items from projects completed in Clark County or similar projects in the Pacific Northwest in 2023. The cost estimates represent a "Class 3 planning level" cost estimate meaning it carries a variance range of plus 30% to minus 20%.

Table 9: Construction Cost Estimate – North Service Options and CTR

North Service Option and CTR Construction Cost Estimates	
New Transfer Station	**$34,000,000**
Satellite Convenience Center	**$25,000,000**
CTR Expansion (Excludes Option 1A)	**$3,500,000**

6.8 Recommended Implementation Schedule

It is important to **expedite the construction of the Phase 1 improvements** to eliminate vehicles from queueing on to Hwy. 503. The County, working with its partners, will need to **further evaluate the options for serving the north service area for the long term.** More information related to the potential of developing on the adjacent parcel just west of CTR is needed as well as evaluating options to site a new transfer station. The County will need time to make any decisions and it may take several years to permit any of the options so Phase 1 improvements will be crucial. The CIP can use the planning level cost information to prepare a financial plan to fund the ultimate decision for building the facilities needed to serve the north service area.

Chapter 7 – Washougal Transfer Station (Washougal)

7.1 Introduction

Washougal began operations in 2009 and is operated by CRC. The facility is located on a 4.6-acre site in the Port of Washougal. Customers enter from Grant Street to a scale house complex that includes one inbound scale and one outbound scale. Each customer must be weighed, and fees are assessed based on total waste disposed. The facility includes an 80-by-60-foot transfer station building (4,800 sf) for customers to unload waste. Transfer trucks enter the east side through a depressed tunnel for loading trailers that are transported to the Wasco Landfill in The Dalles, Oregon. The station operates as a lift-and-load, meaning the bottom of the tunnel is only eight ft below the tipping floor. A front loader is used to lift waste about nine ft to load trailers. This operation does reduce the time to load trailers, but waste can spill off the sides and onto the tunnel floor, which requires regular cleaning.

The transfer station has three (3) 22-foot-wide access doors located on the west side where collection trucks unload. This design allows for up to six (6) vehicles to unload at one time. The layout of the facility is shown in **Figure 20.**

Figure 20: Current Washougal Site Plan



The facility is open six days per week (Monday-Saturday) for commercial collection trucks from 7 a.m. to 5 p.m. The transfer station is open to the public and self-haul traffic on Wednesdays and Fridays from 7 a.m. to 5 p.m., and Saturday from 8 a.m. to 4 p.m. When the facility is open to self-haul customers commercial collection trucks can use a 22-foot roll-up door on the south side to unload.

The facility also provides a drop-off center where customers can bring commingled and source-separated materials to recycle. The drop-off center is open to the public Monday through Friday from 7 a.m. to 5 p.m. and Saturday from 8 a.m. to 4 p.m. Customers can drop off HHW every third Saturday of the month from 8 a.m. to 4 p.m.

In Phase 1 RSWSS, an assessment of the conditions of Washougal was conducted. Some minor repairs are required but primary structures and site appear in good condition.

7.2 Summary of Phase 1 RSWSS – Assessment

The assessment of the transfer station operations was made on Wednesday, February 12, 2020. The site visit included a meeting with the site manager and a review of current conditions. This operations review focused on how the site manages traffic and waste handling and loading under the present conditions. The assessment will consider how the current facilities can manage future waste volumes and traffic to service the eastern portion of the County. During this same visit, a physical condition assessment was made by structural and civil engineers. A full report of the physical site conditions is presented in RSWSS Phase 1 Report Appendix D, Conditions Assessment (see Appendix L).

Conditions Assessment

The limited structural and site improvement conditions assessment reveals most of the assets at the site are in good condition except for areas of pavement, which are in fair condition.

- The transfer station is in **good** condition. Siding damage behind the trailer lift-and-load area was observed. The damage is not structural. However, the damaged siding should be repaired to prevent potential corrosion problems due to moisture penetration.
- The HHW canopy, the scale house, and the administration office are in **good** overall condition. No short-term action is needed.
- The gravel storage area is in **good** condition. No short-term action is needed.
- The public recycling area is in **good** condition. Small areas of cracked pavement were observed. No short-term action is needed. The cracked pavement should be repaired in the future.
- The drive aisles that course through the site are paved with asphalt concrete pavement. In general, the paving is in **good** condition except for in the truck maneuvering areas. We recommend the worn surface areas be repaired or replaced.
- The storm facilities, the sanitary system, and the water system are overall in **good** condition. No short-term action is needed.

The structural and civil conditions assessments were limited to those areas that are readily accessible and visible to field staff. Concealed conditions that become exposed in the future may change our current recommendations made here.

Operational Assessment

In Phase 1 during the site visit, the site manager for CRC reported the facility has no significant operating deficiencies. At times, traffic can back up to the street, but it is not a routine condition. However, this is based on the number of customers and waste volumes having remained similar in the past few years. With moderate growth in customer traffic on Wednesdays and Saturdays, additional unloading stalls are needed. Based on recent data in 2021, the number of inbound trips has increased by nearly 25% since 2019 placing a demand for providing more stalls to unload.

It was reported that commercial trucks will unload using the south door. Waste can then be pushed and lifted to dump into trailers on the east side of the building. Because the building is only 60 ft wide with only 45 ft available for storage of waste at certain times, waste can spill out of the building temporarily. This is not a routine event but is an indication of the limited surge or storage capacity of the station. On days when self-haul customers are unloading, there could be interruptions from unloading until the waste is clear from the tipping floor to allow self-haul access to certain stalls.

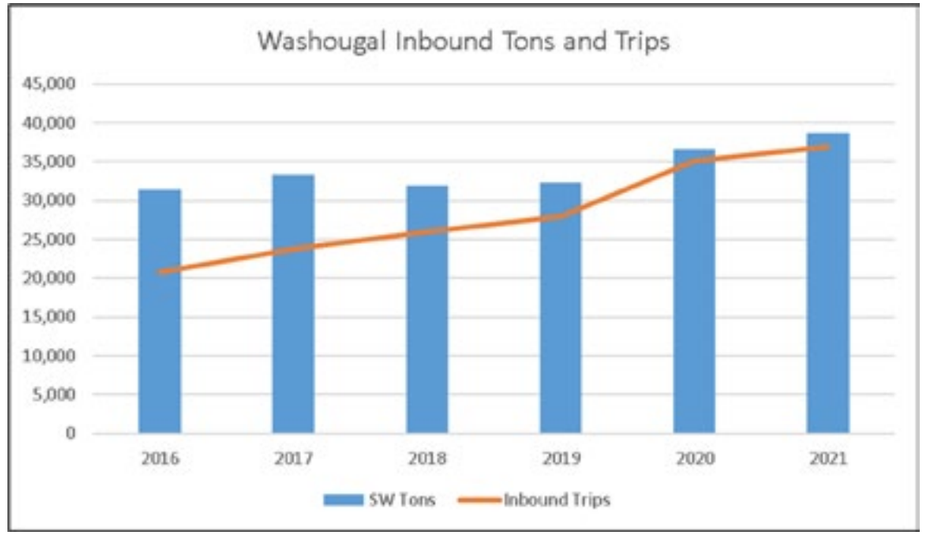
The recycling and HHW drop-off areas are accessible from Grant Street, even when the station is closed to self-haul customers. The overall space is sufficient for managing the recycling needs of the community.

Likewise, the HHW facilities are sufficient for managing materials dropped off. The only drawback is that when the HHW is open, traffic can back up and temporarily impede access to the recycling drop-off area. Fortunately, the HHW facility was designed to allow for two drive-through lanes for customers.

Washougal tons, trips, and capacity is based on the 2021 data. Washougal receives on average about 125 TPD assuming a six-day week operation and 150 TPD if a five-day operational week is assumed. The five-day average should be considered as most of the waste is received during this period. Most customers on Saturday are self-haul vehicles that have small loads.

As shown in **Figure 21** both the trips and total tons received have increased steadily over the past three years. This table has been updated with current numbers from the original Phase 1 report.

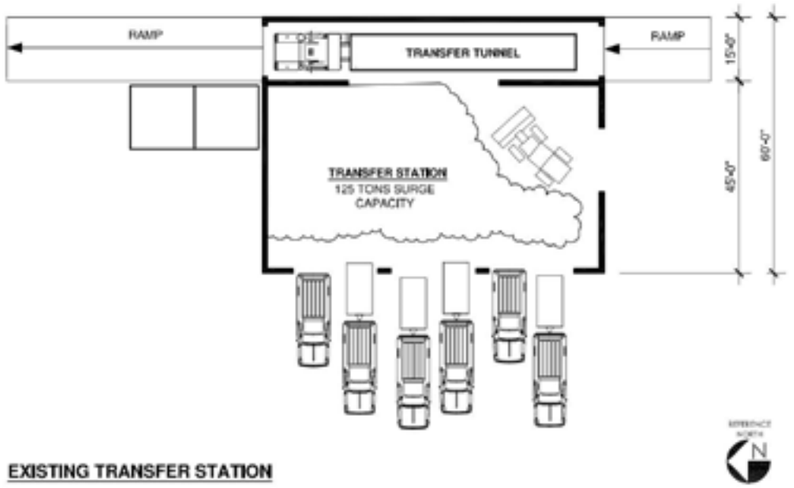
Figure 21: Washougal Inbound Tons and Trips 2016-2021



Existing Tip Floor Operation

The existing tip floor operation shown in **Figure 22** on the next page consists of an area that is approximately 40 ft x 60 ft or 2,400 sf. Accounting for the area to operate equipment to load transfer trailers leaves about 2,000 sf of surge capacity assuming no vehicles are unloading in the building. If the station receives 125 TPD the surge capacity requires about 1,700 sf to temporarily store waste. If the station receives 150 TPD, the needed surge capacity increases to 2,000 sf based on the current waste volume received the facility is basically at full capacity.

Figure 22: Washougal Existing Tipping Floor



Likewise, there are only six stalls available to unload the self-haul customers on the west side of the station. Based on 2021 data, Washougal receives about 200 self-haul customers per day over the three days of operation. This level of traffic suggests that six stalls is generally adequate for unloading this number of customers without causing major onsite queue issues. However, there could be certain times of the year where there are longer wait times to unload. During this period, the commercial trucks primarily unload on the south side of the station. Although the data suggest that a single stall is nominally adequate for unloading commercial collection trucks, it is more desirable to have at least two or preferably three stalls during peak hours. Some initial improvements were noted in the Phase 1 report. These include:

1. Expand the access lane to the HHW facility to improve traffic flow and safety.
2. Add a steel backsplash to protect the siding from damage caused from loading trailers and consider adding a short push wall on the tip floor side to increase surge capacity. This should reduce possible spillage of waste from the top-load operation.
3. Expand the transfer station building to accommodate future growth.
4. Increase the capacity of the scale complex and reduce potential of traffic backing onto Grant Street.

In the RSWSS Phase 1 Report (completed October 2021) it was noted that Washougal will need to be expanded soon. However, the County is currently considering the option to expand the number of days Washougal is open to receive self-haul customers. It is expected to help relieve some of the traffic issues at CTR. This decision may also impact the timeframe for expanding the existing Washougal Transfer Station as the tip floor does not have the capacity to handle more waste generated by growth or by decisions to expand the operating hours for self-haul customers.

Phase 2 – Washougal Facilities Plan

Using the preliminary analysis and findings from the Phase 1 RSWSS the facilities needed to serve the unincorporated eastern county and the cities of Camas and Washougal have been updated.

7.3 Basis of Master Plan for Facility Improvements

Based on the findings from Phase 1 RSWSS and the recently passed HB 1799, the updated design data in **Table 10** is recommended to be the basis of the Washougal Master Plan. This Basis of Master Plan considers that new census data and waste quantities received have resulted in new projections. Population in the two cities is expected to be approximately 50,000 in 2040. It is also assumed that another 50,000 people representing growth in the urbanized areas if east county and parts of the incorporated City of Vancouver may use the Washougal Transfer Station. Thus, for design purposes it is assumed that the amount of waste received at the station could exceed 80,000 TPY by 2040.

Currently the station averages 25 self-haul vehicles per hour. With a stall being able to handle five (5) vehicles per hour, the current need is five to six stalls. Based on projections of 50 vehicles per hour in 2040, the need increases to 10 stalls.

Table 10: Washougal - Basis of Master Plan Design Data (Updated per 2020 Census)

Category		Existing (2021)	2040 Projections	% Change
Waste Quantities (MSW)				
Annual	Tons	38,638	83,097	115%
Average	Tons/Day	125	290	132%
Peak	Tons/Day	150	350	133%
Customer Tons				
WCW				
All Commercial	Annual Tons	32,040	68,000	112%
	Ave Daily	120	193	
Self-Haul /Cash	Annual Tons	6,300	15,000	138%
	Weekly Tons (3 day)	121	288	138%
Trips				
All Commercial	Annual	7,220	15,000	108%
	Daily (5 day)	28	60	114%
Self-Haul/Cash	Annual	29,669	66,000	123%
	Ave Daily (3 day)	190	210 (6 day)	11%

Notes

#1 Source-Washington State – OMB

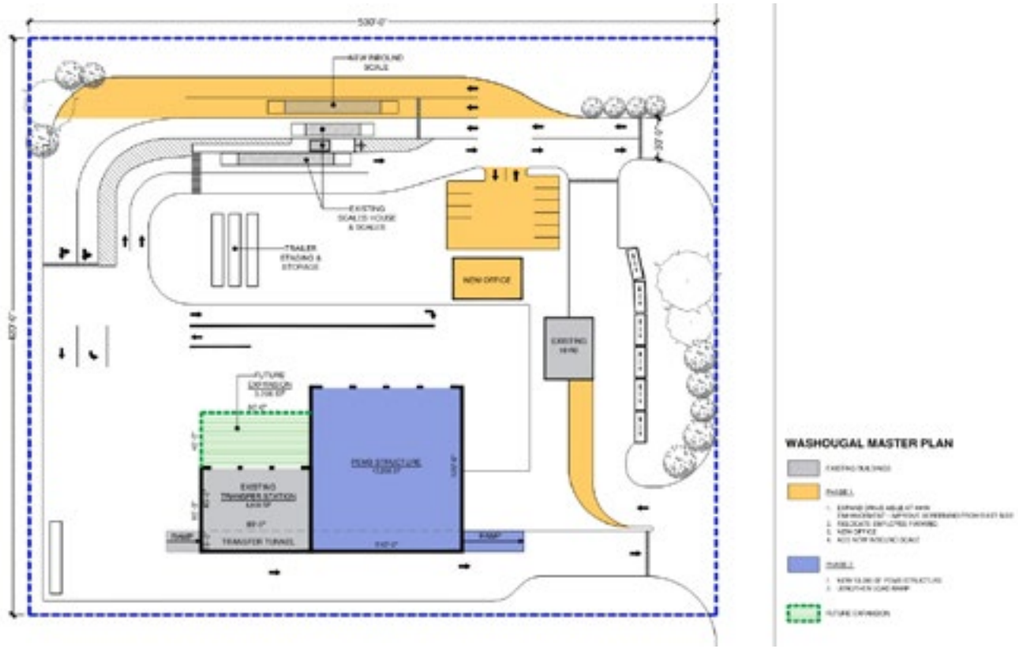
Organics Management

Washougal processed approximately 48 tons of yard debris in 2021 and no source separated commercial food waste was received. This volume is very little when compared to 32,000 tons of garbage collected on-site. With the passage of HB 1799, the design for Washougal will include the continued collection of yard debris and provide options for expanding reload capacity in the future. The site as currently used is not supportive of any preprocessing options for organic material.

7.4 Description of Improvements of Master Plan

To meet the needs of the service area, there are improvements that should be planned to provide more unloading stalls and to add tipping floor space. Additional load out capacity is desirable. This site map in **Figure 23** below shows four improvements to be included in the Capital Improvements Plan for Washougal.

Figure 23: Site Map Showing Improvements



These improvements are as follows:

1. A short-term improvement mentioned by the operator was to expand the access lane to the HHW facility. This is a minor investment to improve traffic flow and safety and could be completed in the near future.
2. Add screening on the east side of the HHW building to reduce exposure to the elements.
3. Add a steel backsplash and chute along the east side of the building in the load-out tunnel. This backsplash will protect the siding from damage caused from loading trailers. It should also reduce possible spillage of waste from the top-load operation. Also, consider adding a short push wall on the tip floor side to increase surge capacity.
4. Expand the transfer station by adding a new 13,200 sf PEMB structure and paving the yard to increase capacity. This will include expanding the below grade loading tunnel.
5. Expand the entrance road to increase the capacity of the scale complex and reduce potential of traffic backing onto Grant Street.
6. Build a new office or relocate the existing building and relocate parking.
7. Provide space for trailer storage and other storage.
8. Consider future expansion at the existing transfer station entrance.

7.5 Estimated Construction Cost for Washougal Transfer Station Capital Improvements

Construction cost estimates were updated from the Phase 1 Report. The primary increase in these costs relates to the updated Basis of Master Plan data that suggests the facility is currently operating above capacity both in managing traffic and waste flows. Traffic for self-haul customers has increased over the past two years and projections of waste to be received at the facility are significantly higher. Thus, a much larger expansion is required to meet this future demand.

Construction cost estimates were made for each phase of the capital improvements for the West Van Transfer and Recycling Facility. These estimates are based on construction costs for specific items from projects completed in Clark County or similar projects in the Pacific Northwest in 2023. The cost estimates represent a "Class 3 planning level" cost estimate meaning it carries a variance range of plus 30% to minus 20%.

Table 11: Construction Cost Estimate – Capital Improvement Plan

Washougal Transfer Station Construction Cost Estimates	
New Access Road and Scale/New Parking Description: 1. Expand the entrance road and install dedicated scale for commercial vehicles.	**$600,000**
New Transfer Station Expansion Description: 1. Construct a new PEMB structure (120' x 110'), extend transfer tunnel, build new office, or relocate existing office and create new parking for employees.	**$4,100,000**
Total Construction for Option w/ New Office	**$4,700,000**
Total Construction for Option Relocation of Existing Office Assuming Use of Existing Office (Reduces Total ~ $ 700,000)	**$4,000,000**
Total Estimated Construction Cost for CIP	**$4,700,000**

7.6 Recommended Implementation Schedule

This facility is already operating beyond capacity and should be a priority for the County. Design and construction for expanding the Washougal Transfer Station should be completed in the next three years. The master site plan does suggest a phased construction to enable the facility to remain in operation during construction. Further details are included in the CIP.

Chapter 8 – Summary of Phase 1 and 2 RSWSS Recommendations

The RSWSS represents a comprehensive review of the operations and facilities serving the County and the cities. The project was completed in two phases. During Phase 1, a thorough assessment of the physical condition of each facility was performed along with a review of operations. The results identified the needs and opportunities to upgrade facilities to meet both current deficiencies and develop the infrastructure to meet the needs of a growing population.

Many alternatives were evaluated while working with County staff as well as the City of Vancouver. Preliminary site plans were prepared to consider the best options for building the needed infrastructure. These results were carried forward into Phase 2 to complete a Regional System Facilities Plan.

Also, in Phase 1, the County considered options to existing policies and practices that might result in improving operations. Recommendations were made and are still under review.

The following represents the list of recommendations presented in both Phase 1 and 2 of the RSWSS. Important to note that several of these recommendations are impacted by the ongoing negotiations with CRC regarding operations of the transfer station system.

8.1 General Policy and Administration Recommendations

1. The County should establish a fair operating margin to compensate CRC for continuing with operations of solid waste facilities for the next five years or for a set period to be determined.

   Status – The County is currently in negotiations with CRC and is expected to address financial compensation for the operation of facilities.

2. Revenues generated in excess of the cost of services plus the established operating margin should be remitted to the County. The remitted revenues will be encumbered to fund capital improvements in the solid waste system.

   Status – The County is currently in negotiations with CRC and is expected to address financial compensation for the operation of facilities.

3. The County should establish a facility R&R evaluation process and a dedicated fund that will maintain system assets.

   Status – A preliminary R&R format was prepared but was not completed. The County is proceeding with a new contract to perform a more detailed assessment of conditions which could be used as the basis for preparing a schedule for establishing an R&R.

4. The County should approve funds for implementing Phase 1 of the CTR site improvements to eliminate any potential for inbound customers from queueing onto the public right of way on state Hwy. 503. The improvements include extending the entrance road and new scale onto the adjacent property located west of the current transfer station. Details of these improvements should be negotiated as part of the contract extension.

   Status – This recommendation is reaffirmed in the Phase 2 – Facilities Plan and is included in the CIP.

5. The County should establish a minimum rate for all customers using the transfer stations. Under the current tip fee policies, customers that bring less than 300 lbs. are not paying the cost of services. Implementing this policy may also provide an incentive to subscribe to regular collection services or cause customers to make fewer trips by consolidating their loads.

   Status – No formal decision has been made regarding establishing a minimum rate at transfer stations. The County has reviewed this recommendation with the SWAC and with the Regional Steering Committee.

6. The County should extend the hours of operations at both the West Van and Washougal.

   Status – No formal decision has been made to extend the hours of operations at West Van and Washougal. The County has reviewed this recommendation with the SWAC and with the Regional Steering Committee.

8.2 Ownership Recommendations

The following recommendations were adopted by the SWAC and endorsed by the Regional Steering Committee.

1. Solid waste staff recommend the County and/or City of Washougal exercise the available contractual options to purchase the facilities when the option of public ownership becomes available.
2. Solid waste staff recommend the option to publicly own and privately operate the regional transfer facilities under contract to be further evaluated. The evaluation should focus on the advantages and disadvantages of public operation of the scale houses versus fully contracted services.
3. Solid waste staff recommend further evaluation of Joint Municipal Utility Service model to own and operate the system. The evaluation should include an extensive stakeholder outreach and input process prior to the formation of a multi-jurisdictional organization.

8.3 Organics Recommendations

1. It is recommended the County prepare an organics management plan to address actions needed to comply with the goals established under HB 1799. It should include reviewing the feasibility of alternatives for implementing best management practices and implementing the most cost-effective strategy for handling organics. This includes considering both collections services for organics, processing and technologies to convert organics into renewable energy, and/or new products.

8.4 Recommendations of Phase 2 Regional System – Facilities Plans/CIP

The Facilities Plan identified $26.5M (2023 $) of capital improvements will need to be made over the next seven (7) to 10 years. Additional investments were also identified that could range from $18M to $34M depending on which option is implemented to serve the north service area currently managed at the existing CTR.

Recommendations for implementing system improvements are described in the CIP and are summarized as follows.

8.5 CTR Recommendations

1. Construction of an extension of the inbound lane onto the adjacent parcel west of the existing facility is the highest priority and should be completed by 2025.
2. The County should complete an evaluation of the options for the north service area in the next two years. This includes considering the necessary siting and permitting process and determining conditions related to expanding CTR.

8.6 Washougal Recommendations

1. The County should proceed with plans to expand Washougal. This would include providing survey and geotechnical data by the end of 2023. Final programming and design should then begin in 2024. It would be desirable to have the new expanded facility operational by the end of 2026.

8.7 West Van Recommendations

1. The County should proceed to complete site survey and geotechnical information by mid-2024. This would include gaining approval to extend city water and possibly sewer to the site. Design of first phase improvements could proceed in 2024 with construction in 2025.
2. A determination of a final schedule to remove the MRF should be made by the end of 2023. This would enable the County to make decisions on expanding the organics management improvements.

The recommendations and proposed schedule of capital improvements are further outlined in the CIP. The County will need to monitor the progress of these recommended actions and update the CIP annually.

Chapter 9 – Clark County Regional Solid Waste System Capital Improvement Plan (CIP)

9.1 Regional Solid Waste System Study – Findings for Capital Improvement Needs

The findings of the Phase 1 RSWSS and Facility Plan conclude the existing transfer stations do not have the capacity to manage current waste flows and traffic from customers. All three transfer stations experience operating deficiencies to provide services to customers. CRC has adapted to these conditions to operate safely, but the facilities are undersized to efficiently manage the current customers and waste volumes and cannot handle the increase in waste generated from future growth in the County. During peak periods at CTR, traffic will back onto Hwy 503 from both directions as they wait to enter the facility to weigh in and unload. At both West Van and Washougal customer traffic can also back onto the public right of way. Currently the facilities do not provide sufficient stalls for customers to unload.

In addition, there are no planned facilities to handle other waste streams or integrate programs to reduce waste disposed. This includes the need to handle mixed organics where collection programs for food waste mixed with yard waste from cities is already straining the tip floor space and operations at West Van. The amount is expected to increase significantly with the implementation of HB 1799 requirements by 2030. As acknowledged in the 2023 SWMP update, the County plans to evaluate the needs and opportunities to accept and process construction and demolition waste. The infrastructure required to meet the demands of these trends needs to be incorporated into modernizing the regional system.

In the Phase 1 RSWSS, JRMA completed an assessment of the current processing equipment at the West Van MRF. A MRF feasibility study was prepared and concluded that a new equipment line should be installed using advanced processing technology. The new equipment could be installed at West Van if expanded or at a new facility in the County. A new MRF could be constructed at a different location. Removing the processing equipment from the West Van Transfer Station would free up approximately 45,000 sf of enclosed structure to be used for other services. There is the option to repurpose CTR as a MRF if the County decides to build a new transfer station to serve the north service area.

The updated facilities plans for each transfer station acknowledges the need to provide space to receive and transfer mixed organics. The West Van CIP includes a plan to expand the existing structure to provide a covered area to receive food source separated food waste from commercial generators and mixed organics collected at residences. A new top load out station will allow the material to be transported to a compost facility. The West Van plan also provides the flexibility to construct mixed waste organics processing facilities such as aerated static pile composting (ASP) or possibly an anaerobic digestor unit(s).

9.2 Capital Improvement Plans

With completion of the Facility Plan, the major improvements needed to upgrade and expand the County have been defined. The following table lists the estimated capital to be budgeted over the next seven (7) years. Referred to as the Baseline CIP, these improvements are necessary to address both immediate deficiencies at the facilities while providing the flexibility to make additional investments to expand operations and provide solid waste and recycling facilities needed over the next 25 years.

Table 12: CIP Baseline Projections for Existing Transfer Stations

Capital Improvement Plan – Baseline Projections Estimates	
CTR – Phase 1	$6,500,000
Washougal – Phased Construction Plan	$4,700,000
West Van – Phased Construction Plan	$15,300,000
Total Estimated Capital For Baseline CIP	**$26,500,000**

The Baseline CIP will need to be updated annually to reflect changes to the projected revenue requirements. The construction cost information is based on projects in the region completed in 2023. It assumes that 2023 construction costs will increase by 3.5% annually, based on recent data.

9.3 Schedule and Key Assumptions for Implementing the CIP

CTR/ North Service Area

It is recommended that the County begin the initial phases to execute design and construction improvements at each facility. The highest priority is to build the Phase 1 improvements at CTR. During peak periods traffic continues to queue onto Hwy 503. These improvements will provide the queue space to rectify this condition and provide flexibility to operate with less onsite congestion at times. The Baseline CIP also includes a budget to expand the transfer station on the existing property referred to Phase 1A. This improvement is not scheduled to be made until 2026 and may not be implemented depending on which option the County decides to pursue for managing waste in the north service area.

The decision of which option to pursue in the north service area is expected to be complete by 2026. The Regional Facilities identified three options listed below.

Table 13: CTR and North Service Options Cost Estimates

North Service Option and CTR Construction Cost Estimates	
Build New Transfer Station	**$34,000,000**
Satellite Convenience Center	**$25,000,000**
CTR Expansion (Excludes Option 1A)	**$18,000,000**

CTR currently receives 60% of the waste generated in the County and is expected to experience the largest amount of population growth based on information from the growth management plan. Over the next two years the County will need to consider the timeframe and process associated with siting and permitting a new site versus expanding CTR onto the adjacent property. Another factor to consider in this decision is the question of public ownership of the regional system. At this time the County has leaned towards a preference to own the system and contract with a private company to operate facilities.

Assuming a decision on which option is chosen, the County will need to update the CIP to anticipate the future expenditures. Based on 2023 cost estimates, that could range from $18M to $34M plus inflationary cost. However, these costs are based on conceptual master plans as presented in the Facility Plan. Further analysis of the options with additional programming and design development will provide updated and more accurate

cost information. The JRMA consultant team has prepared CIP projections for each option to be used for financial planning purposes.

Washougal Transfer Station

Improvements at Washougal are considered a lessor priority but preliminary sitework should begin soon. Over the past two years the amount of waste received and number of self-haul customers have increased by 20% and 32% respectively. Thus, on peak days the amount of waste can exceed 150 TPD. As discussed in the Facilities Plan, the transfer station does not have the capacity to handle the surge during these events. For these reasons Washougal should be considered a priority, however CRC may implement measures to minimize impacts on operations until the facility is expanded.

Initial work to begin planning for making improvements could include conducting a site survey and preparing final programming and design development by the end of 2023. The decisions made to make improvements may also need to consider ownership, as the City of Washougal has the right to pursue this option. If these activities do proceed, final design could begin in 2024 and construction in 2025.

Other policies that may impact the timeline for making improvements at Washougal relate to possibly increasing the number days it is open to self-haul customers and establishing a minimum fee. Currently, Washougal is only open for self-haul customers three days per week (Wednesdays, Fridays, and Saturdays).

West Van

The West Van facility is the primary materials handling facility in the County. Located at the Port of Vancouver it not only operates as a transfer station, but also receives and processes all recycled materials, yard waste and mixed organics collected in the County. Solid waste is transferred less than a half mile on a private road to the barge operation, recyclables are processed and shipped to markets and organics are sent to Dirt Huggers, a compost facility in the Columbia Gorge near The Dalles, Oregon.

Similar to the other stations, self-haul traffic backs up onto Old Lower River Road and the limited space for onsite queue adds to congestion that impacts operations. The master plan prepared in this report presents revisions to the site circulation and provides configuration of on-site operations to reduce congestion and improve operating efficiency. It also includes an extension of the City water line to upgrade fire suppression and removal of obsolete structures.

The master plan provides information for creating the structures and space to manage future waste streams such as organics, construction and demolition wastes and/or other services required by the County and its partners. It presents a multi-year construction plan to allow improvements to be made while maintaining the necessary operations and services required.

The most critical element of completing the makeover of West Van is the decision whether to relocate the MRF. Anticipated to be completed over the next five years, the removal of equipment from this facility will open up approximately 45,000 sf of the enclosed structure. This space can then be re-purposed for managing mixed organics or other services.

The Baseline CIP acknowledges these events and describes the improvements to be made over the next seven years. With very limited space to manage the growing amount of mixed organics collected from both the Cities of Vancouver and Ridgefield, the plan shows the need to expand the existing MRF building in 2025. Until a firm decision and schedule for relocating the MRF is known, this improvement should be implemented.

If the MRF is relocated, recycled materials received at West Van will need more space for transferring to the new location. The master plan includes the expansion of the recycling and HHW drop off facilities to improve services and promote efficient operations.

Discussed in the master plan is the need to provide space to add future operations and services. Investments in future operations was not part of the RSWSS scope. Although these have not been clearly defined, the plan provides flexibility to add new facilities either inside the old MRF structure or possibly on the seven acres in the back of the property. Once a firm decision and schedule for relocating the MRF equipment is known, the County can review the master plan and determine revisions as required.

In conclusion the Baseline CIP provides the road map for making the necessary upgrades and expansions for the regional system. It provides a tool for managing the financial resources required to meet the demands for continuing to provide convenient and cost-effective services.

9.4 Financial Analysis for Capital Improvements

The Phase 1 RSWSS presented the options for making the necessary investments to modernize the County system. While preparing the Phase 1 Report, the JRMA team completed a review of the total cost of operating the solid waste system for the year ending in 2019. The financial review was conducted within the guidelines provided for in the contract between the County and CRC. The analysis provides information that will enable the County to evaluate impacts on rates for making capital improvements.

The revenue requirements for the capital improvement plan have been updated in the Facility Plan. The baseline CIP demonstrates the need to initially plan for $26.5M of investments in facility upgrades and expansions. The following table shows the estimated cost to operate the solid waste system in 2022 as projected from the 2019 cost of services review. Total revenues under the current rates are estimated at $43.8M based on the incoming waste received in 2022. Expenses unrelated to the transfer station operations are $13.4M. These expenses include county and city fees, Washington State refuse taxes, and disposal cost. The transfer station operational cost is estimated to $30.4M, and the net revenue generated from current rates is $13.4M in 2022. **Table 14** summarizes these costs.

Table 14: 2020 Transfer Station Revenue, Costs, and Income Projections

Description	Cost per Ton	Waste Tons	Total Cost
Revenue	$107.83	406,170	$43,798,122
Less Non-Related TS Costs	($33.09)	406,170	($13,439,566)
Transfer Station Operational Costs	$74.74	406,170	$30,358,556
Net Income	**$33.09**	**406,170**	**$13,439,566**

As a percentage of the Transfer Station Operational Cost, net income is 44% ($33.09 / $74.74). There are two primary reasons for the high margin. First, the County and CRC agreed to a phased-in reduction of the MRF subsidy without a proportional decrease in the waste disposal fee. Prior to 2017, the MRF was subsidized by the profitability of the transfer system. Second, through the life of the contract, CRC has depreciated the capital investments of the transfer station system. The last material investments made by CRC were in 2009 (Washougal Transfer Station) and 2019 (West Van compactor). It appears from the financial information that most of the capital expenditures are fully depreciated. Typically, capital depreciation is planned to reach zero near the end of an operational contract.

It is also important to note the unit cost to operate the County stations is not necessarily comparable to other transfer stations. This is because the level of services provided and the operations of each transfer station themselves can vary significantly. For instance, Metro contracts out its transfer station operations. However, Metro operates the scales/gatehouse at each facility. In addition, Metro owns the facilities and is responsible for making most repairs. As such, they have established a renewal and replacement account to fund these repairs and replace equipment. CRC is a full-service vendor that manages all of the activities and functions associated with the operations of all three facilities and making repairs.

The financial analysis supports the conclusion that current rates generate sufficient revenue to fund capital improvements. The County is currently negotiating a new contract to address the funding capital investments.

Appendix A: Phase 1 Summary

Summary of Phase 1 Report
Regional Solid Waste System Study

October 15, 2021

Final







Prepared for

Environmental Health Department

JRMA

JRMA

Clark County

Department of Solid Waste

Regional Solid Waste System Study

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Summary Report

Phase 1 - Regional Solid Waste System Study

Chapter 1 – Introduction

The JRMA Consultant Team completed the first phase of the Regional Solid Waste System Study (RSWSS) for Clark County (County). This document provides a summary of the findings and recommendations to be discussed with stakeholders to provide a direction for moving forward with Phase 2. It also outlines the critical decisions that are needed for making the necessary investments in the solid waste system to efficiently manage waste and recyclables for the next 20 years.

Background

The current solid waste system evolved from a set of events in the early 1990s that resulted in the closing of local landfills and reliance on large regional landfills in eastern Oregon and Washington to dispose of waste. This led the County to contract with Columbia Resources Company, a wholly-owned subsidiary of Waste Connections of Washington (WCW), to build two transfer stations, West Vancouver Material Recovery Facility and Transfer Station (West Van) and Central Transfer and Recycling Center (CTR), to receive waste and re-load into larger trailers/containers for transportation to Finley Buttes Landfill located in Boardman, Oregon. Most of the County's waste is transported by barge, which is a separate contract, with Tidewater Barge Company. A third transfer station was constructed in 2009 in Washougal to manage waste in the eastern part of the County. Waste from the Washougal Transfer Station (WTS) is transported via semi-tractor-trailer to the Wasco County Landfill near The Dalles, Oregon. Waste Connections owns both Finley Buttes and Wasco County landfills. Over the past 30 years, no significant improvements or expansions have been completed on the transfer system.

The agreement with WCW has been in place since 1991 and is a contractual relationship with the County and cities for operating transfer stations, material recovery facility (MRF) at West Van, and transporting and disposing of waste. The contract timeframe has been extended until December 31, 2021. It provides for another five-year extension until December 31, 2026.

A crucial provision in the contract allows the County to take ownership of the transfer station system by January 1, 2026, provided WCW is notified by December 31, 2025. The intent for providing this option was the fact that the existing transfer station has been paid for by ratepayers; therefore, these facilities should become public property. This contract provision assumes the County intends to exercise this option. The regional study considers options available for the County to exercise the ownership provision.

The purpose of the RSWSS is as follows:

1. Provide a comprehensive financial review of the cost of services and operation of the facilities.
2. Complete a comprehensive assessment of the physical condition of the existing facilities to identify repairs, equipment, and infrastructure replacement, and estimate the respective costs.
3. Assess operational conditions of each facility and necessary capital investments needed to enhance existing operations and meet the demands of future waste volumes.
4. Consider changes to waste and recycling collection services that could reduce self-haul traffic at the transfer stations.

5. Prepare a 20-year Capital Improvement Plan (CIP).
6. Engage the regional partners and stakeholders to review the study findings and develop a strategy for the system's future development.

A summary of key issues and findings by Chapter from the RSWSS, as well as recommendations, if applicable, follow below.

Chapter 2 – Waste Generation Projections

Key Issues

1. With the expected growth in the County, how much waste will be generated over the next 15 years?
2. Where will the waste be generated, and what are the impacts on the transfer station system?
3. How does this increase in waste volume impact each transfer station?
4. As the County evaluates ownership options, what is the existing condition of the transfer station structures and site features?
5. What is the cost of making improvements to address minor repairs or deficiencies at each station?

Findings

The project team completed estimates of the amount of waste to be managed by the solid waste system using population projections provided by the Office of Financial Management (OFM).

1. Clark County's population is expected to grow from 490,000 to 643,000 people by 2040.
2. Waste generation is estimated to increase from 390,000 tons per year (TPY) to almost 520,000 TPY by 2040, an increase of 130,000 TPY, or 33% in the next 20 years.
3. Based on assumptions presented in the County's Growth Management Plan, a range of 58% to 70% of this growth will occur in the CTR service area. The Cities of Battleground, Ridgefield, and La Center are expected to more than double in population by 2040.

The population growth is estimated to generate 130,000 tons of additional waste per year that must be managed by the transfer station system.

Chapter 3 – Operational Efficiencies and Impacts from Traffic and Public Self-Haul

Self-haul traffic at the transfer stations has increased, particularly at CTR. Continuing to provide a safe level of service at the transfer stations will require additional improvements and expansion at all facilities. Almost 30% of the self-haul customers have less than 200 pounds (lbs.) per load; these are very small loads that accentuate the traffic challenges at CTR.

Several cities have instituted universal collection services for all households and businesses. However, in the unincorporated areas of the County and within the City of Battleground, subscribing to regular collection services is optional. The cost to handle the traffic and loads at the transfer stations exceeds the cost for households to subscribe to regular collection services. Chapter 3 presents options that may be adopted to possibly incentivize customers to consider subscribing to collection services, which could effectively reduce the number of self-haul trips to CTR.

Key Issues

1. Would self-haul traffic at the transfer stations decline if universal waste and recycling collection services were required throughout the County?
2. Based on the current rate structure, are self-haul customer rates covering the cost for service at the transfer stations?
3. Could changes in the collection services, such as the expansion of bulky waste collection, reduce traffic at the transfer stations?
4. Are there changes to the rate policies that would incentivize individuals to subscribe to collection services, and therefore, reduce traffic?

Findings

1. Specific data that suggests a correlation between enacting universal services and the reduction of traffic at the transfer stations are not available.
2. Adopting universal service and expanding the collection services for bulky items is a common practice that may reduce self-haul traffic at transfer stations.
3. Self-haul customers with loads less than 400 lbs. are not charged rates that cover the cost of services provided at transfer stations. To offset this cost customers with small loads at the transfer stations are being subsidized by the large volume collection route trucks. In other words, customers that subscribe to waste collection services are subsidizing the low-volume self-haulers that use the transfer station system.
4. A survey of transfer stations throughout the Pacific Northwest demonstrated it is common that a minimum rate is charged for the self-haul customers at these facilities. In most cases, the minimum fee is assessed to a minimum load weight between 300 to 460 lbs. The minimum fee charged for these loads ranges from $18 to $30 per vehicle (2020 Data).
5. Establishing a minimum fee of $25 would be equivalent to the current charge for 400 lbs. at the County transfer stations.
6. The County should consider opening both West Van and Washougal transfer stations on Sundays to self-haul customers. The additional hours of operation may reduce traffic at CTR.

Chapter Recommendations

1. The Solid Waste Management Plan Update process should further evaluate expanding universal services and programs for the collection of bulky waste items for residences.
2. Adopt a minimum fee at transfer stations that covers the actual cost of services.
3. Expand the operating hours at both West Van and Washougal.

Chapter 4 – Regional Transfer Stations Operations and Conditions Assessment

The County is proceeding with negotiations with CRC to continue operations of the transfer station system. Phase 1 of the regional study focused on reviewing the current conditions of the three stations to determine what improvements are needed to maintain safe and efficient services to residences and businesses.

Key Issues

1. What is the physical condition of each station, and what repairs and/or replacements are required to maintain operations?
2. What improvements are needed to enhance operations and meet the future waste volumes of the areas served by each transfer station with the expected growth within the County?
3. What are the entrance improvements needed at CTR to mitigate off-site queueing onto Highway (Hwy.) 503, and how soon can they be completed?

Findings

The engineering team conducted a condition assessment of each transfer station to inspect physical assets and review operations.

CTR Findings

1. Working with the County and Washington State Department of Transportation (WSDOT), CRC has proceeded with construction to modify the entrance off Hwy. 503 to provide two inbound lanes for vehicles to access the station. The new entrance would allow those vehicles traveling from the south to make a left turn into a dedicated lane. These vehicles would not need to compete with traffic making a right turn from the north. Construction is expected to be completed by the end of 2021.
2. The transfer station building has been maintained and is in good condition. Some minor repairs are recommended.
3. The current CTR facilities began receiving waste in 1992 when the entire County generated less than 200,000 TPY. In 2020 the entire transfer station system handled over 370,000 tons with CTR receiving 230,000 tons. There have been no major improvements or expansions to the facility since it was constructed.
4. Over the next 15 years, the north portion of the County is expected to grow and generate between 64,000 and 75,000 more tons of waste per year. CTR could receive an additional 300 tons per day (TPD) plus more traffic.
5. CTR receives over 60% of all waste generated in the County. At peak periods, CTR receives about 1,000 TPD and can have between 900 and 1,000 vehicles on a weekend day. As a result, there are several deficiencies and significant improvements are needed to handle the current waste quantities and customer traffic.
    a. Even with the new entrance improvements, there is insufficient queue space to handle the current traffic. An additional inbound scale is needed onsite to provide onsite queueing for self-haul customers.
    b. The existing transfer station building does not provide sufficient space for vehicles to unload and for managing waste quantities received.
    c. With only one compactor, the loadout capacity is only 900 tons over 12 hours. Also, if the compactor is out of service for repairs, there is no backup. This can result in reduced payloads in transfer trailers and increased costs.
    d. The current site circulation should be revised for safety purposes by mitigating the mixing of commercial trucks and transfer trucks with self-haul traffic.
    e. If the facility is upgraded, then such improvements should include mitigation measures to reduce potential impacts on the neighboring residential developments.
6. There are three options for addressing current conditions and for serving the north/central part of the County.
    a. Make major improvements to CTR to address current and future needs.
    b. Make minor improvements to CTR and build a new satellite transfer station to serve the growing population in the Ridgefield, Battleground, and La Center area.
    c. Build a new transfer station to serve this area at a new location.

These options are discussed in Chapter 5 – North Area Serve Options.

West Van Findings

1. The transfer station is in fair condition with damage to some building columns. Repairs should be made in the future.
2. All other support structures are in good or satisfactory condition.
3. Bay 1 is dedicated to receiving and transloading organic materials with food waste. It is expected that programs for collecting food waste will be expanded, and Bay 1 will not have sufficient space to manage this material.
4. The MRF process line will need additional equipment to improve throughput and enhance the quality of recovered materials to meet market conditions. These improvements can be made; however, a new process line will need to be installed either at West Van or possibly at a new location. The MRF Feasibility Report is provided in Chapter 7 of this Phase 1 Report.

Washougal Transfer Station Findings

The condition of the transfer station is good; however, there are some improvements to the loadout area that should be made to protect the building panels and to enhance loadout operations. A concept plan for improvements and expansions was prepared. These improvements are as follows:

1. A short-term improvement to expand the access lane to the household hazardous waste (HHW) facility is needed. This is a minor investment to improve traffic flow and safety and could be completed in the near future.
2. A steel backsplash and chute along the east side of the building in the loadout tunnel should be added. This backsplash will protect the siding from damage caused by loading trailers. It should also reduce the possible spillage of waste from the top-load operation. Also, adding a short push wall on the tip floor side to increase surge capacity should be considered.
3. To increase capacity and provide long-term services the station should be expanded in the next five years. This would include expanding the transfer station building and paving to accommodate additional traffic. The new building can include a lean-to on the north side to provide storage of special waste.
4. In the Long-term, the entrance road can be widened to increase the capacity of the scale complex and reduce the potential of traffic backing onto Grant Street.

Chapter 5 – North Area Service Options

Three options were evaluated to address the current traffic deficiencies of the existing CTR facility as well as to manage the increased waste volume from the expected population growth.

Option 1 – Upgrade and expand CTR to accommodate volume capacity to 2040. The estimated cost is $14M to $17M.

Option 2 – Minimal improvements to CTR and construct a new satellite transfer station to serve the northern part of Clark County. The estimated cost is $14M to $16M.

Option 3 – Replace CTR with a new transfer station at a different location for an estimated cost of $25M to $30M.

Findings

1. Construction costs needed to build the infrastructure for serving the north region of the County is estimated to range from $14M to $17M for Options 1 and 2 to as much as $30M for Option 3, assuming a new transfer station is sited.

2. Making major improvements at CTR (Option 1) is estimated to be the lowest overall operating cost for managing the waste generated over the next 15 years. The cost to make these improvements is estimated to be about $17M. This does account for the cost of purchasing the adjacent parcel needed for this expansion. The adjacent parcel located on the west side is owned by WCW. The parcel is part of a former closed landfill, and this option assumes the underlying soil conditions are suitable for building structures. Further analysis is needed to verify these conditions. Also, the adjacent properties on the north and west sides of CTR include new residential developments. It is assumed land use permits will need to be obtained for this expansion. The major improvements prepared as part of this study have demonstrated that CTR can be constructed in phases to keep the facility operating during the construction period.

3. Both Option 2 and 3 are reasonable solutions for meeting the long-term service needs but both will require siting a new facility. County zoning does allow transfer stations to be approved on most zones through a conditional use process.

4. In addition to cost, other considerations may impact the decision for serving this area, including the expansion of residential development adjacent to CTR, ingress and egress limitations for customers off Hwy. 503, and potential issues related to underlying soil conditions on the adjacent west property that could impact the expansion of CTR.

Chapter 6 – Capital Needs Assessment and Financial Analysis

The conditions assessment presented in Chapter 4 and the North Area Service Options in Chapter 5 resulted in defining the needs for making capital improvements to the three transfer stations. Conceptual plans were prepared for both CTR and Washougal. For West Van, the improvements for new equipment for the MRF are listed, but no concept plans were developed. Instead, it is recommended that a master site plan be prepared for the complex once a decision for a new MRF processing system is made.

Findings - Capital Improvements Needs

1. The County will need to decide on the long-term solution for serving the north-central part of the County either by planning further expansion of CTR or by siting a new transfer station.

2. Over the next 10 years, the County and its partners will need to invest an estimated $25M to $50M to upgrade and expand the existing transfer stations and MRF. The broad cost range reflects the fact the County could decide to replace CTR and build a new transfer station.

3. Phase 1 of the CTR improvements includes extending the inbound traffic lane and adding a new scale on the west side property. The improvements will eliminate inbound customer traffic from queuing onto Hwy. 503. This could also include building an access ramp to the south end of the existing transfer station. This improvement is estimated to cost about $3M assuming the underlying soil conditions of the adjacent west property are acceptable.

4. Improvements to upgrade and expand the Washougal Transfer Station at an estimated cost of between $1M and $2M will need to be made over the next five years.

5. CRC has made some initial improvements to the West Van MRF processing system that will enhance system performance. In the long term, a new processing system will be needed.

Findings - Financial Analysis to Address Capital Improvements Needs

The JRMA project team completed a review of the total cost of operating the regional system. Working in cooperation with WCW, the financial analysis examined the current cost of operating the system for 2019. The purpose was to determine the actual cost of just operating the transfer station and recycling facilities. The financial review was conducted within the guidelines provided for in the contract between the County and WCW. The analysis provides information that will enable the County to evaluate impacts on rates for making capital improvements.

1. The total cost of operating the three transfer stations is reported to be $8.9M in 2019. This includes full services from operating the gatehouses, managing traffic and waste volumes, and loading into transfer trailers. It also includes CRC's internal transport operations to shuttle boxes and stage rolling stock and maintaining the physical infrastructure at each facility. It does not include long haul transportation to either the Wasco Landfill in The Dalles, Oregon by truck or Finley Butte Regional Landfill in Boardman, Oregon by barge.

2. Based on the financial information provided it appears that the transfer stations have been fully depreciated. However, there may be some equipment still being paid for by CRC.

3. The current rates generate revenue well above the current cost to operate the transfer station system and for transport and disposal of waste. Assuming facilities have been fully depreciated and paying the vendor an operating margin of 15%, the current rates generate about $5M in surplus revenue that could be allocated to make capital improvements at facilities. Over a ten-year period, this would generate approximately $50M.

4. Establishing a dedicated capital improvement fund with funds generated from current revenue would negate the need to borrow monies for the needed capital improvements.

Chapter 7 – MRF Feasibility Report

The County and each of the cities offer a range of recycling services to residences and businesses. The primary service is the collection of commingled recyclable materials from single-family and multi-family residences. The materials collected are taken to the West Van MRF to be processed for delivery to markets. The current equipment used to process recycled materials has been in operation since 2008.

Recognizing the importance of maintaining and potentially expanding recycling programs the project team completed a thorough review of the MRF operating system. This assessment evaluated both the physical condition and the operating performance of the equipment line. As part of this assessment, the team considered the impacts on markets for recycled materials resulting from China's decision to restrict imports of materials (aka. The China Sword).

Findings of MRF Feasibility Study

1. The current equipment line has been well maintained and relies largely on the use of outdated technologies. This, combined with demand by markets for higher quality materials, results in operating the system on average at 15 tons per hour (TPH) well below the design rate of 20-25 TPH.
2. Currently, the County generates about 60,000 TPY of recycled materials. The current diversion rate is about 67% with 33% of the materials received being transported to landfills. The rate of discards or contaminants is a result of two factors. One, the amount of non–recyclable material being collected from generators of recycled material must be reduced. Two, the MRF processing line will need to be upgraded to improve performance to produce higher quality materials at a reduced cost.
3. The assessment identified a list of potential equipment to be installed to improve performance and reduce cost. CRC has since installed several robotic units and added optical sorters that have contributed to reducing operating costs.
4. The County should begin planning to have a new equipment line installed. The retrofits to the existing process line will provide short-term benefits for processing current materials but will need to be replaced with a new system employing more advanced technologies to be more cost-effective and recover more materials.
5. The feasibility study considered several options for replacing the current process line. They included the following:
    a. Install a new equipment line at West Van
    b. Site and build a new MRF facility to be centrally located in relation to where recyclables are generated and collected.
    c. Converting CTR to a MRF facility and siting a new transfer station to serve the north/central County area.
6. Installing an advanced processing system is estimated to cost between $15M and $18M and would result in reducing the unit operating cost from an average of $127 per ton to an estimate of $100 per ton assuming the current materials (i.e., 60,000 TPY).
7. A new MRF equipment line at a more central location would be the most cost-effective option, assuming the County and its operator could increase the number of materials being processed. The feasibility analysis considered the cost if the number of materials processed was to be increased to 100,000 TPY. This would mean importing materials from other jurisdictions or processing other materials such as high-grade commercial loads.

Chapter 8 – Summary: Key Findings and Recommended Actions

Completion of the Phase 1 of the RSWSS provides a list of key findings for the County and cities to review and decide what facility improvements are needed to manage the region's solid waste system and recyclables for

the next 20 years. Although the three transfer stations have been well maintained there have been no significant investments at either CTR or West Van in over 25 years. The Washougal Transfer Station was constructed in 2009.

Since the construction of these facilities, the population of the County has more than doubled. Over the past 10 years, the amount of waste being generated increased from 230,000 tons in 2010 to nearly 400,000 TPY in 2020, an increase of 75%. OFM projects Clark County's population may grow to as many as 612,000 people or a 22% increase by 2035.

The three transfer stations operating today were not designed to handle the current volume of traffic and waste quantities being received. Decisions to make improvements have been stalled by the current contractual arrangements with CRC. The County has notified CRC of its intent to extend the operating contract for five years as stipulated in the current agreement. No decision has been made regarding the question of ownership. The County has the right to purchase the transfer stations by notifying CRC prior to December 31, 2025.

Findings

1. The County and local jurisdictions will need to invest between $25M to as much as $50M in the solid waste system to efficiently manage the current and future waste projected from growth.
2. CTR has made improvements to help mitigate ingress and egress from Hwy. 503, but this will not eliminate customers from stacking into Hwy. 503. The Phase 1 Report includes concept plans to improve and eliminate this condition.
3. The revenue generated from the current rates can provide sufficient funds to pay for necessary capital improvements over the next ten years.

Description of Scenarios for System Improvements

The Phase 1 Report has identified three scenarios for developing the infrastructure needed to meet the needs of the solid waste system for the next 20 years. In addition to the capital improvements required for the system, it provides the background information necessary to understand the critical issues related to the current contract extension and system ownership.

Each scenario is described and accompanied by a preliminary cost estimate to construct the improvements. A list of advantages and disadvantages is also provided for decision-makers to consider when comparing one scenario vs. another.

<u>Scenario 1 – Upgrade all Existing Facilities to Serve the County</u>

This scenario is based on the decision to upgrade all existing transfer stations and retain the MRF operations at West Van. It reflects the assumption that the current facilities are located adequately to satisfy the long-term needs of the solid waste systems and makes no changes that would affect the collection services.

1. **Limited expansion of the CTR to serve as the primary transfer and recycling facility for the next 20 years.**

    This Report identified several options for making improvements to CTR, so it can operate more efficiently and handle the impacts from growth in this part of the County. The preferred option will require gaining approval to expand onto the adjacent property west of the existing site. The adjacent property is a closed construction and demolition landfill. Before any new structures are built, the environmental and subsurface conditions will need to be investigated further. Land use approval of an expansion will need

to be completed. New residential developments have been built on both the north and west sides of CTR potentially complicating efforts to permit expansion of the facility onto this property.

CTR – Improvements to expand the current structure; and improve circulation to eliminate off-site queue **$14M to $17M**

2. **Expand Washougal Transfer Station**

The Washougal Transfer Station is experiencing the impacts of growth in both Camas and Washougal and the eastern part of the County. The building will need to be expanded to manage the increase in customer traffic and the amount of waste received. The cost for making improvements is estimated to range from $1.5M to $2M.

Washougal TS Improvement **$1.5M to $2M**

3. **West Van MRF Improvements**

There are no immediate capital needs to expand the West Van Transfer Station. The facility can handle the customer traffic and waste received in the near future. However, space is limited for handling other waste streams in particular food waste that is collected from select generators as part of a pilot program. It is expected that the food/organics waste streams will expand as programs to separate food waste expand. The report has recommended that a master plan for the entire site be prepared to consider how this valuable resource can be developed to handle other waste streams such as food waste and construction/demolition debris.

In this scenario, the plan would be to replace the existing MRF processing equipment line at West Van. As the old system is removed and new equipment is installed, the County would be required to transport commingled recyclables out of the County to other MRFs operating in the region (Estimated 9 to 12 months). This cost is not included in this analysis.

West Van Improvements **$4M to $6M**

Scenario 1: Total Estimated Construction Cost Over Next 10 Years **$19.5M to $25M**

Scenario #1 System Impacts

Upgrading all existing facilities appears to be the most expedient approach for system improvements and initially requires less capital than the other scenarios. Collection services will not be impacted and will remain as is current. It does not improve collection services for commingled recycled materials that must travel to West Van to unload. As the north/central portion of the County continues to grow, more collection vehicles will need to make the trip to West Van to unload possibly twice a day.

Expanding CTR onto the adjacent property may encounter challenges from neighbors to develop this property given the changing nature of the area. Also, in the future, all customers leaving the site must turn right. The customers traveling from the north county will need to travel south on Hwy. 503 and find a new route for return to their origin.

Advantages

1. Requires the least capital cost
2. Does not require siting any new facilities in the near future
3. Makes use of existing facilities

Disadvantages

1. Access to CTR off Hwy. 503 is less than ideal
2. CTR will continue to operate adjacent to residential properties
3. Land use approval of CTR expansion may have challenges
4. MRF at West Van requires the longest travel times for commingled collection trucks
5. When a new recycling processing line is installed at West Van materials will need to be transported to an out-of-County MRF facility for 9-12 months
6. Provides no space for new facilities that may be needed to process organics or construction and demolition waste, or other infrastructure identified by CSWMP
7. West Van facilities may need to be expanded in the future

Scenario 2 – Upgrade CTR and Washougal – Build a New MRF

This approach is based on expanding CTR but recognizes the benefit of building a new MRF at a central location to be determined. It also allows the space vacated by removing the MRF processing equipment at West Van (approximately 45,000 sf of enclosed space) to be used for other purposes to meet the future needs of the solid waste system. Examples include processing organics and/or processing construction and demolition waste at West Van.

1. **Build a New MRF for Recycled Materials** **$25M to $30M**
2. **Make Improvements at CTR and Washougal per Scenario 1** **$15M to $19M**

Scenario 2: Total Estimated Construction Cost Over Next 10 Years **$40M to $49M**

Scenario #2 System Impacts

This approach continues the theme of upgrading and expanding CTR and Washougal Transfer Stations. It recognizes that locating a new MRF in a more central location may result in the least transportation cost to the system in the long term. It requires time to site and build a new facility and therefore will require additional capital investments. Assuming the County would contract this to a private vendor, the vendor would be responsible for siting and building the facility.

Advantages

1. Makes use of existing transfer stations
2. If centrally located the new MRF should reduce costs attributed to collecting comingled materials (Preliminary estimate is about $1M per year based on current collection services)
3. Processing recyclables at West Van can operate while a new processing system is installed at the new MRF
4. Provides flexibility by creating space at West Van that can be re-purposed for future options

Disadvantages

1. Requires the largest capital investment of the three scenarios
2. Access to CTR off Hwy. 503 is less than ideal

3. CTR continues to operate in a residential environment
4. Land use approval of expansion may have challenges
5. Requires siting a new MRF facility

Scenario 3 – Build New Transfer Station to Serve North/Central County and Convert CTR to MRF

This approach is based on siting a new transfer station to replace CTR. It recognizes the current CTR site is not the best location given the disadvantages listed in the previous scenarios. Several factors weigh into such a decision. First, direct access off Hwy. 503 is less than desirable given high traffic volumes. Second, the surrounding neighborhood has been developed with more residential property adjacent to the station. Third, expansion of the facility will require building on the adjacent old landfill property on the west side. Rather than retrofit CTR with less-than-ideal conditions, the County would proceed with a siting study to identify a suitable property for developing a new transfer station. Once the new transfer station is operational (est. five years), CTR would be converted to a new MRF. After the new equipment line is installed at CTR the old system at West Van would be removed and the space at West Van can be re-purposed (approximately 45,000 sf).

1. Build a Transfer Station	**$26M to $30M**
2. CTR – Phase 1 Circulation and Traffic enhancements	**$3M**
3. Retrofit CTR to MRF	**$7M to $8M**
4. Washougal TS Improvements	**$1M to $2M**
Scenario 3: Total Estimated Construction Cost Over Next 10 Years	**$37M to $43M**

Scenario #3 System Impacts

This scenario requires the County to site a new transfer station. It also takes advantage of the current infrastructure by converting CTR to an MRF. This will result in CTR receiving only commingled collection trucks (less than 100 vehicles per day) versus the current customer traffic (800 to 1,000 vehicles per day). The facility will receive only recycled materials five days per week with, possibly, a few trips on Saturday. This will have a significant positive safety impact on traffic on Hwy. 503 over the current conditions. Also, the adjacent residences will not be impacted by the traffic at the gatehouse and operations into evenings and on weekends.

Locating and permitting a site to build a new transfer station will require time to gain approval and permits but may be best in the long run. First, it can be built to handle the customer traffic expected from population growth and manage the future waste volumes generated in the North County region. A new site can potentially be developed in a more commercial/industrial area that has good access to arterials and primary collector streets.

Advantages

1. Makes use of existing transfer stations
2. Requires less capital than scenario 2
3. When the new transfer station is operational CTR can be converted to a MRF only operation
4. Existing MRF can continue to operate while CTR is converted avoiding transportation of recyclable materials to an out-of-country facility
5. CTR MRF is centrally located and can reduce costs attributed to collecting commingled materials
6. Provides flexibility by creating space at West Van that can be re-purposed for future operations

7. Has the potential to provide the lowest system cost by building a new more efficient transfer station and reducing overall system collection and transportation costs
8. Eliminates safety risk of having high customer traffic access off Hwy. 503
9. Avoids development onto the adjacent property at CTR

Disadvantages

1. Requires more capital than scenario 1
2. Requires time to site and permit new transfer station

Phase 1 Recommendations

Each of the scenarios described will provide the necessary infrastructure for managing solid waste and recyclables for the next 20 years or longer. The decision of which scenario to implement will require input from stakeholders and a decision regarding future ownership. The following recommendations can be reviewed and considered while work is in progress on Phase 2. The Phase 2 work is designed to provide additional information to aid in making final decisions on the preferred scenario.

1. The County should establish a fair operating margin to compensate CRC for continuing with operations of solid waste facilities for the next five years or for a set period to be determined.
2. Revenues generated above the cost of services plus the established operating margin should be remitted to the County. The remitted revenues will be encumbered for future solid waste system facilities and improvements.
3. The County should establish a facility Renewal and Replacement (R&R) evaluation process and a dedicated fund that will maintain system assets.
4. The County should approve funds for implementing Phase 1 of the CTR site improvements to eliminate any potential for inbound customers from queueing onto the public right of way on State Hwy. 503. The improvements include extending the entrance road and new scale onto the adjacent property located west of the current transfer station. Details of these improvements should be negotiated as part of the contract extension.
5. The County should establish a minimum rate for all customers using the transfer stations. Under the current tip fee policies, customers that bring less than 300 pounds are not paying the cost of services. Implementing this policy may also provide an incentive to subscribe to regular collection services or cause customers to make fewer trips by consolidating their loads.
6. The County should extend the hours of operations at both the West Van and Washougal transfer stations.

Phase 2 Study

The results of the Phase 1 Report have detailed specific operational and master planning questions that need to be addressed as part of developing and implementing a 10-year CIP. The key questions to be answered are as follows:

- Should CTR continue to operate as the primary transfer station over the next 20 years or should a new transfer station facility be built?
- Should the MRF continue to operate at West Van or should the MRF be sited at a more central location

to where materials are generated thus reducing overall collection and transportation costs and using the vacated space for other system needs?

The County and the cities are currently negotiating to extend the contract with CRC until December 31, 2026. The negotiation is expected to clarify the direction the County will take regarding future ownership of the system. Negotiations should determine how the future capital improvements will be paid for under the current rate structure.

Phase 2 of the Regional Study includes the following tasks to provide additional information for decision-makers.

1. Complete the search to locate a new transfer station to serve the north/central parts of the County. The siting study should identify the preferred site for building a new station.
2. Complete subsurface investigations on the property west of CTR to determine the conditions or limitations for consideration of the option to expand CTR.
3. Complete the CSWMP. A priority of the CSWMP will be to identify needs for additional facilities for managing waste in the future. Two items that have been discussed while completing the Phase 1 Report are the need to manage food waste as part of a regional organics management strategy and providing facilities to handle construction and demolition waste.
4. Complete a detailed plan for expanding the Washougal transfer station.
5. Complete the Renewal and Replacement /CIP financial plan for the regional system.

Phase 2 of the Regional Study is expected to be completed within the next 24 months and will be coordinated with Phase 3 – Update of the CSWMP.

Appendix B: Basis of Master Plans: West Vancouver Materials Recovery Center, Central Transfer and Recycling, Washougal Transfer Station

West Vancouver Materials Recovery Center Facility Master Plan

Basis of Master Plan Report

Prepared by JRMA
February 7, 2023

Introduction

This document reviews the findings from the 2021 Phase 1 Regional Solid Waste System Study (RSWSS) and establishes information needed to consider what improvements/modifications and used to prepare a master plan for the West Vancouver Materials Recovery Center (West Van). Preparing a master plan for West Van was a key recommendation from the RSWSS. Please see **Appendix A** for a summary of the findings and recommendation from the RSWSS for the West Van facility. The master plan will identify the infrastructure required for managing solid waste and recycling services over the next 20 years.

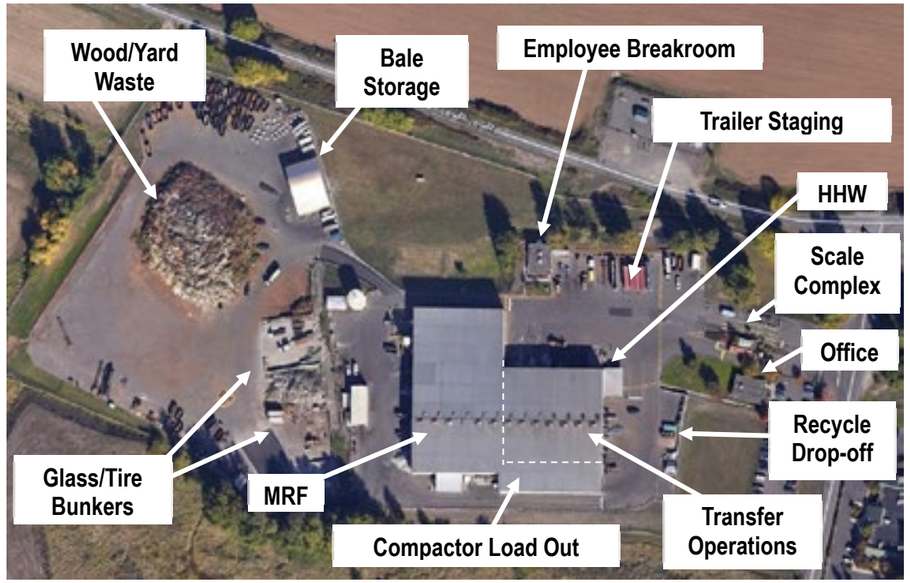
In Phase 1 RSWSS an assessment of the conditions of the West Van was conducted. Some minor repairs are required but primary structures appear in good condition. Based on the current negotiations with Columbia Resource Company (CRC), it is understood the MRF will be relocated to another site within five years (January 2028).

Background and Existing Conditions

West Van is located on a 21+ acre site off Old Lower River Road at the Port of Vancouver. It was constructed in 1993 to receive municipal solid waste (MSW) from commercial collection trucks and self-haul customers. MSW is loaded into containers that are shuttled 0.5 miles to a barge loading facility located on the Columbia River. Waste is then barged more than 200 miles to the Finley Buttes Regional Landfill in Boardman, Oregon.

The property includes a large 91,100 square foot (sf) pre-engineered metal building (PEMB) that receives waste from self-haul customers and Waste Connenction of Washington (WCW) collection trucks from residential and commercial accounts. The transfer operations occupy 46,000 sf of the structure while the MRF receiving and processing operations use the remaining 45,100 sf.

Figure 1: West Vancouver Recovery Center



In addition to the transfer station and MRF operations, West Van provides approximately seven acres on the north side of the site for managing other waste streams. This includes space for receiving and processing yard debris and wood waste and dedicated bunkers to receive mixed glass and inert waste such as concrete and rock deposits. Tires are also received and temporarily stored before being transferred for processing. It also provides supplemental storage for baled materials in a canopied area and for parking rolling stock and container storage. These operations are performed outdoors except for the bale storage canopies.

West Van Waste Quantities

The West Van facility receives 30% of all waste generated in the County. As shown in **Table 1** the total amount of waste received from 2016 to 2021 has increased marginally from 102,798 tons per year (TPY) to 116,719 TPY or 14%. This may be attributed to the fact that most of the growth in the County is occurring in the central portion of the County and in the cities of Battle Ground and Ridgefield. **Figure 2** shows the year-over-year growth in tons and vehicle trips.

Based on recent history, West Van receives an average of 400 tons per day (TPD) and peaks can be 450 TPD. Assuming 30 tons per shipping container and a filling of three compactor loads per hour, all waste can be removed to be barged in five to six hours.

However, the number of trips entering the facility has increased by 53% mostly due to an increase in cash customers from 39,000 in 2016 to over 64,000 in 2021 or 66%.

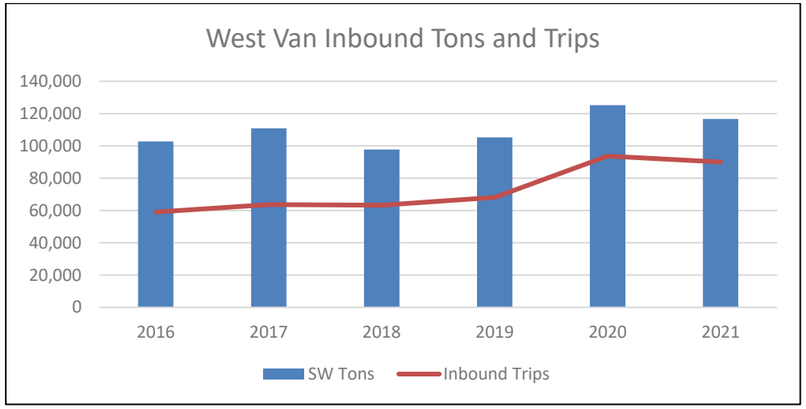
Table 1: West Van Historic Waste Quantities and Traffic

West Van							
Tons	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**5 - Year Av.**
Cash	15,683	19,732	17,694	17,841	22,742	26,620	20,926
Commercial	43,564	44,380	38,335	30,361	16,107	18,971	29,631
Route Trucks	21,172	22,955	21,838	31,495	51,765	42,128	34,036
WCW Drop Box	22,379	23,798	19,925	25,602	34,633	28,999	26,591
Total Tons:	**102,798**	**110,865**	**97,792**	**105,299**	**125,247**	**116,719**	**111,184**
Inbound Trips	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**5 - Year Av.**
Cash	39,003	42,805	43,299	45,674	66,591	64,556	52,585
Commercial	10,951	11,425	11,197	10,802	10,839	11,247	11,102
Route Trucks	2,766	2,877	2,926	4,134	6,430	5,585	4,390
WCW Drop Box	6,340	6,569	5,809	7,465	9,839	8,599	7,656
Total Trips:	**59,060**	**63,676**	**63,231**	**68,075**	**93,699**	**89,987**	**75,734**

Whereas the increase in the total amount of waste received has minimal impacts on operations, the increased number of cash customers creates bottlenecks in day-to-day operations. First, there is limited stacking/queue space before and after the scales; and second there are limited number of stalls for cash customers to unload. The impacts create congestion in site circulation that must be managed for keeping operations safe.

Tons received and traffic volume at West Van were updated with 2021 data. **Figure 2** illustrates that both waste received and number of trips to the transfer station declined from 2020, however remain above the previous four years.

Figure 2: West Van Inbound Tons and Trips



In **Figure 3** the estimated service areas for each transfer station are shown. The estimated service area for West Van is shown in light tan and overlaps in service areas with both CTR and Washougal. The hatched areas are projected for the expansion of the urban growth boundary as reported by Clark County Growth Management Plan. It demonstrates that the West Van service should experience an increase in density in future years thus the waste volume delivered should increase.

Figure 3: Map of County with Annexation

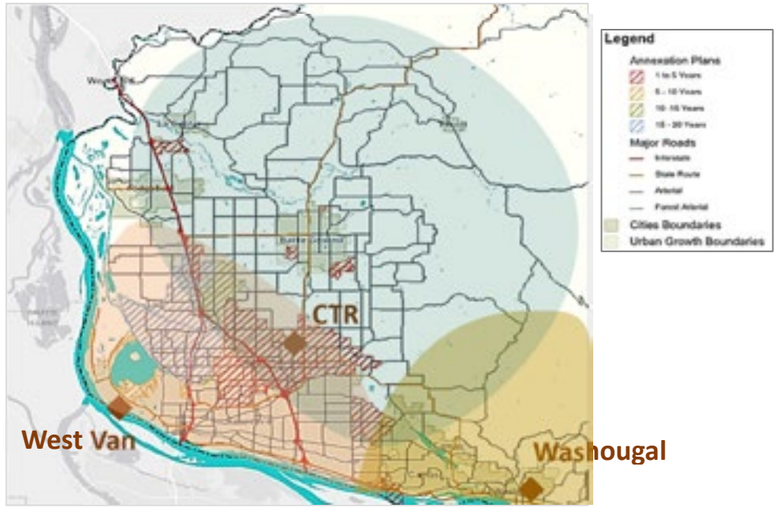


Table 2 below shows that the County will generate an additional 106,000 TPY by 2040. Depending on the assumption of how much of this waste is generated in the West Van service area, one scenario shows that 20% of the increase will be received at West Van.

Table 2: Estimated Service Area Waste Projections

Transfer Station Service Area	Assuming 50% UGB Growth in Central Area			Assuming 70% UGB Growth in Central Area		
	Population	% Change of Waste	Additional Waste (TPY)	Population	% Change of Waste	Additional Waste (TPY)
Service Areas						
Growth in City of Vancouver in North/Central County	40,961		41,780	57,706		58,860
Growth in Unincorporated North/Central County	49,227		50,212	49,227		50,212
Growth in North Cities	26,968		27,507	26,968		27,507
CTR Service Area:	**117,156**	**54%**	**88,734**	**133,901**	**62%**	**101,416**
Growth in City of Vancouver (25% of City & County)	20,840		21,257	20,480		20,890
Growth in unincorporated East County – Assume 20%	19,112		19,494	19,112		19,494
Growth in East Cities	18,748		19,123	18,748		19,123
Washougal Service Area:	**58,700**	**27%**	**44,459**	**58,340**	**27%**	**44,187**
West Van Service Area:	**40,961**	**19%**	**31,024**	**24,576**	**11%**	**18,614**
Total:	**216,817**	**100.0%**	**164,217**	**216,817**	**100%**	**164,217**

When the estimated increase in waste from growth is added to the current West Van waste received in 2019, the total waste would be about 125,000 TPY or 20% increase.

Using these preliminary projections, the increase in waste received at West Van is not that significant. However, additional space on the tip floor is needed to manage surges in waste quantities and perhaps an additional compactor to load containers. With just one compactor that means that when the compactor is out of service for repair there is no backup system. Also, the facility needs to be retrofitted to provide additional stalls for cash or self-haul customers to unload.

Transfer Station Conditions Assessment

In Phase 1 RSWSS a conditions assessment was conducted in 2019. From this review it was determined there were no immediate facility deficiencies to be addressed. The main transfer station and MRF structure were determined to be in good condition. However, many of the support structures were constructed in the 1990s and may be obsolete or in need of major renovation in the longer term. It was recommended that a site Master Facilities Plan be prepared to consider what improvements were

needed to existing facilities and what modifications and expansions were needed to address long term solid waste services for the regional system.

Since this assessment there are several new developments that need to be considered in preparing a master plan as follows:

1. Based on current negotiations with CRC it is expected the MRF will be relocated to another site.
2. The 2020 census data reveals the population in Clark County is higher than previous data and projections.
3. The number of stalls for unloading will need to be increased. The number of cash customers using the facility has increased significantly in the last two years. In 2021 the number of cash customers increased to about 65,000, an increase of 20,000 vehicles.
4. The State has passed new legislation requiring local governments to reduce the amount of food waste being disposed of in landfills.
5. The current food/yard waste collection programs in the City of Vancouver continue to grow and the City of Ridgefield has also started a similar program. This will require more space to be dedicated to handling food waste and/or mixed organics.
6. The City and County are considering public ownership options for the regional transfer station system.
7. The City has extended water service to this area. Assuming the facility can connect to provide water service the existing well and pump system can be replaced and relocated.

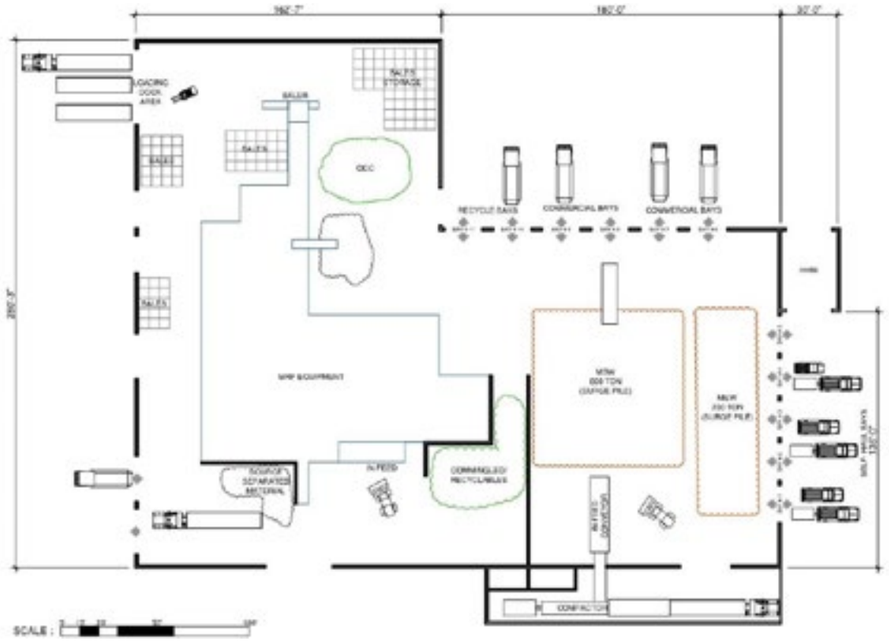
These new developments need to be included in updating the operational assessment and considered in preparing facilities plan for addressing the long-term service needs of the solid waste system.

Existing Tip Floor Operations

Since the facility was constructed in 1992 there has been no major expansion to the transfer station tip floor area. When the facility was first opened the total amount of waste generated in the County was 173,000 TPY or about 600 TPD. When CTR was opened in the early 1990s most of the County's waste was delivered to CTR. In 2021, West Van received over 116,000 tons of waste or roughly 30% of all waste generated in the County. The percentage of waste received at West Van has remained fairly constant over the past six years. Assuming West Van continues to receive a similar percentage of the total waste generated, by 2040 the total waste delivered to West Van is estimated to be about 138,000 TPY or 450 TPD. This is consistent with the service area analysis presented previously.

The current tip floor arrangement shown in **Figure 4** demonstrates that the facility does have sufficient space to receive and temporarily store 450 TPD. However, the amount of space needed is dependent on the load out capacity or time needed to remove all waste from the tip floor. A single compactor can load a container/trailer with 30 tons of waste in about 25 minutes or about 60 TPH. The amount of waste for each container could be more or less than 30 tons depending on the materials being loaded. It would take eight hours of continuous loading operations to remove 600 tons, and does not include interruptions in services whether it be equipment downtime or availability of containers to load. Also, West Van has no contingency if the compactor is out of service for extensive repairs.

Figure 4: Existing West Van Floor Plan



Another factor related to the capacity of the transfer station is the number of stalls available for customers to unload. As shown in **Figure 4** there are currently five-20 ft roll up doors (referred to as Bays 1-5) located on the south side of the building for self-haul or cash customers to unload. Each door opening may accommodate two self-haul vehicles to unload thus providing 10 stalls to unload. However, the door farthest to the west (Bay 1) is currently dedicated to accepting mixed food waste and yard debris collected in both the Cities of Vancouver and Ridgefield and is not available for self-haul customers. Bay 5 is limited for unloading as it must remain unavailable when the household hazardous waste (HHW) is open to accept materials. This leaves only three bays and six stalls that can be used to unload self-haul customers. Based on information in the Phase 1 RSWSS, during peak hours from 9 a.m. to 3 p.m. West Van experiences between 40 and 45 vehicles per hour. On average the typical self-haul customer will use 10 minutes to unload including the time to back in and exit. This means that a stall can handle five vehicles per hour. With only six stalls available on a consistent basis, the facility can handle on average, thirty vehicles per hour, which is much less than what is needed.

The County is considering opening West Van to self-haul customers on Sundays which may result in spreading out the current volume. It could result in more traffic particularly if some of CTR's current customers decide to use West Van. If all doors are dedicated to accepting self-haul customers, it appears there would be 10 stalls available and sufficient to handle the current volume of customers. But

changes to the circulation pattern should be considered to assure there is adequate queue space between the scales and the stalls.

On the east side of the transfer station there are six-20 ft doors (referred to Bays 6-11) for collection trucks to unload. One bay is used for access of the front loader equipment. All compactor and roll off trucks hauling waste use three bays (Bays 7-9) thus providing four to six stalls to unload. These vehicles will unload in approximately five minutes thus, conservatively each bay can receive about eight vehicles per hour. Currently, 50 to 60 collection trucks enter the facility each day with possibly 16 vehicles at peak hours. Thus, a minimum of three stalls will need to be available.

Bays 10 and 11 are used by trucks with commingled recyclables that serve the entire County. There are about 60 collection trucks with recyclable materials that arrive at West Van five days per week. A few trucks (less than 10) also deliver recyclables on Saturday. As long as the MRF continues to operate at West Van these stalls must remain dedicated to unloading the recycling collection trucks. If the MRF is relocated, then these stalls can be used by other customers.

Existing Traffic Circulation

Access to the West Van facility is from a local service road used by several local businesses including the barge loading operations to transport waste to the Finley Butte Regional Landfill. The facility entrance is just 200 ft west of NW Old Lower River Road. All traffic entering and exiting the facility uses this one access point as shown in **Figure 5**.

Figure 5: West Van Entrance and Scale Complex



When entering the site all traffic is directed to a single scalehouse complex that has three inbound and two outbound lanes. All inbound customers must use a single lane with a scale to weigh in. CRC recently installed a second scale dedicated to allowing commercial collection trucks to use a separate lane to weigh in. The third lane is a bypass lane used by transfer trailers and commodity trucks to enter the facility without being weighed. The commodity trucks are used to ship recycled materials to markets.

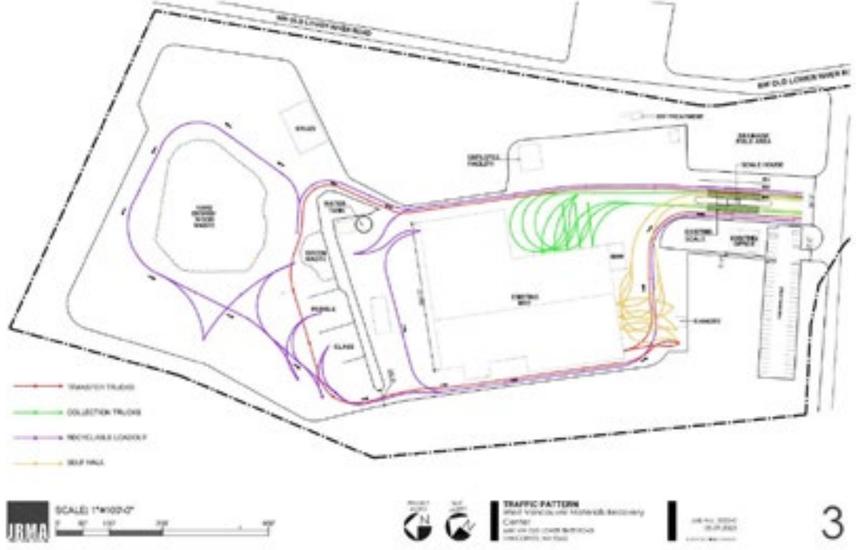
After weighing in the scale complex self-haul customers are directed to turn left where they queue up for an available stall to unload at the transfer station. Self-haul customers can also access either or both the recycling and HHW waste drop off areas. WCW collection trucks will enter the same access lane and proceed to unload on the east side of the transfer station and MRF.

Currently, traffic can back up off the service road and onto Old Lower River Road. Since this road has very little through traffic it does not create a significant congestion problem at the intersection, but it is not a desirable conditon. The new scale serving the commercial trucks will help to relieve the potential for backup onto the Old Lower River Road.

All traffic including self-haul customers, collection trucks, transfer trailers, and commodity trucks must exit at this same entrance. Vehicles that need to weigh out use the outbound scale lane while other vehicles can use the bypass lane.

The site circulation near the entrance is quite congested at times. This is a result of the close proximity of the entrance to the main transfer station building and where vehicles unload. It is further complicated due to the location of the HHW and the recycle drop off area. Site circulation for the various customers using the facilities has evolved over the many years of operations as new services and programs have been adopted. **Figure 6** captures the complexity of traffic patterns.

Figure 6: West Van Traffic Patterns



Master Plan Considerations

Near Term Issues

1. A critical need is to establish the location and facilities needed for top loading operations. An immediate need is to have capabilities to top load food waste/mixed organics.
2. Extend the city waterline to provide water service and replace the current ground water pump and tank system used for fire suppression.
3. Consider the location for the second compactor.
4. Develop plans to reduce congestion and eliminate offsite queue issue.
    a. Consider adding a new access for transfer trailers/containers off Old Lower River Road.
    b. Consider a new exit road for containers being shuttled to the barge facility.

Longer Term Issues

The West Van facility is located on 21 acres. The back seven acres are currently used for receiving and processing yard debris and wood waste. It also includes a bale storage structure and container/bin storage and other support activities. The County should consider how this space can best be used to provide waste management and recycling services in the future.

Also, the MRF processing operations are expected to be relocated to a new facility. Once the equipment line is removed the space can possibly be used for other servceis. Options may include:

1. Receive and process C/D materials.
2. Process organics – including food waste, green waste, and wood waste.
3. Other operations as deemed necessary for providing waste management and recycling services.

Organics Management

The State of Washington recently passed HB 1799 that directs local jurisdictions to reduce organic materials disposed in landfills by 75% before 2030. In 2021, the County generated 415,000 tons of MSW. Based on a waste composition study preapred for the City of Tacoma (2014) food waste represents about 20% of MSW. Using this data indicates the County discarded of 83,000 tons of food waste in 2021. If 75% is removed, the County would need to find an alternative for 62,000 tons of organics. The volume of organics collected at West Van would be about 35,000 tons in 2040.

West Van received 23,000 tons of yard debris and wood waste in 2021. Of this total, 11,800 tons were reported to be received from Portland Metro. Therefore, only 11,200 tons of these organic materials were collected in the County. The facility also received almost 1,500 tons of source separated food waste inside the transfer station. These materials are processed and then transported to the Dirt Huggers Compost Facilty. One component of the West Van master plan will be to evalaute options for managing organics in response to this new legislation.

Basis of Master Plan Data

Based on the findings from Phase 1 RSWSS (**Appendix A**) and the recently passed HB 1799, the design data in the following **Table 3** and **Table 4** is recommended to be the basis of the West Van Master Plan.

Table 3: West Van - Basis of Master Plan Data

Category		Existing	2040 Projection	% Change
Waste Quantities (MSW)				
Annual	Tons	116,719	150,000	29%
Ave Daily	Tons	400	550	38%
Peak Daily	Tons	450	600	33%
Customer Trips				
WCW				
All Commercial	Annual	25,428	33,000	30%
	Daily	110	127	15%
	MSW	50	65	30%
	Recycle	60	75	25%
Self-Haul/Cash	Annual	64,559	84,000	30%
	Daily	227	300	32%
Organics		**Tons/Year**	**Tons/Year**	
Yard Waste				
	County	5,514	7,200	31%
	Metro*	11,800	N/A	
Wood				
	County	5,465	7,100	30%
	Metro*	245		
Mixed Organics				
	Source Separated	1,416	1,840	30%
Food Waste – MSW				
	Vegetative	13% 15,173	22,230	47%
	Other	8% 9,200	13,700	49%
		24,373	35,930	47%
	Source Separated	12,395	16,140	30%
Total Organics	MSW + SS	36,768	52,070	42%

*Material that originates from the Portland Metro region

Table 4: Clark County Population Projections

Clark County Population Projections					
City or Area	2010 Census	2020 Census	% Increase	2040	2020 to 2040 % Increase
Battle Ground	17,571	20,743	18.05%	29,698	43.2%
Camas	19,355	26,065	34.67%	37,712	44.7%
La Center	2,800	3,424	22.29%	5,060	47.8%
Ridgefield	4,763	10,325	116.78%	16,716	61.9%
Vancouver	161,791	190,915	18.00%	272,837	42.9%
Washougal	14,095	17,039	20.89%	24,140	41.7%
Woodland (part)	0	84		119	42.0%
Yacolt	1,566	1,668	6.51%	2,344	40.5%
Incorporated Clark County:	**221,941**	**270,263**	**21.77%**	**388,625**	**43.8%**
% Incorporated:	52.2%	53.7%	2.91%	54.0%	0.5%
Unincorporated Clark County:	**203,422**	**233,048**	**14.56%**	**331,503**	**42.2%**
% Unincorporated:	47.8%	46.3%	-3.18%	46.0%	-0.6%
Clark County:	**425,363**	**503,311**	**18.33%**	**720,128**	**43.1%**

Source: Washington State - Office of Financial Management, Forecasting and Research Division

Appendix A

Findings from Phase 1 RSWSS

One recommendation was to consider developing a long-term master site plan. This plan would be prepared in conjunction with the evaluation of the infrastructural needs identified from updating the long-term Solid Waste Management Plan. Examples of this are as follows:

1. One system option may be to construct a new MRF in a central location to both collection routes and provide transportation access to regional markets.
2. If the MRF is relocated, it will free up a large building that could be repurposed for other service needs. One concept could be to provide a construction/demolition recycling facility.
3. A decision to reduce food waste and organics from being disposed in landfills as directed by the new state law, the MRF building could be repurposed to process these materials. This is a trend in other states.

The master plan can be prepared to establish how these facilities can be implemented with the caveat they may not be built immediately but can identify the space needs for such operations. By completing the master plan, it would help prevent spending good money after bad money on new facilities.

Central Transfer and Recycling Facility Master Plan

Basis of Master Plan Report

Prepared by JRMA
May 30, 2023

Introduction

Central Transfer and Recycling (CTR) facility is located on Washington State Route 503 in central Clark County near Brush Prairie. It serves the largest area of the County and is the area projected to have the most growth over the next 20 years.

Figure 1: Current CTR Site Plan



The facility resides on an irregularly shaped parcel of land and includes three main structures that make up the facility operations. The solid waste transfer station is the main structure. There is also a recycling building, an HHW building, and an administrative and operations office building. The facility was originally constructed circa the 1970s. In 1991, a new 38,000 sf transfer station was added to replace the original transfer building. MSW is loaded into containers that are shuttled 13 miles to a barge loading facility located at the Port of Vancouver on the Columbia River near West Van. Waste is then barged more than 200 miles to the Finley Buttes Regional Landfill in Boardman, Oregon. In addition to managing the area's waste, CRC operates a recycling and HHW waste drop-off center. **Figure 1** above provides an aerial photo of the site operations.

The original building was expanded and converted to the recycling and HHW building. An automatic scale system for route trucks was installed in 2012.

Key Findings from Phase 1

<u>Review of CTR Conditions Assessment</u>

The limited structural and site improvement condition assessment reveals that most of the assets at the site are in fair to good condition, except for the recycling building, paved areas east of the boundary retaining wall, and the infiltration portion of the stormwater system. A summary of the key points are as follows:

- The transfer station and HHW buildings (see **Figure 1**), the north boundary retaining wall, and the south boundary retaining wall are in **good** overall condition.
- The recycling building next to the HHW building is in relatively **poor** condition. It is our recommendation that a detailed structural investigation be implemented as part of the planning process when considering public ownership of the site.
- The drive aisles that course through the site are paved with asphalt concrete pavement. Some areas of the paving are in very **poor** condition and require rehabilitation. We recommend worn surface areas be repaired or replaced.
- The east boundary buffer is in **poor** condition due to the trees and tree roots impacting the pavement section and curb. The pavement section and the damaged curb should be repaired or replaced.
- The existing pump station for the sanitary sewer system is a duplex pump system with two pumps that alternate pumping discharge of the sanitary sewer effluent. According to facility staff, one of the pumps failed in September 2019 and was replaced in the fall of 2019. CRC provides routine maintenance of equipment. The pump station is in **good** condition.
- The scale house and the scale booth were not assessed since they were to be replaced in the near future (it was replaced in December 2019). The domestic water system was not assessed since it is owned and maintained by Clark County Public Utilities.

Structural and civil condition assessments were limited to those areas that are readily accessible and visible to the field staff. Concealed conditions that become exposed in the future may change our current recommendations.

<u>Site Circulation and Unloading Stall Capacity</u>

When CTR was constructed in 1991, it was not designed to accommodate the current levels of traffic, or the different activities and services currently provided.

Daily traffic at CTR averages 50 to 60 vehicles per hour. An unloading stall is expected to handle six vehicles per hour, giving 10 minutes per vehicle to maneuver into the stall, unload, and exit. Some vehicles, such as cars and pickups with less waste, will unload faster. However, vehicles with trailers and those with hydraulic tippers typically take longer. Therefore, in non-peak times, 10 to 12 stalls are sufficient for unloading.

During peak times, customer traffic can increase from 80 to as many as 100 vehicles per hour. At this volume, the facility would need to dedicate a minimum of 13 stalls for unloading during peak weekday times and 17 to 20 stalls during peak weekend times. **Figure 2** on the next page shows the tipping floor and vehicle unloading capacity (north is the left side of the figure). With the two northernmost stalls dedicated to source-separated cardboard, green waste, and clean wood (red circled area), there are only 11 stalls for unloading waste. On weekends, CTR can use the south drive aisle to route vehicles to unload. After unloading, these vehicles will exit the southeast door (blue circle) and drive to the outbound scale (green circle).

Also depicted in **Figure 3** is how transfer trucks, when loaded, exit the facility. The truck and trailer must intersect with other outbound traffic and will need to access the scale.

Figure 2: Tipping Floor Capacity



CRC does a good job managing traffic and ensuring vehicles can safely unload in the transfer station. Spotters are located at the entrance and on the tipping floor to guide customers to the appropriate stalls. Although the current facility does not have enough stalls to unload quickly during peak times, there is space for customers to queue onsite before entering the transfer station. However, when exiting the transfer station from the southeast door (blue circle), there is approximately 550 feet before the outbound scale, queue space for 20 to 22 vehicles. Routing vehicles in this direction can reduce the traffic queue exiting the transfer station. However, there is only one scale dedicated to processing all outbound customers and to weigh out transfer trucks.

The amount of customer traffic on weekends and during peak seasons also impacts the overall site circulation. The primary place of congestion is the outbound lanes before the scales. As shown on the site circulation map in **Figure 3**, all traffic must converge on two lanes including transfer trucks loaded with containers bound for the Tidewater loading dock.

Figure 3: CTR Site Circulation



Outbound traffic conditions may be improved by decreasing the time to process customers; however, the physical space for vehicles to line up to be weighed out as well as those to use the bypass lane is very limited. If the station is to make improvements to eliminate the off-site queue, it would also be desirable to consider modifications to remedy both the outbound scale capacity issues and the site circulation restrictions.

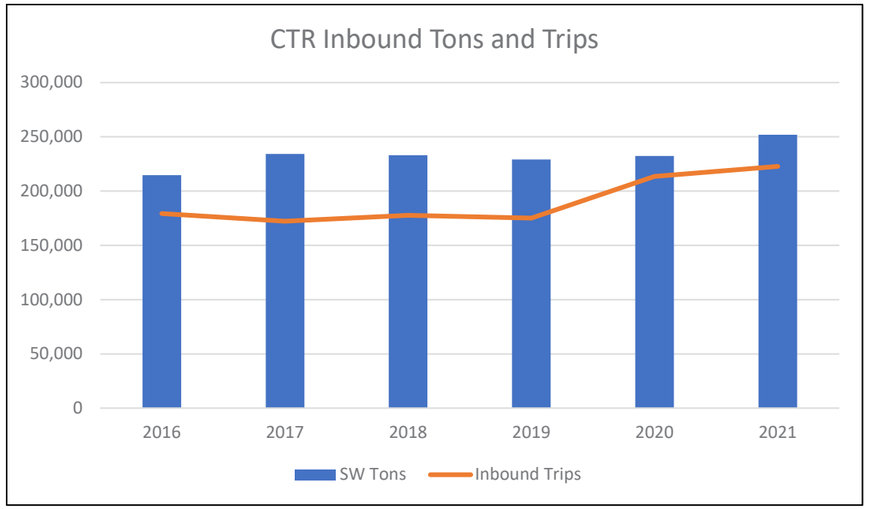
Impacts of Growth Management in CTR Service Area

Clark County has grown about 2% per year since 2010 (approximately 60,000 people from 2010 to 2019), and based on recent data from OFM, it is expected to continue at this rate for the next 20 years. The central and northern portions of the County, served by CTR, are expected to experience most of this growth, as predicted in the Growth Management Plan. The updated waste projections show that projected growth for this area could result in more than 100,000 tons of additional waste being generated per year in the next 20 years.

Growth has resulted in increased development of adjacent properties around CTR. The apartment complex on the northside of CTR has expanded, and now sits within 15 feet of the north retaining wall. Property on the west side of 112th street has been developed with new single-family houses. On the south side of the transfer station, a storage unit facility and private school were recently constructed. CRC owns eight acres located on the west side of CTR, providing a buffer between the new residential development and the transfer station. A new scale complex designed to eliminate off-site queueing problems is proposed by CRC for this property. These recent changes in the development of adjacent properties will need to be considered in deciding future changes to operations and future facility improvements.

CTR continues to experience increases in total waste volumes and the number of customers using the facility. The following is updated data that shows the increase over the past 2 years. Also, CTR is the only transfer station open on Sundays and therefore must serve the entire County. The traffic on weekends may be impacted if the County decides to expand the hours of operations at the Washougal and West Van transfer stations.

Figure 4: CTR Inbound Tons and Trips



Considering the increase in volume and number of self-haul customers, CTR is currently at operating capacity. This operating capacity is based on current waste quantities and hours of operation at about 900 TPD. If the waste exceeds the capacity, CRC will process the waste to ensure it is removed from the tip floor and not stored overnight. There were several observed deficiencies during the consultant team's site visits and review of data. It is important tounderstand that these deficiencies are a result of the physical conditions and limitations of the original design to handle the increase in customers and waste volume experienced over the past 30 years. CRC executes day-to-day operations to manage the current waste streams and traffic in a safe and efficient manner, given these physical constraints.

Tons received and traffic volume at West Van were updated with 2021 data. **Figure 4** illustrates that both waste received and traffic on site continue to grow at CTR.

Based on the assessment of current operations, the following site constraints and deficiencies were noted (as shown in **Figure 5**).

1. **Scale Capacity:** CRC is considering adding a second in-bound scale to increase thequeuing for in-bound traffic.
2. **Tipping Floor Space:** The current facility does not have sufficient space for vehicles to unload and limited space to handle surges in waste volumes.
3. **Congestion at Exit Lanes:** All traffic exiting the site must make a left turn into two outbound lanes. Transfer trucks are subjected to a hairpin-like turn and therefore use both lanes to access one outbound scale. The competition for the outbound scale and exiting is not a desirable condition and is exacerbated by the increase in waste quantities and increase in self-haul traffic.
4. **Compactor Load-Out Capacity:** With the current operating hours (12 per day), the compactor can only loud out about 900 TPD. CTR averages between 800 and 900 TPD. There are some days during peak periods where CTR receives between 900 and 1,100 tons. CRC reported that on occasions when waste of more than this capacity is received, they will load this material into trailers/containers to ensure it is not stored overnight.

Figure 5: CTR Operations Assessment



Summary of CTR Conditions

The CTR was not designed to handle the current waste volume and traffic conditions. The demand for services has increased greatly, particularly in the past five years. CTR is centrally located, has been well-maintained, and is in relatively good condition. There are improvements that can be made to not only deal with the current off-site queue, but also to improve overall site circulation and enhance the material handling needs. Changes could include expanding the transfer station building to provide space for unloading and floor storage. The additional areas would provide space for unloading construction and demolition (C&D) waste for processing that could divert this material from the landfill. Added space to handle green waste and wood could also contribute to higher material recovery. The key question to address is what level of investment should be made at CTR in conjunction with other regional service needs.

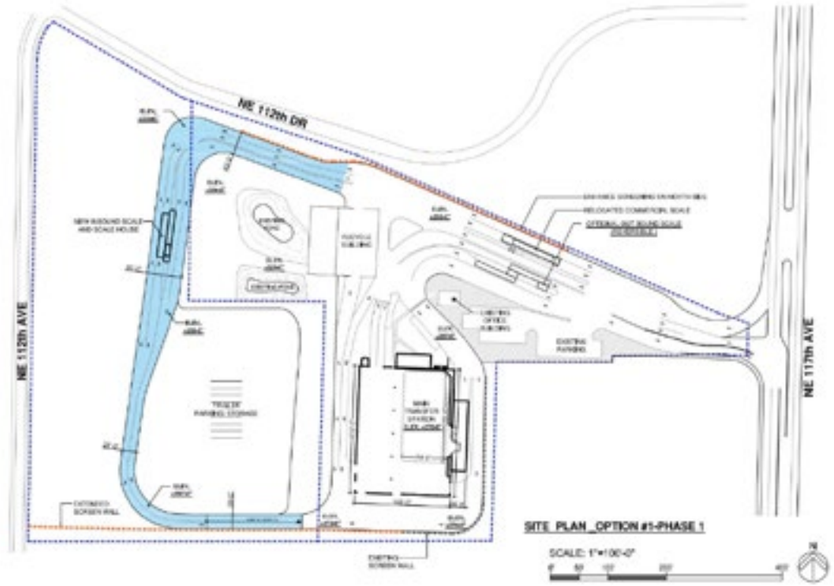
The answer to this question remains to be determined. In Phase 1 RSWSS, Chapter 5 – North Area Service Options presented what facilities are needed to serve this area. In Chapter 5, four options were developed. Drawings for those can be found in Appendix A of the RSWSS. The report identified two short-term improvements and settled on option 1.

The most immediate need identified in the system was to make improvements at CTR to address safe ingress and egress off Hwy 503. The first step was to modify the entrance to allow for two separate lanes entering the facility. This improvement is complete and there are no left turns permitted when exiting the station. Now all vehicles exiting CTR can only turn right and travel south on Hwy 503. Customers originating from north of CTR, such as Battle Ground, Ridgefield, La Center, and Yacolt must find a route to return to the north county.

The second improvement was to add lanes for inbound customers and eliminate any vehicles from queuing off-site onto the highway shown in **Figure 6**. This would allow customers to travel a much

longer entrance road to a new scale for weighing in. This was not completed and is included in the master plan improvements.

Figure 6: Proposed Inbound Lane Addition



To address the question of how to best serve the north and central portion of the county, the Phase 1 report evaluated the options for serving the north service area. These three options were compared to the options for making improvements at CTR. The north-central portions of the County are projected to experience the largest percentage of growth over the next 20 years. This growth has resulted in increased waste volumes and traffic at CTR and the need to make investments in facilities to manage the current conditions. However, to improve current deficiencies at CTR and manage future growth in this service area, additional investments in the system will be necessary. Updated projections show an increase in volumes to all County facilities with CTR expected to experience an increase of more than 100,000 TPY or 40% by 2040. The options for meeting the future infrastructure needs of the northcentral County were identified in the Phase 1 report.

The three distinct options identified are summarized as follows:

1. Make major improvements at CTR to address current and future service needs.
2. Make minimal improvements at CTR and site and build a new satellite transfer station to serve the northernmost portion of the County and relieve some of the customer traffic using CTR.
3. Replace CTR with a new transfer station designed to handle future growth. This alternative recognizes the need to minimize impacts to the residential properties adjacent to CTR; it is important that CTR be a good neighbor.

For each option, conceptual facility plans were developed to provide planning level construction cost estimates.

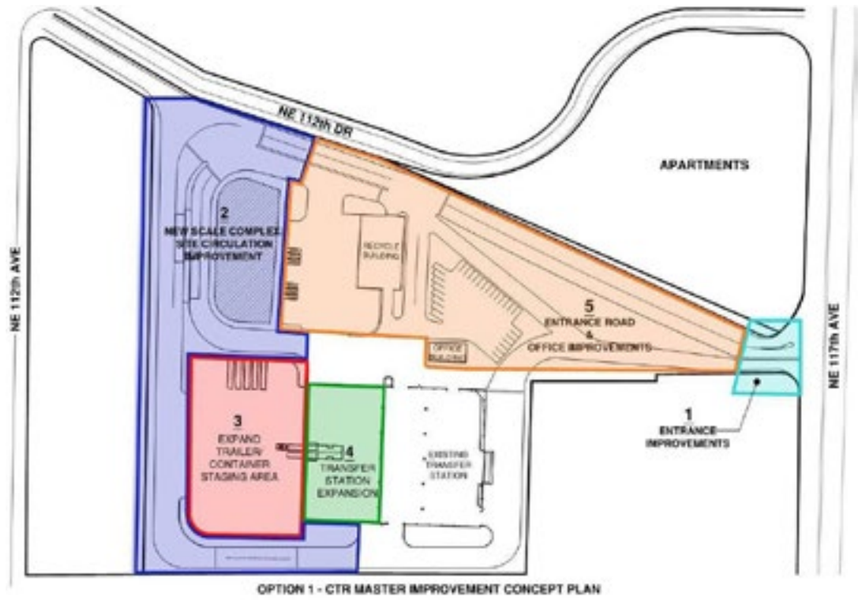
Decisions on a new transfer station and whether to move the MRF to a new location from its current location at West Van have not been made since the Phase 1 report was finalized. There has also been no decision made on the ownership of the facilities, so a summary of each developed option is as follows.

Option 1: Make Major Improvements at CTR to Address Current and Future Service Needs

This option assumes the CTR Transfer Station will make major improvements to address the current operational deficiencies and provide the infrastructure to manage waste resulting from growth in the central and northern part of the County. Improvements at CTR will be made to meet capacity needs for the next 25 plus years.

JRMA prepared several concept site plans that incorporate significant improvements to meet the needs of CTR's future conditions. These have been reviewed by the County and CRC and are the basis of the improvements listed; however, more analysis is needed to develop a final site master plan. A primary guiding principle in developing the new site plan has been the need to construct the facilities while maintaining the current operations. Therefore, the intent of the infrastructure improvements is to meet the capacity needs in a phased approach so that the facility can remain open to customers during the construction period. These improvements are captured in **Figure 7 below**.

Figure 7: Option 1 – CTR Improvements



The option to expand CTR was used in the Phase 1 RSWSS to identify the capital investments needed to address near term deficiencies in current operations and to evaluate the best approach for expanding the facility to meet demands of the north services area. To meet this demand, the facility would require

expansion onto the adjacent property owned by CRC. As a result, the report identified several issues that need to be addressed prior to making a final decision on whether to expand CTR.

First, this adjacent property would need to obtain a land use permit to allow the planned expansion. Recognizing that the adjacent properties are now zoned for residential and have been developed will need to be considered if CTR is to expand onto adjacent property. In contrast, if a decision was to close CTR and build a new transfer station it also is subject to a siting and permitting process.

Second, the adjacent property is believed to have been part of an old landfill that closed many years ago. This raises questions as to what impacts these conditions may have in redeveloping the adjacent parcel.

Third, the only access to the facility is off Hwy 503, a major north/south transportation corridor in the County. The entrance to CTR has been improved to enhance safe ingress and egress by eliminating the left turn for outbound traffic. Also, the Washington Department of Transportation will not permit a traffic signal to be installed. Thus, the site will need to contend with the high traffic volume on a long-term basis with the current entrance. Although certain improvements included in the site plan can relieve queueing onto the public right of way, traffic on Hwy 503 will increase as the north area of the county grows.

<u>Option 2: Make Minimal Improvements at CTR and Site/Build a New North SatelliteTransfer Station to Accept Primarily Waste from Self-Haul Customers</u>

This option assumed minimal investments at CTR. The improvements were targeted to advance onsite conditions to handle existing traffic. It recognized that adding any more traffic with access off Hwy 503 and accepting more waste at CTR as the region grows is less desirable. However, CTR is centrally located and with minimal investments, the facility can handle current traffic more efficiently. **Figure 8** on the next page depicts the proposed improvements to the existing CTR facility to address the immediate needs. In addition to improving site circulation and eliminating offsite queueing, a small building constructed on the west side of the existing transfer station may be feasible. This new structure is considered an optional investment to address self-haul customer traffic and provide additional unloading stalls. The improvements to CTR are expected to include the following features:

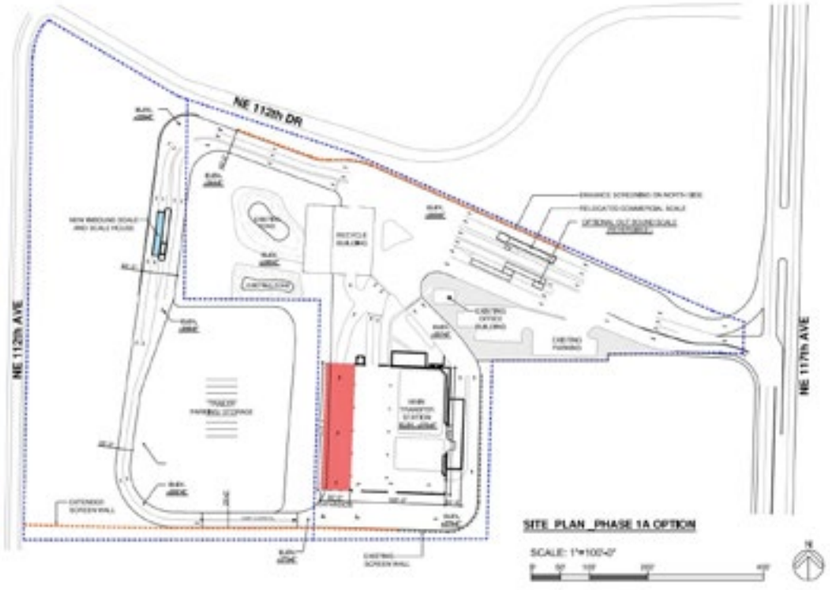
1. Modify entrance to accommodate lane separation for onsite queue and possibly construct access to the adjacent property on the west side like option 1.
2. Regrade and pave the back property to provide an area for staging trailer/containers for transport to the disposal site. An access ramp to the south side of the transfer station would be constructed.
3. Add new scales and gatehouse to handle self-haul traffic during peak hours on WCW property on CTR's west side.
4. Expansion onto the adjacent west property is predicated on the assumption that the underlying soil conditions are suitable to support new structures and that land use approval is obtained.

These are minimal improvements to mitigate near-term operating deficiencies, assuming a long-term plan of siting and building a new satellite transfer station/convenience center to serve the north area.

The expanded transfer station would serve to improve overall operations until a satellite station was sited and constructed. Under this approach once the satellite station is operational, CTR would only receive waste from commercial collection trucks. This would positively impact neighbors by reducing

traffic since the facility would not receive waste from self-haul customers. Also, impacts on neighboring properties would be greatly reduced on weekends with no self-haul traffic and limited operations.

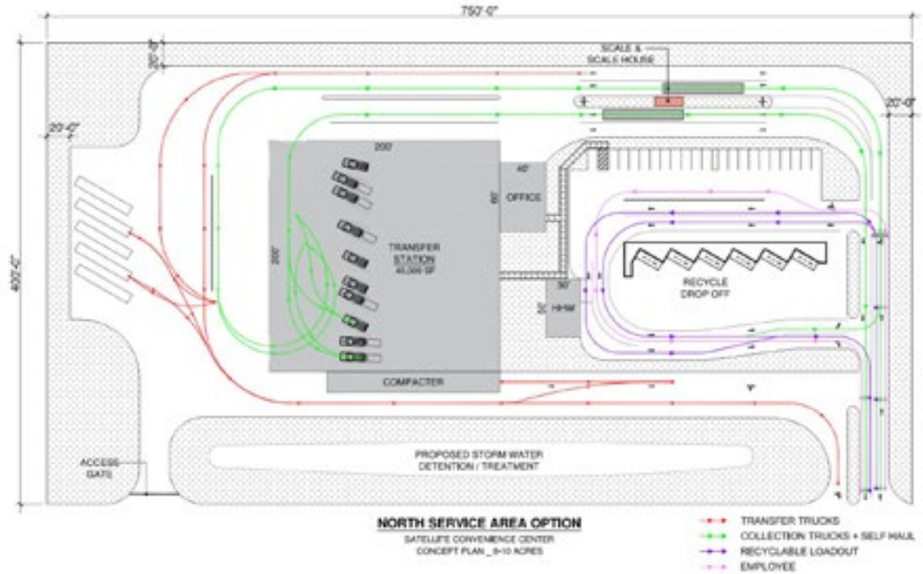
Figure 8: CTR Improvement Option



Option 2 also includes siting a satellite transfer station often referred to as a "convenience center" to receive waste from self-haul customers. The new convenience center would be a smaller structure but large enough to ensure capacity to handle future growth. Typically, convenience centers are open seven days per week but the days and hours for operations can vary depending on the local jurisdiction's policies and practices.

Figure 9 on the next page shows a concept plan for a typical satellite facility. The actual size and site configuration will vary based on local conditions and determined by the desired services to be provided.

Figure 9: Option 2 – CTR Satellite Station



Features for a new northern area satellite transfer station may include:

1. A minimum site of six acres of commercial/industrial zoned property is located on a minor arterial road. However, it would be desirable to have seven to ten acres.
2. A new convenience center/transfer station (Estimated to be approximately 16,000 to 20,000 sf building) to handle up to 400 TPD.
3. Recycling /HHW drop-off center.
4. Scale complex with one inbound and one outbound scale and gatehouse.
5. Top load trucks from the floor and no compactor.

It would be expected to take a minimum of three years to site and permit the new facility, but this is just an estimate, and permitting a new site could be longer depending on local zoning requirements. This assumes that conducting the siting process with public involvement would take 12 to 18 months. The timeline for zoning approval would be similar (12 to 18 months) considering it would require a conditional use process. Design and construction would occur over two years meaning a new facility may take a minimum of five years before it would be operational.

Benefits of this new north area facility include:

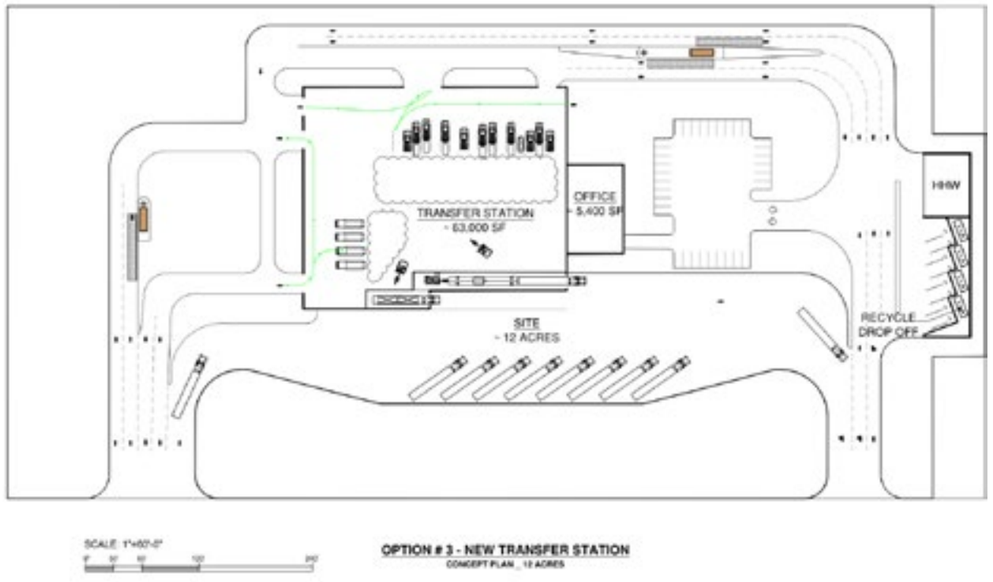
1. Improves onsite queue and circulation issues at CTR.
2. Increases scale capacity and assumes new scale house software to improve transaction times.
3. Increases space to provide stalls needed for self-haul and cash customers to unload more safely during peak conditions.
4. Provides some separation of self-haul vehicles from WCW collection trucks under peak conditions.
5. May increase needed capacity to loadout waste.
6. Provides additional floor space for flexibility in managing different waste streams.
7. Adds new facility to serve the fastest growing area of the County.
8. Eliminates self-haul customers at CTR which reduces operating hours and days, benefiting neighbors.
9. Reduce overall traffic at CTR and may reduce drive times for self-haul customers when a satellite facility is operational.

<u>Option 3: Replace CTR with New Transfer Station at a New Location</u>

The CTR Transfer Station was not designed to handle the traffic and quantities of waste currently received. Over the past five years, there have been many new developments in the surrounding properties. This includes new residential developments as well as a new school and church. With the expected growth, the County may decide that it may not be the best long-term site to invest in. One option is to make minimal investments in CTR to address immediate operational needs and establish a new location to serve the long term.

To provide future waste management and recycling services, a modern transfer station would be sited and constructed. Ideally, the new station would still be somewhat central to most of the population it serves and be located on commercial /industrial zoned property with access off an arterial or major collector street. It would be located to serve the current service area as well as the growing area of the North County cities. **Figure 10** below shows the proposed concept site plan for a new transfer station to replace CTR.

Figure 10: Option 3 – New Transfer Station



The following describes the key features of a new transfer station:

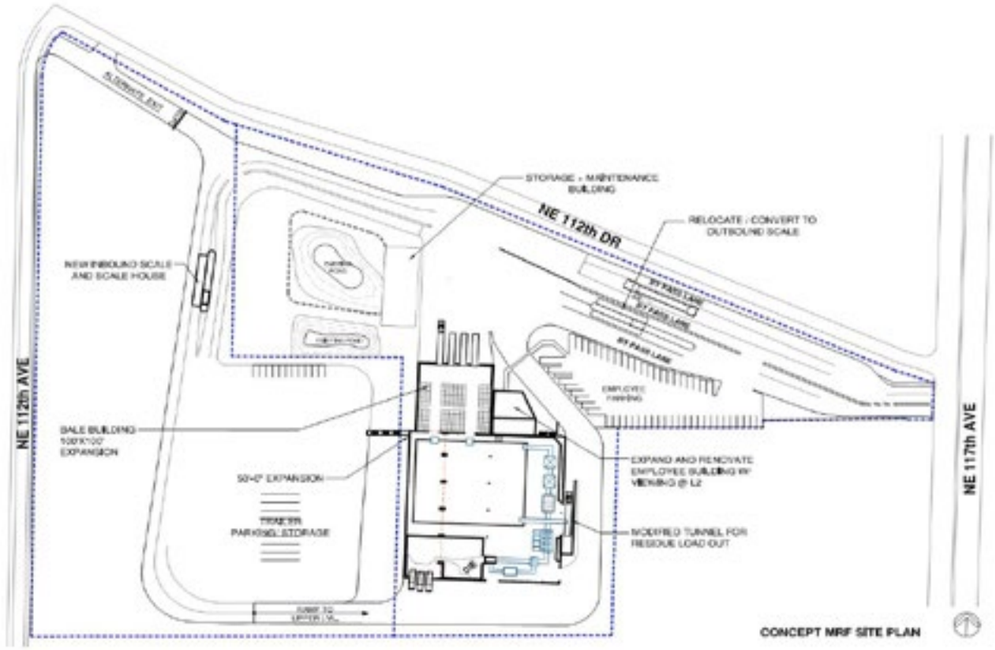
- A minimum site of 12-acres of commercial/industrial zoned property located on a minor arterial road.
- A new transfer station building (approx. 70,000 sf building) to handle up to 1,500 TPD.
- Minimum of two (2) load-out ports equipped with compactors and one top load port to be used as backup and for other materials.
- A recycling / HHW drop-off center.
- Preferably a separate or split access drive for collection trucks to separate from self-haul traffic for safety reasons.
- Separate scales for weighing collection trucks with RFID readers and the capability to weigh out vehicles.
- Parking area for staging trailers and containers.
- Office and employee break/restroom and training area.
- Possible education center for tours.

This facility would also incorporate green design features such as natural lighting, recycled-content building materials, water conservation features, renewable energy features, modern odor, and dust control systems.

MRF Option: If CTR Closed

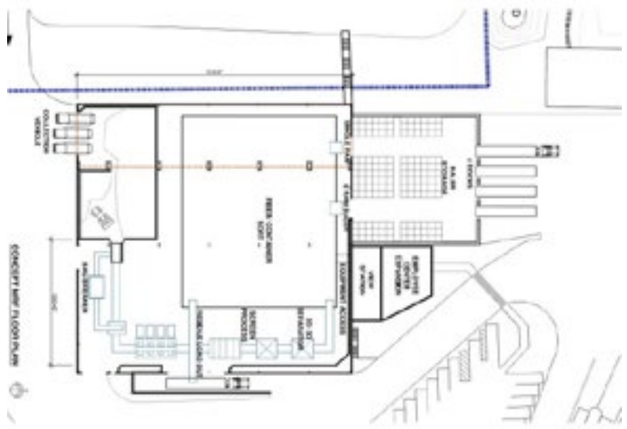
If CTR was closed to receiving MSW from both commercial collection trucks and self-haul, one option to consider would be to repurpose the facility into a MRF. Repurposing CTR would result in lower system costs since to site, permit and construct a MRF at a new location would require more capital. **Figure 11** shows a concept for converting CTR to a new MRF.

Figure 11: Concept MRF Site Plan



As shown on the conceptual floor plan the primary expenditure to convet CTR would be to expand the struture by adding a bale storage and shipping buildng on the north side.

Figure 12: Convert CTR to MRF - Floor Plan



Basis of Master Plan Data for North Service Area

Based on the findings from Phase 1 RSWSS and the recently passed HB 1799, the updated design data in **Table 1** and **Table 2** is recommended to be the basis of the West Van Master Plan. This Basis of Master Plan considers that new census data and waste quantities received have resutled in new projections.

Table 1: CTR - Basis of Master Plan Data (Updated per 2020 Census)

Category		Existing Transfer Station	Future (20 Years)
Building Space			
		38,000 sf - 36,136 excl. loadout	Space need defined by criteria
Waste Quantities			
Annual	Tons	251,847	353,263
Average	Tons/Day	900	1,200
Peak	Tons/Day	1,100	1,400
Traffic/Unloading Capacity			
Commercial	Ave Per Day	100	130
	Ave Per Hour	25	30
Commercial Stall		4 to 5	5
Self-Haul Weekday	Peak	600	780
	Per Hour	70	90
Weekday Stalls		14	18
Self-Haul Weekend	Per Hour	100	130
Weekend Stalls		20	26
*Assumes 1 stall is 5 cars an hour			
Operating Space			
Available area to stack waste, handle surge, and load trailers. Excludes maneuvering and stall for unloading			
Need		13,000 sf	18,000 sf (1 day storage + 10% operations)
Available		11,000 sf	
Average		900 TPD	1,200 TPD
		30 ton payload	
		30 trailer loads	
		25 minutes 12.5 hours*	16 hours @ existing
Peak		1,100 TPD	1,400 TPD
		15 hours*	20 hours @ existing
*Assumes no disruptions			
Trailer Parking			
		Space for 4	Assume 8 trailers for staging
		Minimum 6,000 sf	12,000 sf
Scale Capacity/Transactions			
Inbound - 1 - SH scale		80 vehicle/hour	120 vehicle/hour
Outbound - 1 SH scale shared with transfer trailers		80 vehicle/hour	120 vehicle/hour
*Note both inbound and outbound scales at 45 seconds/transaction			

Table 2: Clark County Population Projections

Clark County Population Projections					
City or Area	2010 Census	2020 Census	% Increase	2040	2020 to 2040 % Increase
Battle Ground	17,571	20,743	18.05%	29,698	43.2%
Camas	19,355	26,065	34.67%	37,712	44.7%
La Center	2,800	3,424	22.29%	5,060	47.8%
Ridgefield	4,763	10,325	116.78%	16,716	61.9%
Vancouver	161,791	190,915	18.00%	272,837	42.9%
Washougal	14,095	17,039	20.89%	24,140	41.7%
Woodland (part)	0	84		119	42.0%
Yacolt	1,566	1,668	6.51%	2,344	40.5%
Incorporated Clark County:	**221,941**	**270,263**	**21.77%**	**388,625**	**43.8%**
% Incorporated:	52.2%	53.7%	2.91%	54.0%	0.5%
Unincorporated Clark County:	**203,422**	**233,048**	**14.56%**	**331,503**	**42.2%**
% Unincorporated:	47.8%	46.3%	-3.18%	46.0%	-0.6%
Clark County:	**425,363**	**503,311**	**18.33%**	**720,128**	**43.1%**

Source: Washington State - Office of Financial Management, Forecasting and Research Division

Basis of Master Plan Additional Considerations

Prior to making any large investments at CTR a decision on which option is best for serving the north/central county should be implemented. However, each of the options will require several years to site and permit. Even after the permits are secured final design and construction will require a minimum of two to three years. Given this timeline improvements at CTR should be to eliminate potential for offsite queueing onto Hwy 503. Also, the option to expand the existing structure and provide added tip floor space may be beneficial in both the short run and for the long term if Option 2 is selected.

Organics Management

CTR processed approximatly 1,500 tons of yard debris in 2021 and no source seperated commercial food waste. This material is reloaded and sent to Dirt Hugger, a compose facility in Dallesport WA. With the passed HB 1799, the design for CTR will include the continued collection of yard debris and provide options for expanding reload capacity in the future. The site as currently used is not supportive of any preprocessing options for organic material.

Pending an organics feasibility study, it is recommended that space be allocated for the collection of both yard debris and source seperated commercial food waste for reloading in any proposed facility. In the event of the siting of a full service transfer statation, proper space should be allocated for preprocessing equipment to provide flexibility.

North Service Area Options

Investments in the future needs of CTR will need to be made depending on the negoiations with CRC and the County and consideration of options relating to the North Service Area Options. The options for consideration have been described in the Summary of CTR section of this report. The three options are:

- Option 1: Make Major Improvements at CTR to Address Current and Future Service Needs
- Option 2: Make Minimal Improvements at CTR and Site/Build a New North SatelliteTransfer Station to Accept Primarily Waste from Self-Haul Customers
- Option 3: Replace CTR with New Transfer Station at a New Location

Option one has some issues that would make it an unlikely choice. At the back of the property is an old inert landfill and stability for building is questionable on this part of the site. There is also a different zoning for the back lot of CTR meaning a conditional use review would be needed to develop it and the neighborhood characteristics have changed since the site was first developed making any expansion much more difficult. It is recommended that the County conduct further evaluation of these options once negotiations are complete. A decision on the MRF could also influence preference for one option over another.

Washougal Transfer Station Master Plan

Basis of Master Plan Report

Prepared by JRMA
January 10, 2023

Introduction

This document reviews the findings from the 2021 Phase 1 Regional Solid Waste System Study (RSWSS) as well as incorporates updates in data and changes since publication. This document will highlight information needed for consideration of what improvements/modifications should be prioritized and used to prepare a master plan for the Washougal Transfer Station (Washougal). Preparing a master plan for Washougal was a key recommendation from the RSWSS. The master plan will identify the infrastructure required for managing solid waste and recycling services over the next 20 years.

Background and Existing Conditions

Washougal began operations in 2009 and is operated by Columbia Resource Company (CRC). The facility is located on a 4.6-acre site in the Port of Washougal. Customers enter from Grant Street to a scale house complex that includes one inbound scale and one outbound scale. Each customer must be weighed, and fees are assessed based on total waste disposed. The facility includes an 80-by-60-foot transfer station building (4,800 sf) for customers to unload waste. Transfer trucks enter the east side through a depressed tunnel for loading trailers that are transported to the Wasco Landfill in The Dalles, Oregon. The station operates as a lift-and-load, meaning the bottom of the tunnel is only eight feet (ft) below the tipping floor. A front loader is used to lift waste about nine ft to load trailers. This operation does reduce the time to load trailers, but waste can spill off the sides and onto the tunnel floor, which requires regular cleaning.

The transfer station has three 22-foot-wide access doors located on the west side where collection trucks unload. This design allows for up to six (6) vehicles to unload at one time. The layout of the facility is shown in **Figure 1**.

Figure 1: Current Washougal Site Plan



The facility is open six days per week (Monday-Saturday) for commercial collection trucks from 7 a.m. to 5 p.m. The transfer station is open to the public and self-haul traffic on Wednesdays and Fridays from 7 a.m. to 5 p.m., and Saturday from 8 a.m. to 4 p.m. On these days commercial collection trucks can use a 22-foot roll-up door on the south side to unload. This allows self-haul customers to use the west side doors to unload on these days.

The facility also provides a drop-off center where customers can bring commingled and source-separated materials to be recycled. The drop-off center is open to the public Monday through Friday from 7 a.m. to 5 p.m. and Saturday from 8 a.m. to 4 p.m. Customers can drop off household hazardous waste (HHW) every third Saturday of the month from 8 a.m. to 4 p.m.

In Phase 1 RSWSS an assessment of the conditions of Washougal was conducted. Some minor repairs are required but primary structures and site appear in good condition.

Washougal Transfer Station Waste Quantities

Washougal received 38,638 tons in 2021 representing about 10% of the County's waste. **Tables 1 and 2** summarize solid waste tonnage and customer (vehicle) trips made annually to Washougal over the past six years. Total waste received increased by almost 20% over the past two years while the number of trips increased by nearly 32%. This has occurred even though the station is open to receive waste from self-haul customers only three days per week (Wednesday, Friday, and Saturday).

Table 1: Washougal Annual Solid Waste Tonnage by Customer Type

Solid Waste Tons	2016	2017	2018	2019	2020	2021	5-Year Ave. (2017-2021)	% Ave. of Total
Cash	3,318	4,263	4,446	5,177	6,700	6,598	**5,437**	**16%**
Commercial	220	421	397	836	335	442	**486**	**1%**
Route Trucks	14,539	14,914	15,090	15,104	16,776	18,579	**16,093**	**47%**
WCW Drop Box	13,295	13,816	11,987	11,209	12,756	13,019	**12,557**	**36%**
Total Tons	**31,372**	**33,414**	**31,919**	**32,326**	**36,566**	**38,638**	**34,573**	

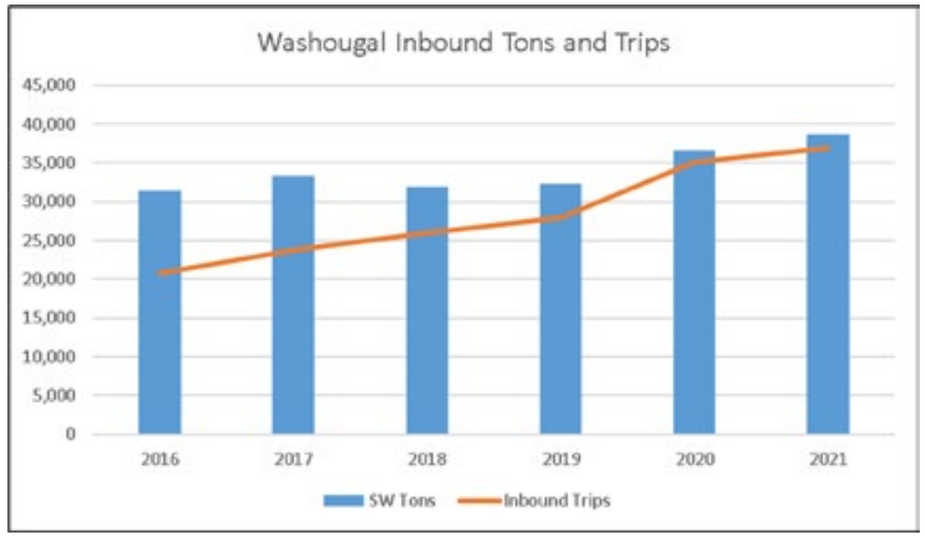
Table 2: Washougal Annual Customer (Vehicle) Trips

Inbound Trips	2016	2017	2018	2019	2020	2021	5-Year Ave. (2017-2021)	% Ave. of Total
Cash	14,923	17,542	19,678	21,703	28,411	29,669	**23,401**	**78%**
Commercial	328	416	364	512	291	582	**433**	**1%**
Route Trucks	1,701	1,769	1,976	1,931	2,163	2,305	**2,029**	**7%**
WCW Drop Box	3,841	4,049	3,938	3,855	4,202	4,333	**4,075**	**14%**
Total Trips	**20,793**	**23,776**	**25,956**	**28,001**	**35,067**	**36,889**	**29,938**	

Based on the 2021 data, Washougal receives on average about 125 tons per day (TPD) assuming a six-day week operation and 150 TPD if a five-day operational week is assumed. The five-day average should be considered as most of the waste is received during this period. Most customers on Saturday are self-haul vehicles that have small loads.

As shown in **Figure 2** both the trips and total tons received have increased steadily over the past three years.

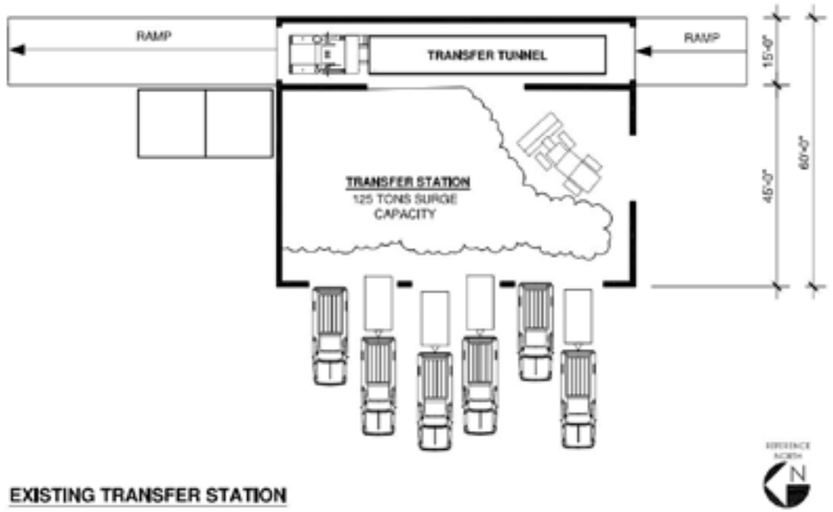
Figure 2: Washougal Inbound Tons and Trips 2016-2021



Existing Tip Floor Operation

The existing tip floor operation shown in **Figure 3** consists of an area that is approximately 40 ft x 60 ft or 2,400 sf. Accounting for the area to operate equipment to load transfer trailers leaves about 2,000 sf of surge capacity assuming no vehicles are unloading in the building. If the station receives 125 TPD the surge capacity requires about 1,700 sf to temporarily store waste. If the station receives 150 TPD the needed surge capacity increases to 2,000 sf based on the current waste volume received the facility is basically at full capacity.

Figure 3: Washougal Existing Tipping Floor



Likewise, there are only six stalls available to unload the self-haul customers on the west side of the station. Based on 2021 data, Washougal receives about 200 self-haul customers per day over the three days of operation. This level of traffic suggests that six stalls is generally adequate for unloading this number of customers without causing major onsite queue issues. However, there could be certain times of the year where there are longer wait times to unload. During this period, the commercial trucks primarily unload on the south side of the station. And, although the data suggest that a single stall is nominally adequate for unloading commercial collection trucks it is more desirable to have at least two and preferably three stalls during peak hours.

In the RSWSS Phase 1 Report (completed September 2020) it was noted that the Washougal will need to be expanded soon. However, the County is currently considering the option to expand the number of days Washougal is open to receive self-haul customers. It is expected to help relieve some of the traffic issues at Central Transfer and Recycling Center (CTR). This decision may also impact the timeframe for expanding the existing Washougal as the tip floor does not have capacity to handle more waste generated by growth or by decisions to expand the operating hours for self-haul customers.

Potential site improvements identified in the Phase 1 Report are discussed further in the Transfer Station Condition Assessment section of this document.

Waste Projections for Washougal

The population of the cities of Camas and Washougal is projected to increase from 43,104 (2020 Census) to 61,852, an increase of almost 19,000 people, by 2040. The amount of growth in the unincorporated areas in the eastern part of the County is more difficult to project. Based on assumptions made in the waste projections, it is estimated that 11,000 more people could live in the unincorporated portions of eastern Clark County. In total, 28,000 additional people are projected to be served by the Washougal Transfer Station.

Figure 4: Map of County with Annexation

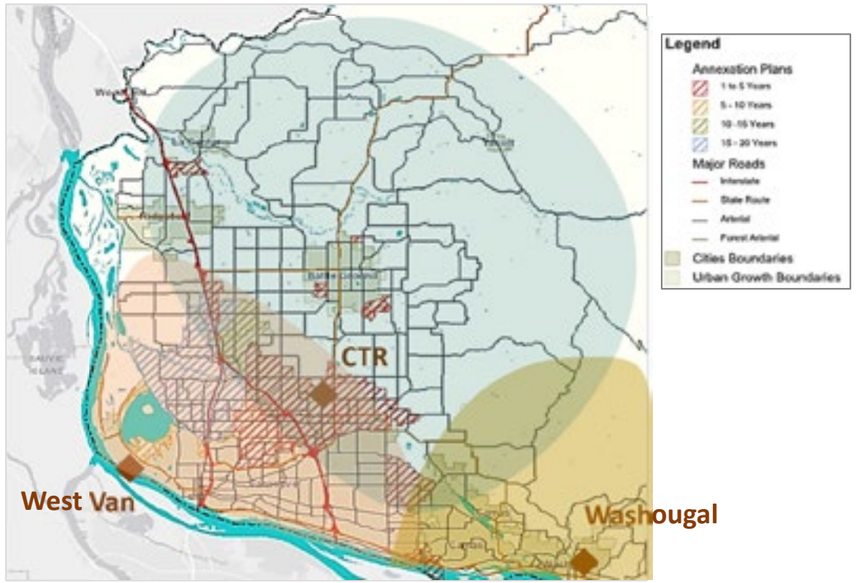


Table 3 below shows that the County will generate an additional 106,000 tons per year (TPY) by 2040. Under both assumptions, waste generated in the Washougal service area increases 21.2%.

Table 3: Estimated Service Area Waste Projections

Transfer Station Service Area	Assuming 50% UGB Growth in Central Area			Assuming 70% UGB Growth in Central Area		
	Population	% Change of Waste	Additional Waste (TPY)	Population	% Change of Waste	Additional Waste (TPY)
Service Areas						
Growth in City of Vancouver in North/Central County	40,961		41,780	57,706		58,860
Growth in Unincorporated North/Central County	49,227		50,212	49,227		50,212
Growth in North Cities	26,968		27,507	26,968		27,507
CTR Service Area:	**117,156**	**54%**	**88,734**	**133,901**	**62%**	**101,416**
Growth in City of Vancouver (25% of City & County)	20,840		21,257	20,480		20,890
Growth in unincorporated East County – Assume 20%	19,112		19,494	19,112		19,494
Growth in East Cities	18,748		19,123	18,748		19,123
Washougal Service Area:	**58,700**	**27%**	**44,459**	**58,340**	**27%**	**44,187**
West Van Service Area:	**40,961**	**19%**	**31,024**	**24,576**	**11%**	**18,614**
Total:	**216,817**	**100.0%**	**164,217**	**216,817**	**100%**	**164,217**

With this growth, the increase in waste will be about 23,000 TPY over the next 15 to 20 years. When added to the current waste volume of 32,000 TPY, the projected total waste is estimated to be about 55,000 TPY. This estimate suggests the amount of waste received at the Washougal will increase to about 1,060 tons per week. With only 7% delivered on Saturdays, the weekday volume could be between 970 to 1,000 tons. Although weekday volumes could average 200 TPD, if Wednesdays remain open to self-haul, the amount of waste received on that day could be as much as 250 tons.

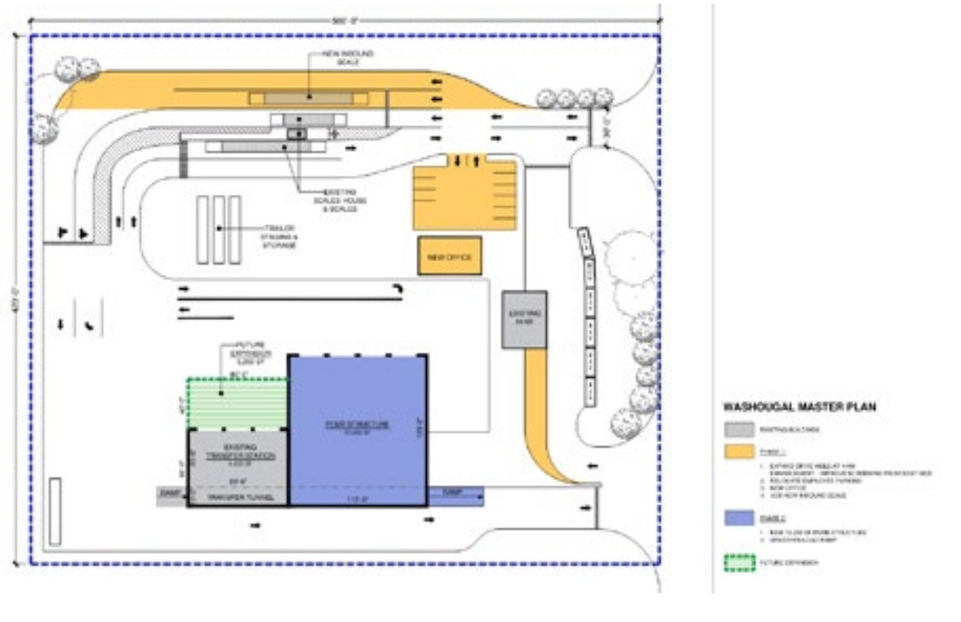
Transfer Station Conditions Assessment

Washougal is currently operating at its capacity but with no critical operating deficiencies. The County may consider opening the station for self-haul customers for additional days of the week. Assuming this would result mainly in distributing the current customers over a longer period, not increasing overall transactions, this may resolve any near-term need to add more stalls. This is similar to what occurred when the CRC opened the station to self-haul customers on Fridays in 2018.

The only other minor improvement to consider would be to add a push wall to stack waste along the trailer tunnel. This could provide additional stacking for waste prior to loading and reduce spillage when loading trailers.

To address the overall needs of the facility to meet the needs of the service area, there are several improvements that should be planned to provide more unloading stalls and to add tipping floor space. This site map in **Figure 5** on the next page shows seven improvements to be included in the Capital Improvements Plan for the Washougal.

Figure 5: Site Map Showing Improvements



1. A short-term improvement mentioned by the operator was to expand the access lane to the HHW facility. This is a minor investment to improve traffic flow and safety and could be completed in the near future.
2. Add screening on the east side of the HHW building to reduce exposure to the elements.
3. Add a steel backsplash and chute along the east side of the building in the load-out tunnel. This backsplash will protect the siding from damage caused from loading trailers. It should also reduce possible spillage of waste from the top-load operation. Also, consider adding a short push wall on the tip floor side to increase surge capacity.
4. Expand the transfer station building with a 10,000-sf addition and pave the yard to increase capacity including expanding below grade loading tunnel. The new building can include a lean-to on the north side to provide storage of special waste.
5. Expand the entrance road to increase the capacity of the scale complex and reduce potential of traffic backing onto Grant Street.
6. Build a new office and parking, free up space for trailer storage and other storage.
7. Consider future expansion at the existing transfer station's entrance.

The 2020 Phase 1 report expected growth in the service area to increase waste volumes at the facility by as much as 21% in the next 20 years, and that these improvements could be scheduled over the next

three to six years, however three years has passed since that report and these recommendations should be given greater priority.

Basis of Master Plan Data

Based on the findings from Phase 1 RSWSS and the recently passed HB 1799, the design data in the **Table 4 & 5** is recommended to be the basis of the West Van Master Plan. This basis of design considers that new census data and waste quantities received have resutled in new projections.

Table 4: Washougal - Basis of Master Plan Data

Category		Existing (2021)	2040 Projections	% Change
Waste Quantities (MSW)				
Annual	Tons	38,638	83,097	115%
Average	Tons/Day	125	290	132%
Peak	Tons/Day	150	350	133%
Customer Tons				
WCW				
All Commercial	Annual Tons	32,040	68,000	112%
	Ave Daily	120	193	
Self-Haul /Cash	Annual Tons	6,300	15,000	138%
	Weekly Tons (3 day)	121	288	138%
Trips				
All Commercial	Annual	7,220	15,000	108%
	Daily (5 day)	28	60	114%
Self-Haul/Cash	Annual	29,669	66,000	123%
	Ave Daily (3 day)	190	210 (6 day)	11%

Notes
#1 Source-Washington State – OMB

Table 5: Clark County Population Projections

Clark County Population Projections					
City or Area	2010 Census	2020 Census	% Increase	2040	2020 to 2040 % Increase
Battle Ground	17,571	20,743	18.05%	29,698	43.2%
Camas	19,355	26,065	34.67%	37,712	44.7%
La Center	2,800	3,424	22.29%	5,060	47.8%
Ridgefield	4,763	10,325	116.78%	16,716	61.9%
Vancouver	161,791	190,915	18.00%	272,837	42.9%
Washougal	14,095	17,039	20.89%	24,140	41.7%
Woodland (part)	0	84		119	42.0%
Yacolt	1,566	1,668	6.51%	2,344	40.5%
Incorporated Clark County:	**221,941**	**270,263**	**21.77%**	**388,625**	**43.8%**
% Incorporated:	52.2%	53.7%	2.91%	54.0%	0.5%
Unincorporated Clark County:	**203,422**	**233,048**	**14.56%**	**331,503**	**42.2%**
% Unincorporated:	47.8%	46.3%	-3.18%	46.0%	-0.6%
Clark County:	**425,363**	**503,311**	**18.33%**	**720,128**	**43.1%**

Source: Washington State - Office of Financial Management, Forecasting and Research Division

Source: Washington State - Office of Financial Management, Forecasting and Research Division

Appendix C: CIP Spreadsheet



Appendix D: Drawings

Figure 1: West Van Site Plan

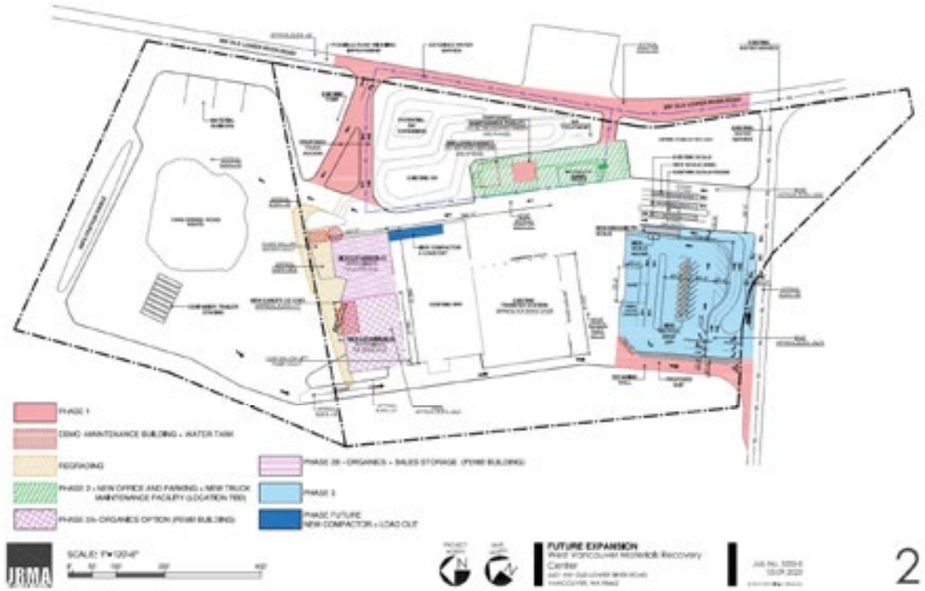


Figure 2: CTR Improvement Option

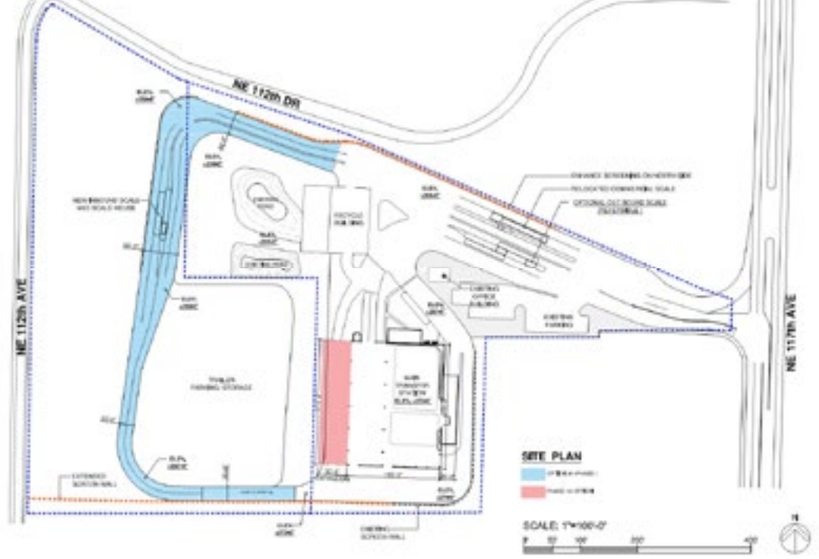


Figure 3: Option 1 – CTR Improvements

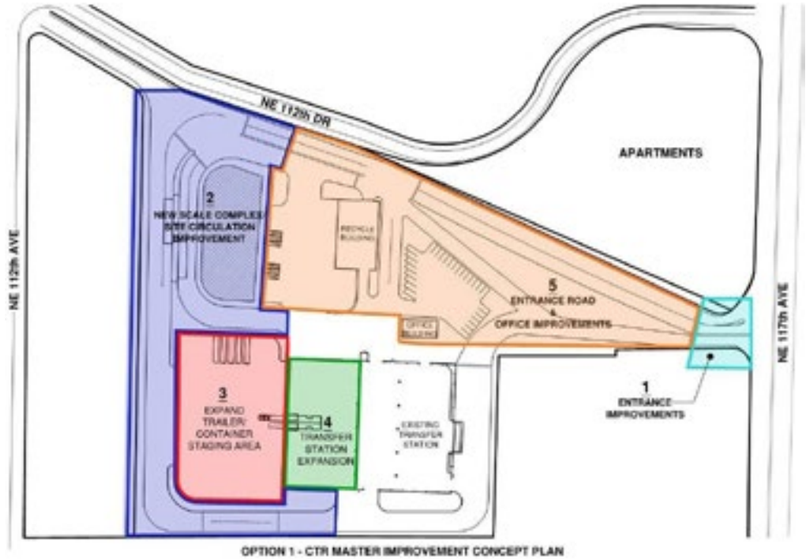


Figure 4: Option 2 – CTR Satellite Station

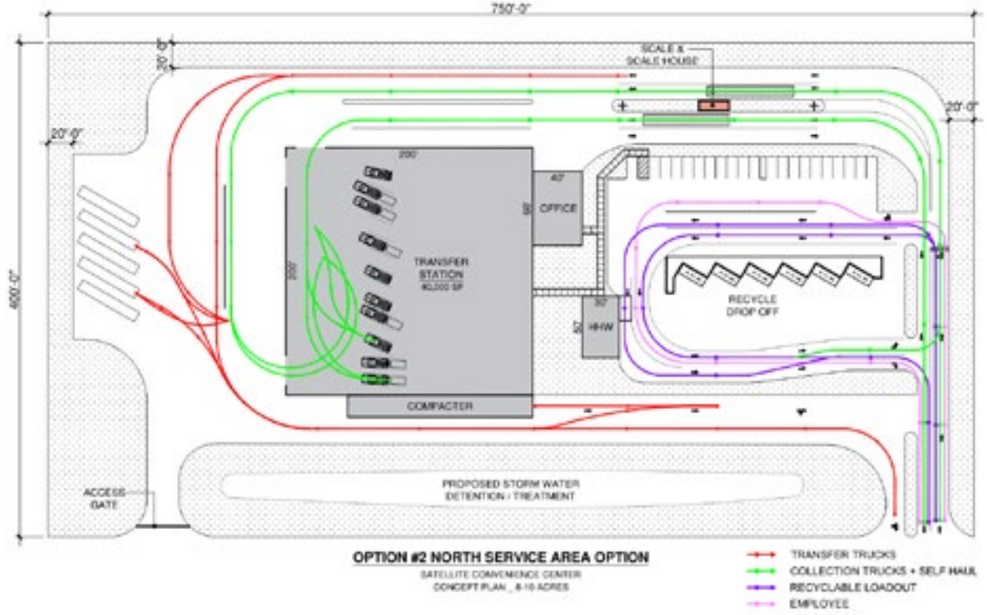


Figure 5: Option 3 – New CTR Transfer Station

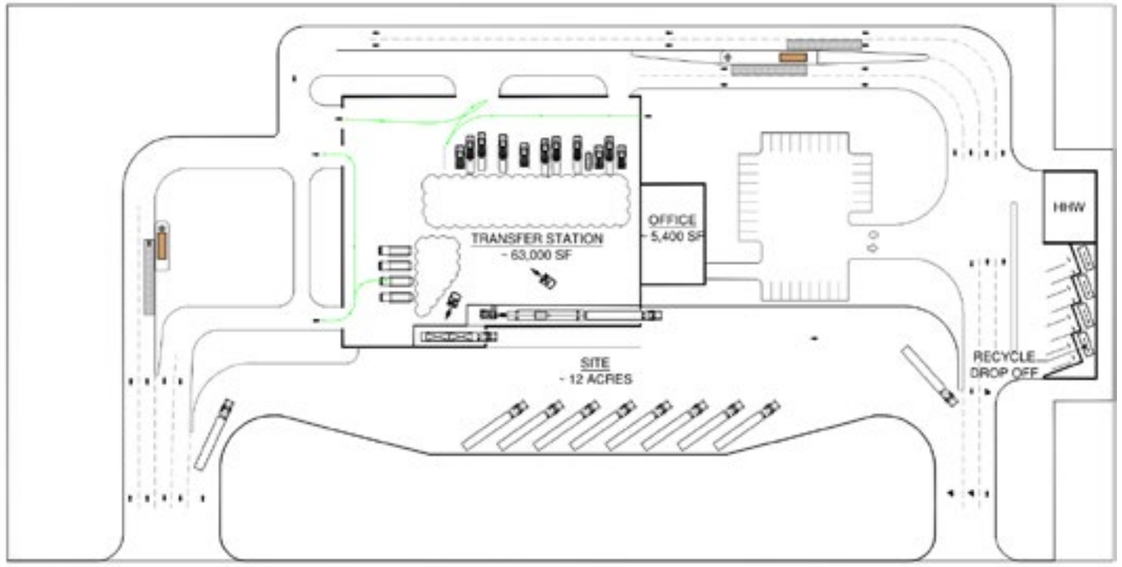


Figure 6: CTR Concept MRF Site Plan

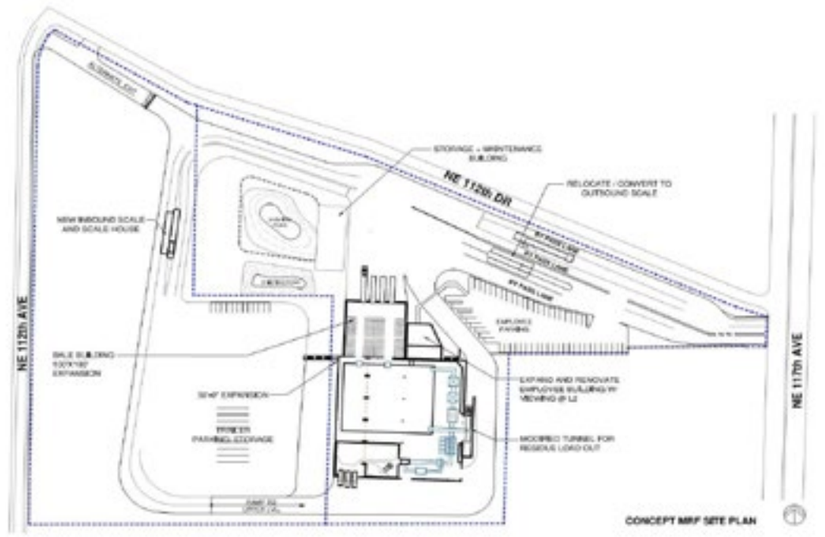


Figure 7: Convert CTR to MRF - Floor Plan

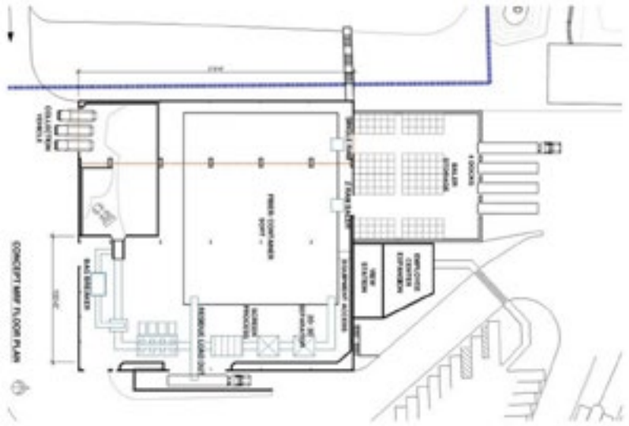
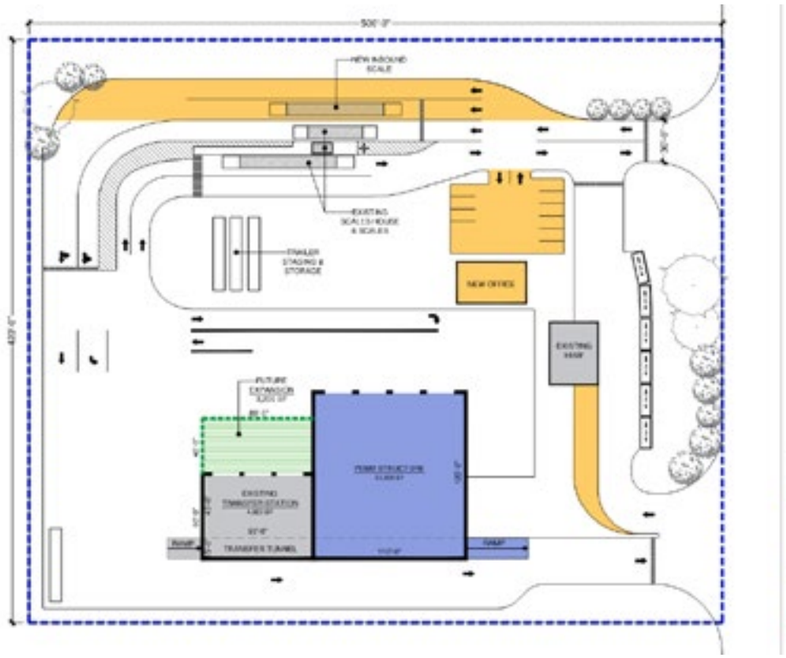


Figure 8:Washougal Site Map Showing Improvements



J

APPENDIX J: Equity Assessment and Action Plan

PUBLIC HEALTH





SOLID WASTE AND RECYCLING

Equity Assessment and Action Plan

Clark County Solid Waste and Recycling

Vision

A future where less waste is generated.

Mission

To provide equitable services and infrastructure, that equip everyone to sustainably manage waste.

Values

Community: We collaborate with community members and partners to educate, inspire, and foster accessible use of the solid waste system.

Environment: We recognize the natural environment is our life support system. Protecting it is critical to our health and resiliency.

Equity: We respect all people and serve with transparency to provide unbiased and fair services.

Quality: We build efficient and effective programs and services using the best available science and research.

Introduction

The purpose of this plan is to provide a current assessment of equity in the Clark County solid waste system and set goals to improve conditions. This plan will identify needed actions that ensure the solid waste system is providing services and opportunities for all.

There are various internal and external elements that must be considered to evaluate equity conditions in the solid waste system. Internal elements are processes happening within Clark County Solid Waste and Recycling that impact the system. External elements are observable results of Clark County Solid Waste and Recycling work, such as the public experience, solid waste infrastructure, and environmental impacts.

Internal considerations assessed in this plan:

- Capital projects, contracts, and procurement
- Education and outreach planning
- Employee development and training
- Governmental advisory groups
- Policies and ordinances
- Rate structures

External considerations assessed in this plan:

- Community partners
- Costs for services
- Customers
- Education opportunities
- Environment
- Public advisory committee
- Costs
- Services and infrastructure

Internal considerations

Capital projects, contracts, and procurement

Methodical and consistent practices are used to ensure fair, responsible, and cost-effective spending of public funds. Purchasing standards give all qualified vendors equal opportunity and comply with regulations for ethical practices in public contracting.[19]

Clark County Solid Waste and Recycling manages various contracts to serve the public. See Exhibit A for a list of active contracts.

Education and outreach planning

A major function of the Clark County regional solid waste system is to provide education and coordinate outreach efforts to the residents, businesses, and schools in Clark County. This work aims to give residents and businesses the knowledge and tools to manage waste in ways that protect the environment and public health.

Clark County Solid Waste and Recycling has four education and outreach programs, including the Composter Recycler training program, Green Business certification and education program, Green Neighbors residential education program, and Green Schools program. Clark County Solid Waste and Recycling also requires the county's recycling contractor, Waste Connections of Washington, to employ recycling educators to conduct their own outreach and education to customers.

Education planning includes:

- Staff attendance at community events
- Engaging community organizations
- Strategic planning of workshops and classes

- Developing strategies to engage underserved audiences
- Data-based decision making
- Maintenance of online and printed resources
- Collaboration with Waste Connections educators
- Collaboration with the City of Vancouver

Employee development and training

Clark County Public Health provides staff with resources for learning and professional development. Employees and managers work together to set quarterly and annual goals for development and learning. The goal is to have a competent and culturally aware workforce, and for staff to develop Public Health core competency skills, including:[16]

- Data analytics and assessment
- Policy development and program planning
- Communication
- Health equity
- Community partnerships
- Public health science
- Management and finance
- Leadership and systems thinking

All Clark County staff take mandatory trainings on topics including ethics, microaggressions, and workplace violence prevention. In addition, Solid Waste and Recycling staff receive a minimum of one equity training annually, conducted by a professional consultant.

Governmental advisory groups

Solid Waste and Recycling is advised by two interlocal advisory committees. The Regional Solid Waste System Steering Committee is made up of the Public Works directors of each city within the county, advising on solid waste issues and plans. The Leichner Landfill Oversight Committee advises on the management and maintenance of the closed Leichner Landfill in Vancouver. The committee consists of the county Public Health director, the county Solid Waste and Recycling project manager(s), county legal counsel, the county financial analyst, the City of Vancouver Public Works director, City of Vancouver legal counsel, and a designated representative of Clark County Public Health.

Policies and ordinances

Work is directed by federal, state, and local laws and regulations. These are defined in the Revised Code of Washington (RCW), the Washington Administrative Code (WAC), and the United States Code.[14, 18, 22] Regulations direct the priority projects for the county. Local ordinances are passed by the Clark County Council into the Clark County Code.[9] There are various ordinances related to solid waste, recycling, and environmental protection.

Rate structures

Clark County Solid Waste and Recycling staff review and approve rates charged by the private contractors, Waste Connections and Columbia Resource Company, for transportation, processing, and disposal of solid waste, recycling, and yard debris.

Rates for curbside services are set in the county's collection contracts with Waste Connections (See Exhibit A). Rates are adjusted annually using inflation indices produced by the United States Bureau of Labor Statistics. Clark County reviews and approves all changes to rates.

Solid waste (garbage) disposal rates are set through the county's contract with Columbia Resource Company (See Exhibit A). The cost to dispose of garbage is known as a tipping fee. The fee is adjusted annually using the previous year's consumer price index produced by the United States Bureau of Labor Statistics. Clark County reviews and approves all rate adjustments. In addition to the tipping fee, solid waste delivered to the transfer stations is subject to a $10.00 transaction fee.

External considerations

Community partners

Clark County Solid Waste and Recycling partners with local organizations and agencies to provide educational opportunities and events that strengthen connections with community members. Partners include:

- Clark County Clean Water[8]
- Fort Vancouver Regional Libraries[11]
- Lower Columbia Nature Network[15]
- Washington State University, Clark County Extension[23]
  - SNAP-Ed
  - Master Gardeners
- Vancouver Farmers Market[17]
- Watershed Alliance of Southwest Washington[25]

Costs for services

Residential and commercial customers in Clark County pay rates for solid waste services. There are no assistance programs for low-income customers. Waste Connections is responsible for the billing of customers. Waste Connections policy states that bills unpaid for 90 days result in cessation of pick-up services, following several notifications to the customer.

Customers

The demographics of Clark County residents are shown in Figures 1–3. This is an accurate representation of customers subscribed to curbside solid waste services. The demographics of customers self-hauling waste to the transfer stations is unknown, so it is unknown if the facilities are being used equally by everyone.

Figure 1: Graphic displaying the race by ethnicity (Hispanic or Latino) in Clark County and Washington State.[5]

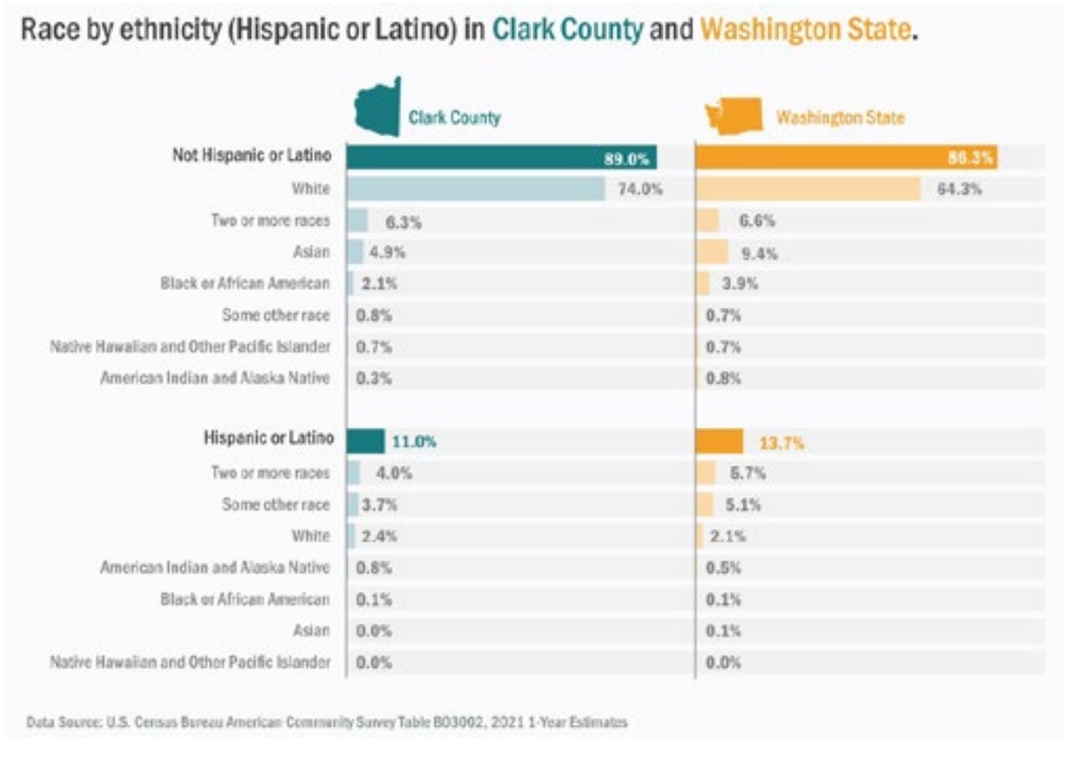


Figure 2: Graphic displaying the languages spoken in Clark County.[5]

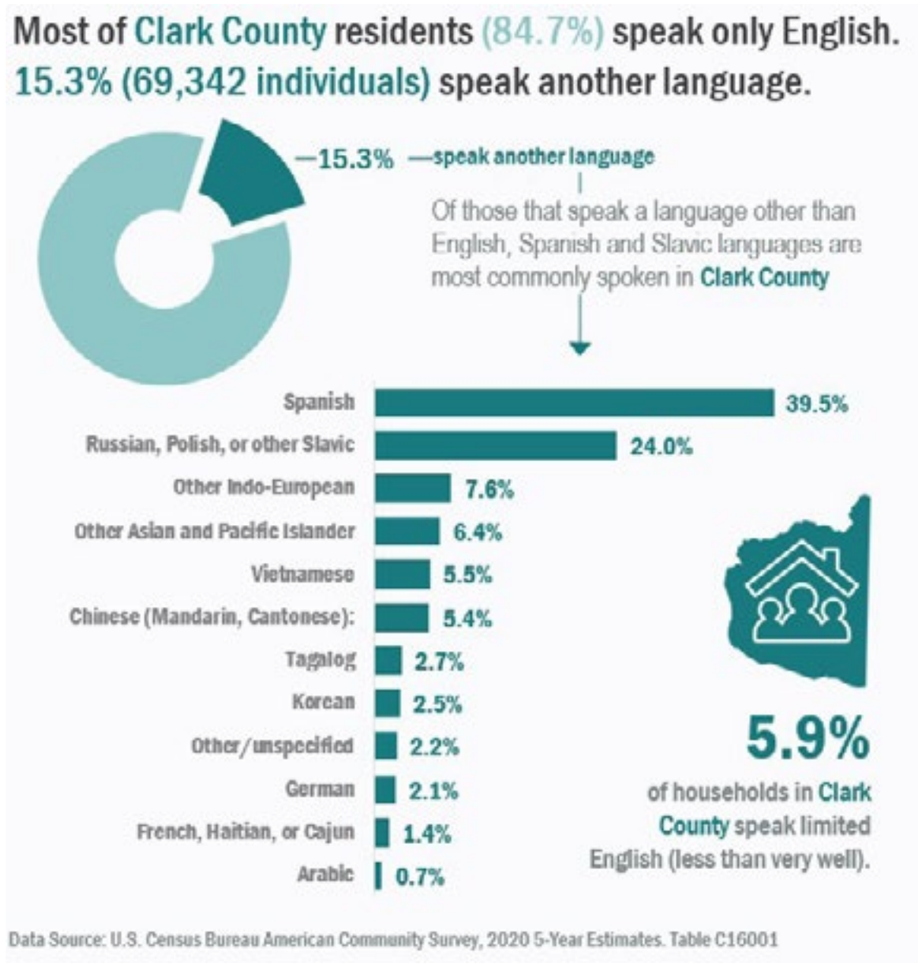
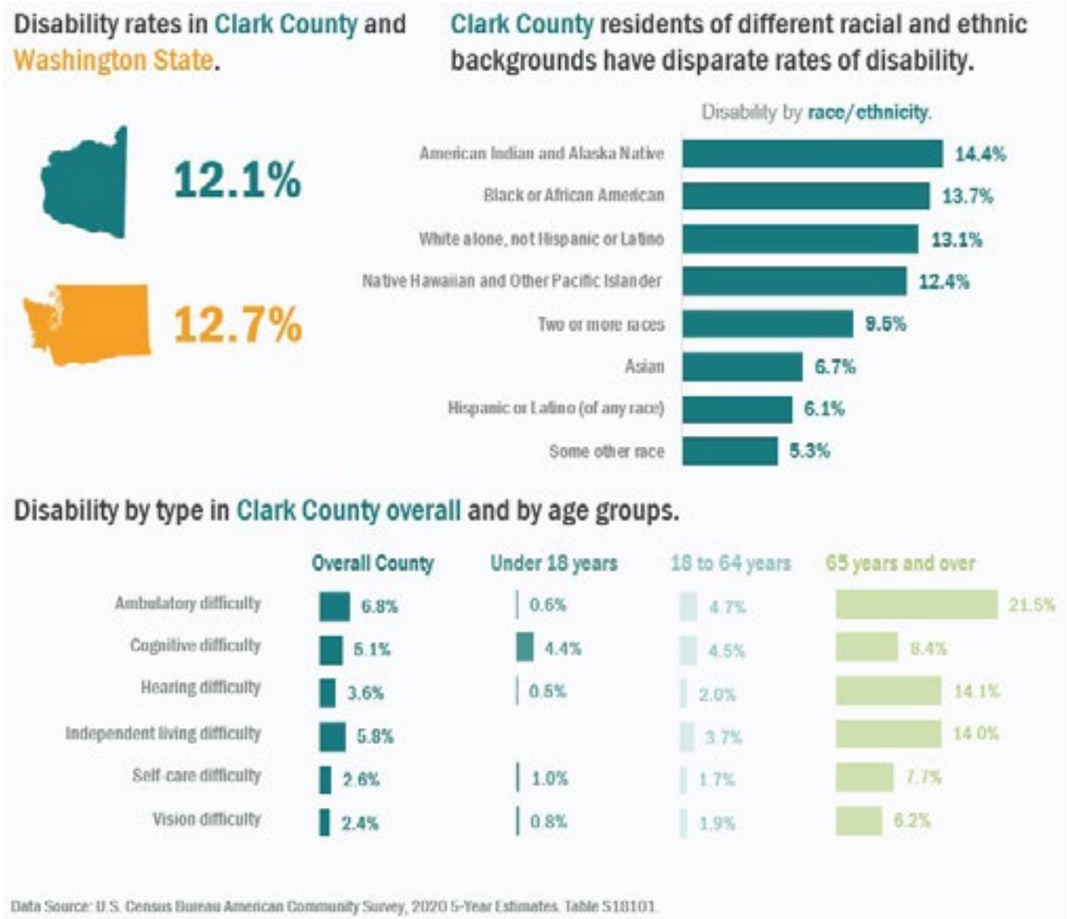


Figure 3: Graphic displaying the disability rates and types of disability by age and racial and ethnic backgrounds in Clark County and Washington State.[5]



Education opportunities

The public engages with solid waste outreach programming through various opportunities, including:

- Free online and in-person classes
- Free resources such as backyard compost bins, worm bins, and green cleaning kits
- Interacting with staff present at community events
- Interacting with Clark County Green Schools staff during staff visits to schools
- Access to a wide variety of online resources and tools[1, 2, 3, 4, 6]
- Access to printed resources during in-person interactions

The community has access to a variety of online and printed resources to learn topics of waste reduction, reuse, recycling, and disposal in Clark County. Some resources are available in multiple languages, though currently, not all resources are translated. See Table 1. All translations are completed through a professional contractor. All materials printed by Clark County include contact information for accessing the Americans with Disabilities Act telecommunication relay service.[13]

Table 1: A table of primary printed and online educational resources and the language(s) the resource is available in as of 2024. Languages identified are the top languages used by Clark County residents.[5]

Educational Resource	English	Spanish	Russian	Vietna-mese	Chinese	Tagalog	Korean
All solid waste content on clark.wa.gov	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recycling A-Z online directory	Yes	Yes	Yes	Yes	Yes	No	Yes
RecycleRight mobile application	Yes	Yes	Yes	Yes	Yes	No	Yes
Green programs websites	Yes	In progress	In progress	In progress	In progress	In progress	In progress
Comprehensive Solid Waste Management Plan	Yes	No	No	No	No	No	No
Annual recycling guides mailed to customers	Yes	Partial	Partial	Partial	Partial	No	Partial
Recycling Done Right Guide	Yes	Yes	Yes	Yes	No	No	No

Environment

Water: 95% of clean water used in Clark County is sourced from groundwater.

Wildlife: Clark County is home to several endangered or threatened species that are protected from industrial zoning such as siting new solid waste facilities. Species include northern spotted owl, bull trout, steelhead trout, coho salmon, chinook salmon, chum salmon, Bradshaw's desert-parsley, water howellia,

North American wolverine, and the Brush Prairie pocket gopher.[7]

Pollution: See the ***Clark County Moderate Risk Waste Plan*** for information about pollution and pollution prevention in the county.

Public advisory committee

RCW 70A.205.110 requires an advisory committee to provide informed advice to the county regarding waste management issues and planning.[20] The Solid Waste Advisory Commission is made up of various representatives from the community, appointed by Clark County Council. Members represent various public interests including agriculture, county at-large, business, City of Vancouver, north county, public interest groups, small cities and towns, solid waste industry, southeast county, and southwest county. Meetings are recorded for compliance with the Washington State Open Public Meetings Act.[21]

Costs

Customers subscribed to curbside waste services pay various rates to Waste Connections, the contracted hauler for residential properties in Clark County. Waste Connections services include curbside pick-up of garbage, recycling, yard debris, and bulky items. Costs for curbside services vary depending on waste type, location within the county, and household type (single-family unit or multifamily unit). Costs for waste drop-off at the transfer stations varies by waste type and may be subject to an additional $10 transaction fee. Current rates can be viewed on the Waste Connections of Washington website.[24]

Services and infrastructure

There are three solid waste transfer stations in Clark County, and each has a household hazardous waste facility onsite with separate hours of operations. **Table 2** lists the locations and hours of operations of each facility.

Customers in Clark County can manage their waste and recycling by:

1. Subscribing to collection services at their location
2. Self-hauling to the transfer stations
3. Self-hauling to annual recycling events organized by their city (residents only)
4. Self-hauling to the household hazardous waste facilities (residents only)
5. Self-hauling to annual household hazardous waste events organized by the county (residents only)
6. Self-hauling to retail or other service locations participating in recycling programs
7. Mailing items using available state product stewardship programs or paid mail-in kits

Table 2: A table listing name, location, and public hours of operation of each transfer station in Clark County, and hours of operation of the onsite household hazardous waste facilities.

Central Transfer and Recycling Center (CTR)	West Vancouver Materials Recovery Center (West Van)	Washougal Transfer Station (WTS)
11034 NE 117th Ave. Vancouver, WA 98662	6601 NW Old Lower River Rd. Vancouver, WA 98660	4020 S Grant St. Washougal, WA 98671
Monday–Friday, 6am–6pm Saturday and Sunday, 8am–4pm	Monday–Friday, 6am–6pm Saturday, 8am–4pm	Wednesday and Friday, 7am–5pm Saturday, 8am–4pm
Household hazardous waste hours: Friday, Saturday, and Sunday, 8am–4pm	Household hazardous waste hours: Friday and Saturday, 8am–4pm	Household hazardous waste hours: First and third Saturday of the month, 8am–4pm

Materials to self-haul to the transfer stations at no cost:

- Electronics accepted in E-Cycle Washington program: televisions, computers, laptops, monitors, tablets, e-readers, and portable DVD players
- Household hazardous waste (residents only): adhesives, aerosols, antifreeze, batteries, fertilizers, cleaners, e-cigarettes, fuel, medical sharps, mercury-containing items, motor oil, paints, pesticides, solvents, and others
- Lights accepted in LightRecycle Washington program: compact fluorescent lights, fluorescent tubes, and high intensity discharge lamps
- Plastic bags/film
- Scrap metal
- Shredded paper
- Standard recyclables: paper, cardboard, plastic bottles/jugs/tubs, metal cans, glass bottles/jars, etc.

Materials to self-haul to transfer stations for a rate and $10 transaction fee:

- Asbestos
- Freon-containing items: air conditioners, refrigerators, and freezers
- Garbage
- Large appliances
- Paper to be shredded onsite
- Tires
- Wood
- Yard debris

Standard curbside collections at single family and multifamily properties (for a fee):

- Mixed recycling
- Garbage
- Glass recycling

Recycling add-ons only at single family properties (no added fee):

- Antifreeze
- Batteries (no lead acid or lithium ion)
- Motor oil

Curbside yard and food waste (for a fee):

- Organics service (yard debris plus food waste) is available in city limits of Vancouver and Ridgefield
- Yard debris service is available countywide

Bulky item pick-up (fees vary by item and location):

- Customers in unincorporated Clark County must pay a fee plus transportation cost for each bulky item pick-up
- Customers in City of Vancouver city limits have free bulky item pick-up options

Clean-up events (no fee):

- Clark County coordinates three annual events in northern Clark County for residents to drop off household hazardous waste. Household hazardous waste includes aerosols, antifreeze, batteries, chemical fertilizers, cleaners, fire extinguishers, fuel, and more.
- The City of Ridgefield coordinates an annual clean-up event for city residents to drop off non-hazardous items including bulky waste, scrap metal, yard debris, cardboard, electronics, and tires.
- The City of Vancouver coordinates multiple neighborhood clean-up events within city limits for residents to drop off non-hazardous items including bulky waste, yard debris, and scrap metal.
- The Town of Yacolt coordinates an annual clean-up event for town residents to drop off non-hazardous items including bulky waste.

Recommendations

1. Collect and use data

	Recommendations	0-1 year	1-3 years	3-5+ years	Goals
1.1	Gather and analyze voluntary demographic data from registrants of Solid Waste programs, classes, and workshops.	X	X	X	Improve demographic data collection to better inform our outreach practices to reach more diverse communities.
1.2	Gather and analyze voluntary demographic data of customers self-hauling to the transfer stations and household hazardous waste facilities.		X	X	Improve demographic data collection to better inform our solid waste services to reach more diverse communities.

2. Diversify community engagement

	Recommendations	0-1 year	1-3 years	3-5+ years	Goals
2.1	Partner with local organizations to provide solid waste services to more diverse communities.		X	X	Improve the quality of solid waste services by partnering with at least five local organizations to reach more diverse communities.

3. Improve language accessibility

	Recommendations	0-1 year	1-3 years	3-5+ years	Goals
3.1	Provide outreach materials and resources in multiple languages.	X	X	X	Translate all outreach materials and resources into the three most common languages other than English.
3.2	Offer classes and workshops at community rooms and centers in multiple languages.	X	X		Increase the number of classes and workshops at community rooms and centers offered in multiple languages.
3.3	Create culturally relevant outreach materials.		X	X	Improve the quality of outreach materials and resources by using culturally relevant language and content.
3.4	Add signage in multiple languages at the transfer stations.			X	Improve accessibility by adding at least the three most common languages to signage at the transfer stations.
3.5	Use Government Alliance on Race and Equity (GARE) resources to ensure use of inclusive and common language.[12]	X	X	X	Improve our diversity, equity, and inclusion knowledge and practices by using GARE resources.

4. Increase accessibility to solid waste services

	Recommendations	0-1 year	1-3 years	3-5+ years	Goals
4.1	Provide vouchers or discounts to unincorporated county customers for bulky item pick-up or bulky item self-haul.			X	Increase the number of vouchers or discounts offered to unincorporated county customers for bulky item pick-up or bulky item self-haul.
4.2	Provide more satellite recycling drop-off locations for batteries prior to statewide battery stewardship law implementation to occur in 2027.	X	X		Increase the number and geographic diversity of satellite drop-off locations for batteries.
4.3	Expand hours of operation of the household hazardous waste facilities to accommodate residents with non-traditional work schedules.			X	Increase the number of hours of operation of the household hazardous waste facilities at transfer facilities.
4.4	Increase the number of sites in the We Compost program.	X	X	X	Increase the number and geographic diversity of We Compost sites to reach more community members.

EXHIBIT A: Solid Waste Contracts

Active contracts as of 2024, excluding interlocal agreements, with summaries of equity and/or environmental considerations built into each project.

Contract or capital project	Summary of work	Status	Equity and environmental considerations built into project
CCPH Advanced Chemical Transport Household Hazardous Waste (HHW) Collection HDC.2040	Contract for the collection and disposal of HHW at annual collection events	Active contract Expires 2026	Increase rural access to safe HHW disposal. Pollution prevention practices. HHW recycling outlets prioritized over disposal/incineration.
CCPH City of San Francisco SWEO Interlocal HDC.1626	Interlocal agreement providing county access to online Zero Waste Signmaker tool	Active contract Expires 2025	Free public access to customized recycling posters to improve waste practices. Allows disposal signage to be standardized, accessible, and understandable.
CCPH Columbia Land Trust Backyard Cert HDC.1503	Assistance, resources, and recognition to private property owners for maintaining their yard/ gardens to benefit the environment	Active contract Expires 2025	Program goals to reduce chemical use in yards/gardens to protect wildlife, native vegetation, and stormwater.
CCPH Columbia Resource Company Solid Waste Recycling Transfer Transport HDC.964	Operations of the transfer stations and HHW facilities	Active contract Expires 2027	Compliance with all environmental permits and regulations. Litter prevention and clean-up. Hazardous waste management.
CCPH Columbian Advertising SWEO HDC.1750	Advertising space in The Columbian newspaper	Active contract Expires 2025	Environmental education reaching audiences that read print media.
CCPH ED Productions LLC SWEO Videographer HDC.1631	Event videography services to highlight various educational projects.	Active contract Expires 2024	Environmental education for audiences that watch video media.
CCPH Formations Web Design and Maintenance HDC.1449	Design and maintenance of educational websites	Active contract Expires 2024	Accessible website design. Use of software for website translations, monitored for accuracy.
CCPH JR Miller RSS Presentation Support HDC.2134	Regional solid waste systems study presentations.	Active contract Expires 2024	n/a
CCPH Maul Foster Solid Waste Management Plan Formatting HDC.2115	Design and formatting of the Comprehensive Solid Waste Management Plan	Active contract Expires 2025	Improve accessibility and readability of the plan through thoughtful document editing and design.
CCPH Parametrix Contract Negotiator HDC.1567	Contract negotiation service for the CCPH Columbia Resource Company Solid Waste Recycling Transfer Transport HDC.964 contract	Active contract Expires 2024	Independent facilitation ensures ethical contracting between public and private entities, to provide the best benefit to the public.
CCPH Parametrix Triennial Inspections HDC.2126	Engineering and architectural inspections of the transfer stations	Active contract Expires 2026	Inspection of environmental protection systems including stormwater infrastructure, litter barriers, etc.
CCPH PSU CES Residue Study Interlocal HDC.2091	Contractor to conduct waste audits of recycling residual material and report findings	Active contract Expires 2026	Identification of residual materials informs operations and education to best benefit the recycling process and environment.
CCPH SCS Engineers Leichner Landfill HDS.2119	Engineering services and environmental monitoring at the closed landfill in Clark County	Active contract Expires 2028	Environmental maintenance and monitoring of the closed landfill to protect the environment and reduce impact and nuisance to surrounding properties.
CCPH VanCougar SWEO Advertising HDC.2258	Agreement for advertising space in the VanCougar news magazine.	Active contract Expires 2024	Environmental education for audiences that read print media.
CCPH Washington Green Schools dba EarthGen HDC.973	Terms for waste audits, technical assistance, outreach, awards, and website for schools participating in Clark County Green Schools program	Active contract Expires 2024	Waste reduction in schools. Recognition for participating schools. Training for teachers. Accurate data collection through conducting waste audits.
CCPH Waste Connections Recyclables Collection HDC.855	Recycling collection service for residential properties in unincorporated Clark County, La Center, Ridgefield, and Yacolt	Active contract Expires 2028	Accessible customer service requirements. Environmental benefits of every other week collections. Diverse types of recyclable materials accepted. Elderly assistance program. Education requirements.
CCPH Waste Connections Yard Debris HDC.858	Yard debris collection for residential properties in unincorporated Clark County, Battle Ground, La Center, Ridgefield, and Yacolt	Active contract Expires 2025	Environmental benefits of diverting yard debris from landfill. Accessible customer service requirements.

Contract or capital project	Summary of work	Status	Equity and environmental considerations built into project
CCPH Waste Control, Inc. Subcontract HDC.856	Subcontract for residential recyclables collection along the Clark County and Cowlitz County border	Active contract Expires 2028	Compliance with the primary contract: CCPH Waste Connections Recyclables Collection HDC.855.
CCPH WSU Master Gardener HDC.2168	Agreement to support the master gardener program, which promotes practices that reduce or eliminate need for garden chemicals	Active contract Expires 2024	Education to reduce use of harmful chemicals in households to protect public health and the environment. Community partnership allows for more diverse outreach.
CCPH Will Hornyak Storyteller HDC.1543	Presentations and workshops teaching students about recycling, waste reduction, and composting	Active contract Expires 2024	Environmental education for K-12 students. Partnership allows for more diverse outreach.

EXHIBIT B: 2023 Solid Waste Survey Results

Clark County Solid Waste and Recycling conducted a widespread survey about solid waste services in 2023. The purpose of the survey was to gain insight into how county residents manage various wastes, what is important to residents, and how residents interact with the solid waste system. The survey was primarily available to take online, and printed copies were passed out at in-person events. It was taken by 1,665 community members and this Exhibit details the results and findings from the survey.

Key insights

Survey responses provided a wide lens to how residents engage with the solid waste system, what is important to the community, and where there are opportunities to improve services and education.

What residents value most regarding waste management:

- At-home waste and recycling services are available and easy
- Convenient drop-off locations and events for wastes not collected at home
- Environmental protection
- Reducing waste going to the landfill

Notable findings for waste management behavior:

- 78% of residents dispose of food waste in the garbage
- 20% of residents dispose of hazardous waste in the garbage, and 11% stockpile it at home

Customer service insights:

- Most residents will use online resources and/or contact Waste Connections for waste management information
- Based on written comments, there is need to inform residents of their curbside recycling options, such as the no-cost option to upgrade to a larger recycling cart

Survey response summary

Percentages of survey respondents using identified disposal methods for garbage:

Curbside or multifamily enclosure	Self-haul bulky or extra items to the transfer station	Self-haul all garbage to the transfer station	Respondent does not have garbage
99%	23%	2%	0.4%

Percentages of survey respondents using identified disposal methods for food waste:

Dispose as garbage	Compost at home	Curbside organics service	Respondent does not have food waste	Drop off at community compost location
78%	20%	13%	3%	0.5%

Percentages of survey respondents using identified disposal methods for yard waste:

Curbside organics or yard debris service	Compost at home	Respondent does not have yard waste	Burning at home	Drop off at transfer station or other drop off site	Dispose as garbage
68%	19%	10%	8%	7%	6%

Percentages of survey respondents using identified disposal methods for household hazardous waste:

Drop off at a household hazardous waste facility	Dispose as garbage	Respondent does not have hazardous waste	Stockpile at home
59%	20%	17%	11%

The list below is the average ranking of the services and infrastructure that are most important to survey respondents, listed in order from most important to least important overall.

1. Having waste and recycling services at home
2. Drop-off events for wastes and recyclables not accepted curbside
3. Access to convenient drop-off locations
4. Having a transfer station that is convenient for me
5. Having waste information available in my language
6. Having better options for waste management at multifamily complexes

The list below is the average ranking of the ideas and values that are most important to survey respondents, listed in order from most important to least important overall.

1. Waste management at home is easy
2. Protect the environment

3. Keep waste out of the landfill
4. Litter and pollution are not present in the neighborhood
5. People and pets in the household stay healthy
6. People in need have financial assistance to dispose their waste
7. Kids learn about reducing waste, composting, and recycling
8. I am informed about how to use local services
9. I can teach others about reducing waste, recycling, composting, etc.

How residents find solid waste information if they have questions or concerns:

Search online	Contact Waste Connections	Ask friends	Don't know how to get information	Contact Clark County	Contact their city	Ask in person
65%	60%	18%	6%	6%	3%	1%

Summary of written comments:

- Residents ask questions in-person at the transfer stations
- Requests for curbside organics service in unincorporated county
- Comments and questions indicating need for increasing awareness about the drop-off services available at the transfer stations
- Requests about at-home services including cart sizes and service frequency
- Concerns about recycling contamination
- Concerns about inequitable waste reduction education
- Mixed positive and negative feedback for Waste Connections customer service
- Concerns about disadvantages that affect ability to self-haul bulky items for disposal
- Concerns about waste services for the disabled and elderly
- Concerns about pollution from Waste Connections collection vehicles and waste facilities
- Comments indicating inaccuracies on the Recycling A-Z directory
- Concerns about vectors in garbage and organics carts
- Requests for more recycling options for electronics, clamshell plastics, textiles, shredding, and block foam
- Concerns about how disposal and recycling rates are determined

Demographics of survey respondents (provided voluntarily)

Home location

Unincorporated Clark County	City limits of a city operating an independent recycling contract	City limits of a city serviced under the county recycling contract
49%	35%	15%

Gender

Female	Male	Prefer not to answer	Prefer to self-describe	Non-Binary
70%	19.5%	9%	1%	0.5%

Race and ethnicity (respondents were able to select multiple)

White	Prefer not to answer	Hispanic or Latino	Asian or Asian American	American Indian or Alaska Native	Black or African American
80.9%	13.2%	3.5%	2.1%	1.5%	0.9%

Annual household income

Over $125,001	$75,000 to $125,000	$50,001 to $75,000	$25,001 to $50,000	Under $25,000
37%	34%	16%	9%	4%

Language

- 99% of respondents use English as their primary speaking and reading language

Ages of members of the household

- 45% of respondent households have children aged 0-18
- 55% of respondent households do not have children aged 0-18

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K

APPENDIX K:
Remedial action sites

Remedial action sites

Remedial Action Sites in Clark County as noted by the Washington Department of Ecology's Toxics Cleanup Program as needing investigation or undergoing hazardous waste cleanup activity. Pulled from ***Ecology's All Cleanup Sites in Washington State*** March 2024. This list is not inclusive of all disposal sites as listed in Appendix G as the data is limited to information provided by the Ecology database.

Cleanup site name	FS ID	Site Cleanup status	Rank	City
4512 Kauffman Ave HOT	53943	Awaiting Cleanup		VANCOUVER
5 CORNERS GAS & GROCERY 211542	44936243	Cleanup Started		VANCOUVER
726 NE 5th Ave Camas	9620	Awaiting Cleanup		CAMAS
7-Eleven Store 24279	43476655	Cleanup Started		VANCOUVER
A & B RADIATOR	22283	Awaiting Cleanup	2 — Moderate-High Risk	VANCOUVER
A & B RADIATOR LUST	22283	Cleanup Started		VANCOUVER
Abandon Tank Site	52841299	Cleanup Started		VANCOUVER
ACGH JOINT VENTURES	9954245	Cleanup Started		VANCOUVER
Allen Residential Property	62681	Awaiting Cleanup		WASHOUGAL
AMERICAN RV STORAGE	90752948	Awaiting Cleanup	3 — Moderate Risk	VANCOUVER
B & B FOOD MART	84611568	Cleanup Started		VANCOUVER
Baldassano Residential Property	61559	Awaiting Cleanup		LA CENTER
Barker Residential HOT	86421	Cleanup Started		VANCOUVER
Battle Ground Chevron	23782	Cleanup Started		BATTLE GROUND
Battle Ground Farm & Home	32749129	Cleanup Started		BATTLE GROUND
Battle Ground Mini Mart 805	9977600	Cleanup Started		BATTLE GROUND
Battle Ground School District 119	81695495	Cleanup Started		BATTLE GROUND
BNSF Rail MP 130	99997172	Awaiting Cleanup		UNSPECIFIED
BNSF Railway Company Vancouver	1048	Cleanup Started	1 — Highest Assessed Risk	VANCOUVER
Bollin Property	86335	Cleanup Started		VANCOUVER
BPA Alcoa Substation	1057	Awaiting Cleanup		VANCOUVER
Brazier Forest Industries	33837982	Cleanup Started		VANCOUVER
BRODIE PROPERTY	14787	Awaiting Cleanup		BRUSH PRAIRIE
Broken Skull Range	73853	Awaiting Cleanup		YACOLT
Burlington Environmental LLC Washougal	1018	Cleanup Started	1 — Highest Assessed Risk	WASHOUGAL
BUSY MART	36344431	Cleanup Started		BATTLE GROUND
CALHOUN PROPERTY	6928703	Awaiting Cleanup		VANCOUVER
Camas Port of Washougal	54565663	Cleanup Started		WASHOUGAL
Cameron HOT	30443	Awaiting Cleanup		VANCOUVER
CARIBOU REALTY GROUP	34583642	Cleanup Started	2 — Moderate-High Risk	VANCOUVER
CFM Site	73713224	Cleanup Started		BATTLE GROUND
Chelatchie Prairie General Store	33415834	Cleanup Started		AMBOY
Chelatchie Tank Farm	30204	Awaiting Cleanup	4 — Low-Moderate Risk	AMBOY
Chevron Bulk Plant 61001854	1060	Cleanup Started	1 — Highest Assessed Risk	VANCOUVER
Christensen Family Properties	94656347	Cleanup Started		VANCOUVER
Clark Co Maintenance Facility	88286851	Cleanup Started		VANCOUVER
Clark Co PUD	25333536	Cleanup Started		VANCOUVER
Clark County Public Works 119th St	36151	Cleanup Started		VANCOUVER
Collins Property	995845	Awaiting Cleanup		VANCOUVER
Columbia Adventist Academy CSWGP	17263	Awaiting Cleanup		BATTLE GROUND
Columbia Machines	45241242	Cleanup Started		VANCOUVER
Columbia Rock Concrete Products Inc	5016308	Awaiting Cleanup	2 — Moderate-High Risk	CAMAS
Commercial Radiator Service	98665473	Cleanup Started	4 — Low-Moderate Risk	VANCOUVER
Conway Property	8341	Awaiting Cleanup		RIDGEFIELD
COPELAND GROCERY	68829522	Cleanup Started		WOODLAND
COV Bella Vista Circle	9415	Awaiting Cleanup		VANCOUVER
Creative Smiles PLLC	12962	Awaiting Cleanup	2 — Moderate-High Risk	VANCOUVER
CRITES PROPERTY	9189718	Awaiting Cleanup		VANCOUVER
Custom Care Cleaners	1049	Cleanup Started	5 — Lowest Assessed Risk	VANCOUVER
DaMaari Terrace Subdivision	4685998	Awaiting Cleanup		VANCOUVER
DEGAGNE PROPERTY	3511806	Awaiting Cleanup		VANCOUVER
Dioxin Release at Mill St & N Railroad Ave	99997906	Awaiting Cleanup		UNSPECIFIED
Domino's Pizza	6110	Cleanup Started		VANCOUVER
DRAPER'S CITY CLEANER	82713854	Cleanup Started		BATTLE GROUND
DUNMIRE PROPERTY	8110344	Awaiting Cleanup		VANCOUVER
East County Auto	94778244	Awaiting Cleanup		WASHOUGAL
Electro Tech Metal Finishing LLP	74748387	Cleanup Started	2 — Moderate-High Risk	VANCOUVER
Emerald Petroleum Services Inc Transfer	47231541	Cleanup Started		VANCOUVER
Estate of Mary E MacKay	1619881	Awaiting Cleanup		VANCOUVER
Evergreen Tire Center	71190	Cleanup Started		VANCOUVER
Evergreen Transportation Center	41729854	Cleanup Started		VANCOUVER
Excel Designs Inc	19464	Awaiting Cleanup		VANCOUVER
Exterior Wood Inc	33568379	Cleanup Started		WASHOUGAL
Exxon Bill Needer	95191884	Cleanup Started		WASHOUGAL
Fargher Lake Grocery	1045	Cleanup Started	3 — Moderate Risk	YACOLT
Fischer Property Nursery	2816247	Awaiting Cleanup		BATTLE GROUND

Cleanup site name	FS ID	Site Cleanup status	Rank	City
Fleischer Property	20708	Cleanup Started		VANCOUVER
Flowserve Corp	12775317	Awaiting Cleanup		VANCOUVER
Foulks Residential HOT	68955	Awaiting Cleanup		RIDGEFIELD
Fourth Plain Chevron	34692169	Cleanup Started		VANCOUVER
Fourth Plain Portland Shopping Center LLC	39916	Awaiting Cleanup		VANCOUVER
Franz Bakery Warehouse	47124354	Cleanup Started		VANCOUVER
Fred Meyer Fuel #140	21578	Cleanup Started		VANCOUVER
Fred Meyer Inc Hazell Dell	29822132	Cleanup Started	3 — Moderate Risk	HAZEL DELL
Freund Residential HOT	30590	Awaiting Cleanup		VANCOUVER
Frito Lay Vancouver	81587474	Cleanup Started		VANCOUVER
Fruit Valley Industrial Holding LLC	61235	Cleanup Started		VANCOUVER
Gary Brown Photography	65134218	Awaiting Cleanup	2 — Moderate-High Risk	VANCOUVER
Gary Gilbert DDS	20814	Awaiting Cleanup	2 — Moderate-High Risk	VANCOUVER
GDGE Land & Development LLC Stockpile	63371	Awaiting Cleanup		VANCOUVER
GEM EQUIPMENT	75145467	Cleanup Started		VANCOUVER
General Chemical Corp Vancouver Works	1011	Awaiting Cleanup	5 — Lowest Assessed Risk	VANCOUVER
Gent Drum Site	21628	Awaiting Cleanup		YACOLT
Georgia-Pacific Camas Business Center	78452582	Cleanup Started		CAMAS
Georgia-Pacific Consumer Products	66765272	Cleanup Started		CAMAS
Graces Cleaners	86416754	Cleanup Started		BATTLE GROUND
Great Western Malting	41573682	Cleanup Started		VANCOUVER
GRESETH PROPERTY	5458	Cleanup Started		CAMAS
Grozav Property	5782	Awaiting Cleanup		VANCOUVER
Hannah Motor Company	12126843	Cleanup Started		VANCOUVER
HANSEN DRILLING CO INC	77926534	Cleanup Started		VANCOUVER
Hazel Dell Auto Care Center	66578798	Cleanup Started		VANCOUVER
Hazel Dell McDonalds	14633	Awaiting Cleanup		VANCOUVER
HEISSON STORE	34852941	Cleanup Started		HEISSON
HIGGINS RESIDENTIAL PROPERTY	7847284	Awaiting Cleanup		YACOLT
HI-WAY FUEL	22538744	Cleanup Started		WASHOUGAL
HOCKINSON MARKET	14357917	Cleanup Started		BRUSH PRAIRIE
HUNTINGTON PROPERTY	7402565	Awaiting Cleanup		VANCOUVER
I-5 SB MP17	42691	Awaiting Cleanup		UNKNOWN
IPC Plywood Mill	1031	Awaiting Cleanup	5 — Lowest Assessed Risk	AMBOY
IPC Solid Waste Site	1032	Awaiting Cleanup	2 — Moderate-High Risk	AMBOY
JIMMY W EVANS	51675496	Cleanup Started		RIDGEFIELD

Cleanup site name	FS ID	Site Cleanup status	Rank	City
Johnson Property Auto Dismantling	3952832	Awaiting Cleanup		RIDGEFIELD
JUMBOS CAR WASH & GAS	96316853	Cleanup Started		VANCOUVER
KOCH TRACTOR	1061	Awaiting Cleanup	3 — Moderate Risk	RIDGEFIELD
Koppe Metals South Property	4754445	Awaiting Cleanup	2 — Moderate-High Risk	VANCOUVER
Lacamas Lake Lodge	24194	Cleanup Started		CAMAS
Lahti Property	23197	Awaiting Cleanup		VANCOUVER
LAKE MERWIN CAMPERS HIDEAWAY	84722352	Cleanup Started		AMBOY
LAKE STORE JAMES E PIDGEON	86115375	Cleanup Started		CAMAS
LARSONS DRY CLEANER	75243248	Cleanup Started	2 — Moderate-High Risk	VANCOUVER
Lincoln Cleaners NE Parkway Dr	78633645	Cleanup Started		VANCOUVER
Linde LLC	13992714	Cleanup Started		VANCOUVER
Lock Property	1488108	Awaiting Cleanup		RIDGEFIELD
MACIEL PROPERTY	2682336	Awaiting Cleanup		VANCOUVER
Main St Auto Care	75854	Awaiting Cleanup		VANCOUVER
Malcolm Montague	12436367	Cleanup Started	2 — Moderate-High Risk	VANCOUVER
Manor Highway Auto Sales	3780556	Awaiting Cleanup		VANCOUVER
Martin Residential HOT	46137	Cleanup Started		VANCOUVER
MATZEN PROPERTY	938507	Awaiting Cleanup		VANCOUVER
McKee Logging	94946182	Cleanup Started		RIDGEFIELD
Miltons Dry Cleaners	19779	Cleanup Started	2 — Moderate-High Risk	VANCOUVER
Moore Wrecking Yard	46073	Awaiting Cleanup		YACOLT
Mountain View Business Park Petroleum	21388	Cleanup Started		RIDGEFIELD
Neumiller Property	84710	Awaiting Cleanup		BRUSH PRAIRIE
NORTHWEST INVESTMENTS	20915	Cleanup Started	2 — Moderate-High Risk	VANCOUVER
Ott Property	6514915	Awaiting Cleanup		VANCOUVER
OVIATT PROPERTY	6590264	Awaiting Cleanup		RIDGEFIELD
PACIFIC COGENERATION INC	1066	Awaiting Cleanup		VANCOUVER
Pacific Wood Treating Corp	1019	Cleanup Started	1 — Highest Assessed Risk	RIDGEFIELD
Paradise Truck Stop	30753149	Cleanup Started		RIDGEFIELD
Park Laundry Site	8100630	Cleanup Started	3 — Moderate Risk	RIDGEFIELD
Pendleton Woolen Mills	1020	Cleanup Started		WASHOUGAL
Philpot	12088	Cleanup Started		CAMAS
Pinkertons Auto Repair	95817965	Cleanup Started		VANCOUVER
Plaid Pantry 112	9158935	Cleanup Started		VANCOUVER
Plaid Pantry 112 Solvent Release	9158935	Awaiting Cleanup		VANCOUVER
Port of Vancouver Rail Release	3120	Cleanup Started		VANCOUVER

Cleanup site name	FS ID	Site Cleanup status	Rank	City
Port Way ROW Pacific Coast Shredding	2297659	Awaiting Cleanup		VANCOUVER
PORTCO CORP PEDIGO PRODUCTS	30759	Cleanup Started	3 — Moderate Risk	VANCOUVER
PORTCO CORPORATION	98588242	Cleanup Started		VANCOUVER
POWELL DISTRIBUTING	89421657	Cleanup Started		VANCOUVER
PRECISION PAVING	8237457	Cleanup Started		VANCOUVER
PRI Northwest Inc Vancouver	24972725	Cleanup Started		VANCOUVER
PRO TECH IND INC	8793389	Cleanup Started		VANCOUVER
PUD Transformer 50th Ave Ridgefield	81242	Awaiting Cleanup		RIDGEFIELD
PUD Transformer at 621 SE 168th Ave	39592	Cleanup Started		VANCOUVER
PYLE PROPERTY	2062470	Awaiting Cleanup		VANCOUVER
Quick Shop Minit Mart 27	36184476	Cleanup Started		VANCOUVER
Reborn Auto Repair Inc	83777258	Cleanup Started		VANCOUVER
Ridgefield School District Bus Barn	16992216	Awaiting Cleanup		RIDGEFIELD
RIDLER PROPERTY	5286	Awaiting Cleanup		VANCOUVER
Riverside Residential HOT	58324	Cleanup Started		VANCOUVER
ROEGNER HEATING OIL TANK	2484731	Cleanup Started		VANCOUVER
Ronald Brown Property	95697798	Cleanup Started	5 — Lowest Assessed Risk	CAMAS
ROYAL SHINE CLEANERS	13618	Cleanup Started		VANCOUVER
RR ROW PORT OF VANC	7925	Awaiting Cleanup		VANCOUVER
Safeway Transformer Spill	16631	Awaiting Cleanup		VANCOUVER
SCHAFFER PROPERTY	1105153	Awaiting Cleanup	3 — Moderate Risk	RIDGEFIELD
Schmid Family LP Hwy 14 Property	14687	Cleanup Started		WASHOUGAL
Schopp & Moody Residential HOT	95909	Cleanup Started		VANCOUVER
SCHROEDER PROPERTY	5812	Awaiting Cleanup		VANCOUVER
Shanky Residential Property	16151	Awaiting Cleanup		VANCOUVER
SHULL PROPERTY	2893056	Awaiting Cleanup		VANCOUVER
Southbound I-5 MP 9	29398	Cleanup Started		RIDGEFIELD
Southwest Washington Hospitals SWMC	23823846	Cleanup Started		VANCOUVER
SPRAGUE & FJERMESTAD	9157494	Awaiting Cleanup	3 — Moderate Risk	RIDGEFIELD
SR 503 CONSTRUCTION	95339634	Cleanup Started		VANCOUVER
ST Services Nustar Energy LP	61862781	Cleanup Started	2 — Moderate-High Risk	VANCOUVER
STOREDAHL SITE	34523599	Awaiting Cleanup		BATTLE GROUND
Sun Dry Cleaners Vancouver	11197	Awaiting Cleanup	2 — Moderate-High Risk	VANCOUVER
SW corner of 18th Ave & 119th St ROW	39458	Awaiting Cleanup		VANCOUVER

Cleanup site name	FS ID	Site Cleanup status	Rank	City
THE COUNTRY STORE	59194613	Cleanup Started		VANCOUVER
TIDEWATER COVE CONDOMINIUMS	7570126	Cleanup Started		VANCOUVER
Time Oil Co 01-103	48214249	Cleanup Started		BRUSH PRAIRIE
Tomlinson Residential Property	17210	Awaiting Cleanup		VANCOUVER
TOSCO 1104430095	16865364	Cleanup Started		VANCOUVER
Tosco Corporation Site 257323-31299	11251483	Cleanup Started	3 — Moderate Risk	VANCOUVER
TrueGuard LLC	75455855	Cleanup Started		WASHOUGAL
U-Haul Center of Hazel Dell	82682784	Cleanup Started		VANCOUVER
ULTIMATE TRUCK SERVICE	5215934	Awaiting Cleanup		RIDGEFIELD
UNOCAL SERVICE STATION 6166	1076	Cleanup Started		VANCOUVER
US Army Camp Bonneville	69965472	Cleanup Started	1 — Highest Assessed Risk	VANCOUVER
US ARMY Camp Bonneville RAU-2	9420069	Cleanup Started	1 — Highest Assessed Risk	PROEBSTEL
US ARMY Camp Bonneville RAU-2C	475000	Cleanup Started	1 — Highest Assessed Risk	PROEBSTEL
Vacant Lots @ 4511 NW 18th Ave	49149	Awaiting Cleanup		CAMAS
Vancouver City Blandford Station 4	202	Cleanup Started	0 — NPL Site (Fed HRS Score)	VANCOUVER
Vancouver City Operations Center	47696337	Awaiting Cleanup		VANCOUVER
Vancouver Ice & Fuel Oil	1037	Cleanup Started		VANCOUVER
Vancouver King Street Substation	94380	Awaiting Cleanup		VANCOUVER
Vancouver Port of 058720-000	5922991	Awaiting Cleanup	5 — Lowest Assessed Risk	VANCOUVER
Vancouver Port of NuStar Cadet Swan	1026	Cleanup Started	1 — Highest Assessed Risk	VANCOUVER
Vancouver Port of Red Lion Hotel	15891	Cleanup Started		VANCOUVER
Vancouver Sign Co Inc	35998513	Cleanup Started		VANCOUVER
Vancouver Warehouse & Distribution Co	8828	Awaiting Cleanup		VANCOUVER
Varicast Inc	1034	Cleanup Started		VANCOUVER
VICKS SERV-U-WELL	4386384	Cleanup Started		RIDGEFIELD
VIEW MOORE MARKET	69538245	Cleanup Started		LA CENTER
Volkman Residential Property	4704	Awaiting Cleanup		CAMAS
WA DOC DNR Larch Mountain Corr	1024	Cleanup Started	2 — Moderate-High Risk	YACOLT
WA DOT Battle Ground	89645195	Cleanup Started		BATTLE GROUND
WA DOT Retention Pond	2621289	Awaiting Cleanup		VANCOUVER

Cleanup site name	FS ID	Site Cleanup status	Rank	City
WA DOT Ridgefield	92866148	Cleanup Started		RIDGEFIELD
WA DOT SHELL DENNIS MEADOWS	46933333	Cleanup Started	3 — Moderate Risk	VANCOUVER
WA DOT Vancouver	1050	Cleanup Started	5 — Lowest Assessed Risk	VANCOUVER
WA PARKS BATTLEGROUND STATE PARK	77432389	Awaiting Cleanup	2 — Moderate-High Risk	BATTLE GROUND
WA WSU Vancouver Res & Ext	57753233	Cleanup Started		VANCOUVER
WAL MART STORE 2947	14975986	Cleanup Started		VANCOUVER
Warman Farm Gas Tank	48001	Awaiting Cleanup		VANCOUVER
Wastequip Washington	46726523	Awaiting Cleanup		RIDGEFIELD
Wayside Gas	15491331	Cleanup Started		BATTLE GROUND
Wells Residence	3988393	Cleanup Started		RIDGEFIELD
Wertz and Weeks Properties	3612707	Awaiting Cleanup	2 — Moderate-High Risk	RIDGEFIELD
Western Station Corp	46254644	Cleanup Started		VANCOUVER
Whatley Pit Decant Facility	7838213	Cleanup Started		VANCOUVER
Wildlife League Property	4884	Cleanup Started		CAMAS
Willamette Dental Vancouver	22584	Awaiting Cleanup		VANCOUVER
William Schueter Living Trust	30538	Cleanup Started		VANCOUVER
WSDOT ROW	16424	Cleanup Started		BATTLE GROUND
WSDOT ROW I-5 NB at Hwy 501	57300	Cleanup Started		VANCOUVER
WSDOT SR 502	21936	Cleanup Started		BATTLE GROUND
Xiaoping Ding and Fuha Holly Guo Property	20551	Awaiting Cleanup		VANCOUVER
Z MART	98615159	Cleanup Started		RIDGEFIELD

L

APPENDIX L:
Designated recyclables list

Designated recyclables list

All materials collected curbside on the below list are collected by the G-certified hauler in unincorporated areas of the county, and in cities that default to the G-certified hauler for their services.

Material Category	**Material**	**Collection Method** Curbside (C) Drop-off (DO) Bulky item request (B) Other — briefly describe	**Customers served** Single-family (SF) Multifamily (MF) Self-haul (SH)	**Required by minimum service ordinance** if applicable	**Notes** commingled, source separated, color of cart, program listing for specific materials etc.
Paper	Mixed paper	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Paper	Newspaper	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Paper	Cardboard	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Paper	Milk and juice cartons (no foil)	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Paper	Aseptic containers (milk, juice, soup)	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Paper	Poly-coat food boxes (dry and frozen)	Not collected	Not collected	Not collected	Not collected
Metal	Aluminum cans	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Metal	Steel and tin cans	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Metal	Scrap metal	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Metal	Aluminum foil	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Plastic	Plastic bottles, jugs and jars (#1 and #2)	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Plastic	Dairy tubs (#5)	C, DO	SF, MF, SH	Locations vary	Commingled blue cart
Plastic	Plastics (#3-7)	Not collected	Not collected	Not collected	Not collected
Glass	Glass bottles and jars	C, DO	SF, MF, SH	Locations vary	Dark green bin
Organics	Yard debris	C, DO	SF, MF, SH	No	Green yard debris or organics cart
Organics	Food waste	Locations vary for C	SF, MF	No	Green organics cart
Organics	Food-soiled paper	Not collected	Not collected	Not collected	Not collected
Organics	Compostable packaging and/or service ware	Not collected	Not collected	Not collected	Not collected
Organics	Food processing waste	Other	Commercial	No	Facility drop boxes
Organics	Fats oils and grease	Not collected	Not collected	Not collected	Not collected
Other Recyclables	Paint	DO, Other	SH	No	PaintCare program
Other Recyclables	Electronics	DO, Other	SH	No	E-cycle Washington
Other Recyclables	Light bulbs	DO, Other	SH	No	LightRecycle Washington
Other Recyclables	Textiles	DO, Other	SH	No	DO at retail locations
Other Recyclables	Batteries	C, DO	SF, SH	No	Collected curbside outside the blue cart
Other Recyclables	Used oil/antifreeze	C, DO	SF, SH	No	Collected curbside outside the blue cart
Other Recyclables	Mattresses	DO, B	SF, SH	No	Can be requested for bulky item pickup
Other Recyclables	Tires	DO, B	SF, SH	No	Can be requested for bulky item pickup
Construction & Demolition	Wood waste (unpainted, untreated)	DO	SH	No	Drop boxes may be requested
Construction & Demolition	Concrete	DO	SH	No	Drop boxes may be requested
Construction & Demolition	Asphalt pavement	DO	SH	No	Drop boxes may be requested
Construction & Demolition	Plate glass	Not collected	Not collected	Not collected	Not collected

***UTC-Regulated Haulers**
G-101 Waste Control, Inc — servicing Woodland vicinity
G-253 Waste Connections of Washington — servicing remainder of Clark County
G-118 Basin Control, Inc — Inactive

Area and Jurisdiction	**Regulatory Authority**	**Service Provider**	**Mandatory Collection**	**Ordinances**
Battle Ground	WUTC	G-253	No	
Camas	City of Camas	G-253	Garbage and recycling	Refuse Collection and Disposal Chapter 13.80
La Center	WUTC	G-253	No	
Ridgefield	WUTC	G-253	Garbage and recycling	8.12.020 — Universal compulsory solid waste collection.
Vancouver	City contracted	G-253	Garbage and recycling	VMC/6.12.110
Washougal	City contracted	G-253	Garbage and recycling	Chapter 7.06
Yacolt	WUTC	G-253	No	
Unincorporated Clark County	WUTC	G-253	Subscription based, recycling mandated with subscription of weekly and EOW MSW	



M

APPENDIX M: Inventory of dangerous waste generators

Inventory of dangerous waste generators

The following inventory was generated from the Washington State Department of Ecology database, listing all small, medium, and large quantity generators of hazardous waste in Clark County. The data comes from the Hazardous Waste and Toxics Reduction Program's database, Turbo Waste. The database is populated with data provided by hazardous waste generators' annual reports to Ecology. State generator code designations (LQG/MQG/SQG/XQG) are based on Washington's dangerous waste rules (LQG= large quantity generator, MQG=medium quantity generator, SQG=small quantity generator, and XQG=nongenerator). Data was received from Ecology March 2024.

Handler ID	Handler name	Status	Street Address	City	State	Zip
Large Quantity Generator						
WAH000047756	Albina Asphalt 1300 W 8th St	LQG	1300 W 8th St	Vancouver	WA	98660
WAR000006387	Analog Devices Inc	LQG	4200 NW Pacific Rim Blvd	Camas	WA	98607
WAH000035680	Church & Dwight Co Inc	LQG	6350 NE Campus Dr	Vancouver	WA	98661
WAH000057660	Composites One LLC Vancouver	LQG	12301 NE 56th St	Vancouver	WA	98682
WAD082631722	Exterior Wood Inc	LQG	2685 Index St	Washougal	WA	98671
WAD009042896	Georgia Pacific Consumer Operations LLC	LQG	401 NE Adams St	Camas	WA	98607
WAH000046258	Graphic Packaging International LLC	LQG	900 SE Tech Center Dr	Vancouver	WA	98683
WAH000049766	IND LLC	LQG	18110 SE 34th St Bldg 5	Vancouver	WA	98683
WAR000008565	Kemira Chemicals Inc Washougal Plant	LQG	1150 S 35th St	Washougal	WA	98671
WAH000055546	KINDER MORGAN BULK TERMINALS LLC	LQG	2701 NW Harborside Dr	Vancouver	WA	98660
WAH000054006	Kyocera International Inc	LQG	18110 SE 34th St	Vancouver	WA	98683
WAD980982383	Kyocera International Inc	LQG	5701 E Fourth Plain Blvd	Vancouver	WA	98661
WAD988505459	Mercury Plastics Inc	LQG	3807 SE Hidden Way	Vancouver	WA	98661
WAD980981286	Nalco Co	LQG	5210 Fruit Valley Rd	Vancouver	WA	98660
WAD050956671	NuStar Terminals Svcs Inc	LQG	2565 NW Harborside Dr	Vancouver	WA	98660
WAH000040989	Pacific Crest Building Supply	LQG	5901 S 11th St	Ridgefield	WA	98642
WAD980833099	SEH America Inc	LQG	4111 NE 112th Ave	Vancouver	WA	98682
WAD000711556	Tesoro Logistics Operations LLC	LQG	2211 St Francis Ln	Vancouver	WA	98660
WAD009051871	Tetra Pak Materials LP	LQG	1616 W 31st St	Vancouver	WA	98660
WAD988521043	Tidewater Industrial Center	LQG	6305 NW Old Lower River Rd	Vancouver	WA	98660
WAH000057695	Trimaco Inc Ridgefield	LQG	7000 S 10th St Bldg 100	Ridgefield	WA	98642
WA1891406349	US DOE BPA Ross Complex	LQG	5411 NE Hwy 99	Vancouver	WA	98666
WAH000022204	US Water Services Inc	LQG	2700 W Firestone Lane	Vancouver	WA	98660
WAH000002246	Wafer Tech LLC	LQG	5509 NW Parker St	Camas	WA	98607
Medium Quantity Generator						
WAD980976625	Allweather Wood LLC	MQG	725 S 32nd St	Washougal	WA	98671
WAH000052256	Blackfly Investment LLC Vancouver	MQG	14401 SE 1st St	Vancouver	WA	98684
WAH000040816	CARIBOU REALTY GROUP	MQG	8914 NE St Johns Rd	Vancouver	WA	98665
WAD009055211	Chemtrade Solutions LLC Vancouver	MQG	2611 W 26th St Extension	Vancouver	WA	98666
WAH000010082	Chevron 208889	MQG	1900 E 162nd Ave	Vancouver	WA	98684
WAH000056995	Christensen Shipyards, LLC	MQG	2301 SE Hidden Way Bldg 37c	Vancouver	WA	98661
WAH000059705	City of Vancouver Water Station 7	MQG	11595 SE 16th St	Vancouver	WA	98684
WAH000034901	CLARK PUBLIC UTILITIES RIVER RD	MQG	5201 NW Lower River Rd	Vancouver	WA	98660
WAH000057435	Dept of Ecology Vancouver Field Office	MQG	12121 NE 99th St	Vancouver	WA	98682
WAR000000273	Ershigs Inc	MQG	5985 S 6th Way	Ridgefield	WA	98642
WAH000003145	Hewlett Packard Co Vancouver	MQG	1115 SE 164th Ave	Vancouver	WA	98684
WAH000024284	Home Depot 4718	MQG	8601 NE Andresen Rd	Vancouver	WA	98665
WAH000026840	Home Depot 4738	MQG	330 SE 192nd Ave	Vancouver	WA	98683
WAH000060475	Hudsons Bay High School	MQG	1601 E Mcloughlin Blvd	Vancouver	WA	98663
WAH000047305	JT MARINE INC	MQG	2301 SE Hidden Way Ste 100	Vancouver	WA	98661
WAH000048160	Long Painting Co Vancouver	MQG	1120 NE 146th St	Vancouver	WA	98685
WAH000050668	Lowes Home Centers LLC 1632	MQG	11413 NE 76th St	Vancouver	WA	98662
WAH000050787	Lowes Home Centers LLC 2954	MQG	18801 SE Mill Plain Blvd	Vancouver	WA	98683
WAD988520235	Mitchell Bros Truck Line Inc	MQG	2303 SE Hidden Way Bldg 17	Vancouver	WA	98661
WAH000057650	nLIGHT Inc Camas	MQG	4637 NW 18th Ave	Camas	WA	98607
WAH000013912	nLIGHT Photonics Corp	MQG	5408 NE 88th St Bldg E	Vancouver	WA	98665
WA0000105767	Oregon Iron Works Inc 3001	MQG	3515 SE Columbia Way Bldg 48	Vancouver	WA	98661
WAH000032324	Pacific Powers Products 6th Way	MQG	6100 S 6th Way	Ridgefield	WA	98642
WAD071824080	Printforia Vancouver	MQG	3201 NW Lower River Rd	Vancouver	WA	98660
WAH000058245	Printforia Washougal	MQG	4060 S Grant St Ste 100	Vancouver	WA	98671
WAD154018436	Sapa Extrusions	MQG	2001 Kotobuki Way	Vancouver	WA	98660

Handler ID	Handler name	Status	Street Address	City	State	Zip
WAH000026656	Target Store 0343	MQG	7809 NE Vancouver Plaza Dr	Vancouver	WA	98662
WAH000026789	Target Store 1883	MQG	8801 NE Hazel Dell Ave	Vancouver	WA	98665
WAH000027896	Target Stores 1444	MQG	16200 SE Mill Plain Blvd	Vancouver	WA	98684
WAD030779623	Thompson Metal Fabrication	MQG	3000 SE Hidden Way	Vancouver	WA	98661
WAH000051080	Trobella Cabinetry Inc	MQG	3201 NW Lower River Rd Unit D	Vancouver	WA	98660
WAD988509048	UPS Vancouver	MQG	6609 NE St Johns Rd	Vancouver	WA	98661
WAD980579304	Vancouver Port Maintenance Shop	MQG	Terminal 3 Building 3205	Vancouver	WA	98660
WAH000037740	Vancouver SD 37	MQG	6014 Fruit Valley Rd	Vancouver	WA	98660
WAH000002345	WA WSU Vancouver Branch Campus	MQG	14204 NE Salmon Creek Ave	Vancouver	WA	98686
WAH000016857	Walmart 2947	MQG	9000 NE Hwy 99	Vancouver	WA	98665
WAH000044577	Walmart NEighborhood Market 3145	MQG	2201 N Grand Blvd	Vancouver	WA	98661
WAH000006627	Walmart Supercenter 2550	MQG	221 NE 104th Ave	Vancouver	WA	98664
WAH000049589	Walmart Supercenter 5461	MQG	14505 NE Fourth Plain Blvd	Vancouver	WA	98662
WAH000029143	Walmart Supercenter 5462	MQG	430 SE 192nd Ave	Vancouver	WA	98683
WAH000046741	Walmart Supercenter 5929	MQG	1201 SW 13th Ave	Battle Ground	WA	98604
Small Quantity Generator						
WAH000042482	ALBERTSONS 580	SQG	14300 NE 20th Ave Bldg E	Vancouver	WA	98686
WAH000032536	Albertsons 592	SQG	2108 W Main St	Battle Ground	WA	98604
WAD039792106	Alpha Iron dba Vancouver Steel Painters	SQG	3001 SE Columbia Way 41	Vancouver	WA	98661
WAH000049748	Beaming White LLC Vancouver	SQG	1205 NE 95th St Ste A	Vancouver	WA	98665
WAD084421866	BNSF Railway Company Vancouver	SQG	1515 W 39th St	Vancouver	WA	98660
WA0000137489	BP 07054	SQG	10314 SE Mill Plain Rd	Vancouver	WA	98664
WA0000230300	BP 07098	SQG	116 NE 164th Ave	Vancouver	WA	98684
WAH000056150	BP 07130	SQG	11508 NE 119th St	Vancouver	WA	98662
WAH000059650	Burea Veritas Commodities and Trade Inc Vancouver	SQG	2119 SE Columbia Way Ste 280	Vancouver	WA	98661
WAD092300250	Burlington Environmental LLC Washougal	SQG	625 S 32nd St	Washougal	WA	98671
WAD057075947	Caliber Collision Center Vancouver Cascade 2931	SQG	2600 E 33rd St	Vancouver	WA	98663
WAH000047029	Caliber Collision Center Vancouver Hazel Dell 2932	SQG	7631 NE Highway 99	Vancouver	WA	98665

Handler ID	Handler name	Status	Street Address	City	State	Zip
WAH000004085	Caliber Collision Ctr Vancouver Mill Plain 2933	SQG	12025 SE Mill Plain	Vancouver	WA	98684
WAD085974962	Caliber Collision Ctr Vancouver Orchards 2934	SQG	12302 NE 4th Plain Rd	Vancouver	WA	98682
WAR000002451	Cascade Park Medical Office	SQG	12607 SE Mill Plain Blvd	Vancouver	WA	98684
WAD980836365	CLARK CNTY PUBLIC WORKS	SQG	4700 NE 78th St	Vancouver	WA	98665
WAH000055273	Clark County Fire District 10	SQG	21709 NE 399th St	Amboy	WA	98601
WAD000812966	Clark PUD	SQG	8600 NE 117th Ave	Vancouver	WA	98662
WAH000013631	Classic Collision Vancouver	SQG	4615 NE Minnehaha St	Vancouver	WA	98661
WAD009020140	Columbia Machines	SQG	107 Grand Ave	Vancouver	WA	98661
WAH000030400	Corrosion Companies Inc	SQG	3725 S Grant St Ste 3	Washougal	WA	98671
WAH000037143	Costco Wholesale 1086	SQG	19610 SE 1st St	Camas	WA	98607
WAH000023548	Costco Wholesale 772	SQG	6720 NE 84th St	Vancouver	WA	98665
WA0000905000	Crown Plating Inc	SQG	4221 NE St Johns Rd Apt G	Vancouver	WA	98661
WAH000058260	Dept of Ecology Battle Ground ERTS 702764	SQG	24612 NE 214th St	Battle Ground	WA	98604
WAH000057715	Dept of Ecology Vancouver ERTS 698716	SQG	15709 NE 78th St	Vancouver	WA	98682
WAH000058125	Educational Service District 112	SQG	2500 NE 65th Ave	Vancouver	WA	98661
WAD068794387	Emerald Services Inc Vancouver	SQG	1300 W 12th St	Vancouver	WA	98660
WAH000007476	Fabricated Products Inc	SQG	3201 Lower River Rd Blg 2575	Vancouver	WA	98660
WAH000017939	Fabrication Products Inc Minnehaha St	SQG	4201 NE Minnehaha St	Vancouver	WA	98661
WAD061493789	Frito Lay Vancouver	SQG	4808 NW Fruit Valley Rd	Vancouver	WA	98660
WAH000053996	Geneva Woods Pharmacy #48548	SQG	6600 NE 112th Ct, Ste 103	Vancouver	WA	98682
WAH000055534	Hawthorne Hydroponics	SQG	3300 NW 32nd Ave	Vancouver	WA	98660
WAH000055528	Hawthorne Hydroponics	SQG	3204 NW 38th Cir	Vancouver	WA	98660
WAH000048544	Industrial Ctrl Development dba ICD Coat	SQG	7350 S Union Ridge Pkwy	Ridgefield	WA	98642
WAH000014951	Kaiser Mill Plain One Medical	SQG	203 SE Park Plaza Dr Ste 140	Vancouver	WA	98684
WAH000030079	Kaiser Orchards Medical Office	SQG	7101 NE 137th Ave	Vancouver	WA	98682
WAH000056990	Legacy Cancer Institute	SQG	700 NE 87th Ave Ste 360	Vancouver	WA	98664
WAH000026330	Legacy Salmon Creek Hospital	SQG	2211 NE 139th St	Vancouver	WA	98686
WAH000052124	Marks Design & Metalworks	SQG	4220 NE Minnehaha St	Vancouver	WA	98661

Handler ID	Handler name	Status	Street Address	City	State	Zip
WAD041268947	Messer LLC	SQG	4715 NE 78th St	Vancouver	WA	98665
WA0000952374	Micropump Inc	SQG	1402 NE 136th Ave	Vancouver	WA	98684
WAH000054238	Miller Paint Co Inc — Orchards	SQG	11717 NE 78th Way Ste 101	Vancouver	WA	98682
WAH000040634	Miller Paint Co Inc 20th Ave Ste 104	SQG	14300 NE 20th Ave Ste 104	Vancouver	WA	98686
WAD988495438	Miller Paint Co Inc Vancouver	SQG	2607 NE Andresen Rd	Vancouver	WA	98611
WAH000043046	National Container Group LLC	SQG	503 SE Maritime Ave Bldg 5	Vancouver	WA	98661
WAD988475679	NuStar Terminals Ops Partnership LP	SQG	5420 NW Fruit Valley Rd	Vancouver	WA	98660
WAH000041418	Oldcastle BuildingEnvelope Vancouver	SQG	1611 SE Commerce Ave	Battle Ground	WA	98604
WA0000940270	Oregon Cam Grinding Inc	SQG	5913 NE 127th Ave Ste 200	Vancouver	WA	98682
WAD060602711	Pac Paper LLC	SQG	6416 NW Whitney Rd	Vancouver	WA	98665
WAD982821050	Pacific Northwest Plating	SQG	7001 NE 4oth Ave	Vancouver	WA	98661
WAH000056620	Petco 1220	SQG	8820 NE 5th Ave	Vancouver	WA	98665
WAH000056595	Petco 1222	SQG	11505 NE Fourth Plain Rd Ste 82	Vancouver	WA	98662
WAH000008995	Petco 1233	SQG	305 SE Chkalov Dr	Vancouver	WA	98683
WAH000053745	Petrochem Inc.	SQG	6811 NE 131st Ave	Vancouver	WA	98682
WAD988524377	Pick N Pull Vancouver	SQG	9605 NE 76th St	Vancouver	WA	98662
WAH000027762	Quality Carriers Inc	SQG	503 SE Maritime Ave Bldg 5	Vancouver	WA	98661
WAH000039872	Rite Aid #6498	SQG	2800 NE 162nd Ave	Vancouver	WA	98682
WAH000011718	Rite Aid 4067	SQG	3307 Evergreen Blvd Bldg 4	Washougal	WA	98671
WAH000008839	Rite Aid 5291	SQG	13511 SE 3rd Way	Vancouver	WA	98661
WAH000045915	Safeway Store 1103	SQG	6701 E Mill Plain Blvd	Vancouver	WA	98661
WAH000046064	Safeway Store 1287	SQG	800 NE 3rd St	Camas	WA	98607
WAH000044953	Safeway Store 1611	SQG	6711 NE 63rd St	Vancouver	WA	98661
WAH000044994	Safeway Store 1653	SQG	2615 NE 112th Ave	Vancouver	WA	98684
WAH000045024	Safeway Store 1687	SQG	3307 Evergreen Blvd	Washougal	WA	98671
WAH000045030	Safeway Store 1704	SQG	6700 NE 162nd Ave	Vancouver	WA	98682
WAH000045097	Safeway Store 1842	SQG	13023 NE Hwy 99	Vancouver	WA	98686
WAH000045506	Safeway Store 400	SQG	3707 N Main St	Vancouver	WA	98663
WAH000044731	Safeway Store 4313	SQG	904 W Main St	Battle Ground	WA	98604
WAH000044743	Safeway Store 4405	SQG	408 NE 81st	Vancouver	WA	98665
WAR000010249	Salmon Creek Medical & Dental	SQG	14406 NE 20th	Vancouver	WA	98684
WAH000019141	Sheryl Lee DMD LLC	SQG	700 SE 160th Ave	Vancouver	WA	98684
WAH000029439	Silicon Forest Electronics Inc	SQG	6204 E 18th St	Vancouver	WA	98661

Handler ID	Handler name	Status	Street Address	City	State	Zip
WAH000027732	Team Industrial Services	SQG	11917 NE 56th Circle	Vancouver	WA	98682
WAH000057845	Ultrablock Inc Vancouver	SQG	815 NE 172nd Ave	Vancouver	WA	98684
WAH000057825	UNFI DC Ridgefield	SQG	7909 S Union Ridge Pkwy	Ridgefield	WA	98642
WA7360010345	VA Medical Center Vancouver Division	SQG	Fourth Plain Blvd & O St	Vancouver	WA	98663
WAR000007682	Vancouver City Brookside	SQG	2315 General Anderson	Vancouver	WA	98661
WAD981772148	Vancouver Ford	SQG	6801 NE 40th St	Vancouver	WA	98661
WAH000056835	VANCOUVER WESTSIDE WTP	SQG	2323 W Mill Plain Blvd	Vancouver	WA	98660
WAD103015756	Vigor Works Bldg 4400	SQG	4400 SE Columbia Wy	Vancouver	WA	98661
WAD980981369	WA DNR LARCH MOUNTAIN CORR	SQG	15314 NE Dole Valley Rd	Yacolt	WA	98675
WAD988492674	Western Star Northwest	SQG	487 S 56 Pl	Ridgefield	WA	98642
WAH000017921	Western Star Northwest	SQG	600 S 56th Pl	Ridgefield	WA	98642
Nongenerator						
WAD050966019	A & J CUSTOM CABINETS Inc	XQG	2300 E 1st St Ste B	Vancouver	WA	98661
WAD058146143	Advanced Drainage Systems Inc	XQG	627 S 37th St	Washougal	WA	98671
WAH000057475	Alki Middle School	XQG	1800 NW Bliss Rd	Vancouver	WA	98685
WAH000035344	ASPEN DENTAL VANCOUVER	XQG	8101 NE Parkway Dr Ste	Vancouver	WA	98662
WAH000025188	Battle Ground School District 119	XQG	300 North Parkway	Battle Ground	WA	98604
WAH000056300	BGSD Warehouse	XQG	400 N Parkway Ave	Battle Ground	WA	98604
WAH000059680	Block 18 Development	XQG	SW Of Intersection Of Columbia Way And Waterfront	Vancouver	WA	98660
WAH000043550	BNSF Railway Co Columbia River Bridge	XQG	1502 W 8th St	Vancouver	WA	98660
WAD009624453	Boomsnub Airco Superfund Site	XQG	7608 NE 47th Ave	Vancouver	WA	98661
WAD044938447	C TRAN Clark Cnty Public Transit	XQG	2425 NE 65th Ave	Vancouver	WA	98668
WAH000056310	CAM Academy	XQG	715 NW Onsdorff Blvd	Battle Ground	WA	98604
WAR000000547	Camas City Operations Center	XQG	1620 SE 8th Ave	Camas	WA	98607
WAR000000554	Camas School Dist Bus Shop	XQG	1707 NE Ione St	Camas	WA	98607
WAH000028304	Camas School District Transportation	XQG	1125 NE 22nd Ave	Camas	WA	98607
WAR000002444	Cascade Park Dental Office	XQG	12711 SE Mill Plain Blvd	Vancouver	WA	98684

Handler ID	Handler name	Status	Street Address	City	State	Zip
WAD988469136	CASEE B	XQG	11104 NE 149th St	Brush Prairie	WA	98606
WAD988506101	Central Transfer & Recycling Center	XQG	11034 NE 117th Ave	Vancouver	WA	98662
WAD000832741	CHEVRON BULK PLANT 61001854	XQG	1801 W 39th St	Vancouver	WA	98660
WAH000035970	CLARK COLLEGE COLUMBIA TECH CTR	XQG	18700 SE Mill Plain Blvd	Vancouver	WA	98683
WAH000024464	Clark College LLC WSU V Engineering	XQG	14204 NE Salmon Crk Ave Clark	Vancouver	WA	98686
WAD980985766	Columbian Publishing Co	XQG	701 W 8th St	Vancouver	WA	98660
WAH000058425	EnviroServe Inc Vancouver	XQG	7503 NE 101st St	Vancouver	WA	98662
WA0000072918	Food Express Inc	XQG	2901 NW Lower River Rd	Vancouver	WA	98660
WAH000005751	Food Express Inc Fruit Valley Rd	XQG	3818 NW Fruit Valley Rd	Vancouver	WA	98660
WAH000057480	Gaiser Middle School	XQG	3000 NE 99th St	Vancouver	WA	98665
WAD980738322	Georgia-Pacific Consumer Operations LLC	XQG	349 NW 7th Ave	Camas	WA	98607
WAH000030326	Graces Plaza Cleaners	XQG	717 W Main Vacant Land	Battle Ground	WA	98604
WAH000052366	High Tech Manufacturing Services	XQG	3105 B NE 65th St	Vancouver	WA	98663
WAD006454516	Hood Packaging Corp	XQG	1401 W 4th Plain Blvd	Vancouver	WA	98660
WAR000007955	IMAT INC	XQG	12516 NE 95th St Ste D110	Vancouver	WA	98682
WAH000052297	Knights of Pythias Retirement Center	XQG	3409 Main St	Vancouver	WA	98663
WAD057075889	Mackins Salmon Creek Auto Body	XQG	10803 NE Hwy 99	Vancouver	WA	98686
WAH000057380	Maddox Industrial Transformer	XQG	1608 SE Commerce Ave	Battle Ground	WA	98604
WA0000263319	Messer LLC	XQG	7608 NE 47th Ave SW Cor	Vancouver	WA	98661
WAH000021048	Miller Paint Company Inc East Vancouver	XQG	111 NE 164th Ave	Vancouver	WA	98684
WA0000381707	Miltons Dry Cleaners	XQG	6721 E 4th Plain Blvd	Vancouver	WA	98661
WAD071801625	Northwest Pipeline GP Battleground Dist	XQG	8907 NE 219th St	Battle Ground	WA	98604
WAD000642132	Northwest Pipeline GP Washougal C/S	XQG	T2n R4e S30 NW1/4	Washougal	WA	98671
WAD009035502	Pendleton Woolen Mills	XQG	2 Pendleton Way	Washougal	WA	98671
WAH000058695	Pleasant Valley School Vancouver	XQG	14320 NE 50th Ave	Vancouver	WA	98686
WAH000056305	Prairie High School	XQG	11311 NE 119th St	Vancouver	WA	98662
WAH000052959	Pulse Electronics Inc	XQG	18110 SE 34th Ave Bldg 2	Vancouver	WA	98683

Handler ID	Handler name	Status	Street Address	City	State	Zip
WAD980985311	Qwest Corporation W00359	XQG	11418 Fourth Plain Blvd	Vancouver	WA	98662
WAH000050442	Red Lion Hotels Holdings Inc Vancouver	XQG	100 Columbia St	Vancouver	WA	98660
WAD009422411	Ridgefield Port Lake River Site	XQG	111 W Division St	Ridgefield	WA	98642
WAH000037678	Sherwin Williams #8008	XQG	6307 NE Hwy 99	Vancouver	WA	98665
WAH000057560	Simonds International Ridgefield	XQG	5525 South 11th Street	Ridgefield	WA	98642
WAD988499745	Texaco Downstream 211542	XQG	9404 NE 76th St	Vancouver	WA	98662
WAH000053774	Tidewater Environmental Services Inc	XQG	6305 NW Old Lower River Rd	Vancouver	WA	98660
WAD988466975	Tidland Corp	XQG	2305 SE 8th Ave	Camas	WA	98607
WAH000043028	US Army Reserve 65th St	XQG	15005 NE 65th St	Vancouver	WA	98682
WAH000055000	US DOE BPA SIFTON SUBSTATION	XQG	16700 NE 39th St	Vancouver	WA	98682
WAD009045279	VANCOUVER PORT LOWER RIVER	XQG	5509 NW Lower River Rd	Vancouver	WA	98660
WAH000052684	Vancouver Port of Terminal 1	XQG	300 W Columbia Way	Vancouver	WA	98660
WAH000012955	Veolia ES Technical Solution LLC Vancouv	XQG	5720c NE 121 Ave	Vancouver	WA	98682
WAH000057685	Veolia ES Technical Solutions LLC Vancouver	XQG	3301 SE Columbia Way Bldg 45 Ste 160	Vancouver	WA	98661
WAD988488466	WA AGR Clark 1	XQG	7110 NE 63rd St	Vancouver	WA	98661
WAH000012856	WA AGR Clark 2	XQG	213b SE 120th Ave	Vancouver	WA	98683
WAD076435122	WA DOT Vancouver	XQG	4200 Main St	Vancouver	WA	98661
WAD980979801	WA WSU Vancouver Res & Ext	XQG	1919 NE 78th St	Vancouver	WA	98665
WAH000034951	WASHOUGAL TRANSFER STATION	XQG	4020 S Grant St	Washougal	WA	98671
WA0000472084	West Van Materials Recovery Center	XQG	6601 NW Old Lower River Rd	Vancouver	WA	98660

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APPENDIX N: Clark County municipal solid waste data

MSW tonnage projections based on anticipated population growth

With an increase in population comes an increase in the amount of solid waste being produced. Population and tonnage projections help plan for future capacity needs at the transfer stations.

Table N1: MSW tonnage projections based on anticipated population growth

Year	2023	2024	2025	2026	2027	2028	2029	2030
Estimated population	527,400	535,453	543,507	551,285	559,330	567,356	575,352	583,307
Estimated MSW tonnage	400,697	406,815	412,934	418,844	424,956	431,054	437,129	443,173

Population data: Washington State Office of Financial Management

Population data link: ***https://ofm.wa.gov/washington-data-research/population-demographics/population-forecasts-and-projections/growth-management-act-county-projections/growth-management-act-population-projections-counties-2020-2050***

Tonnage data: CRC Solid Waste Activity Reports

Annual inbound solid waste tonnage by facility

Inbound tonnage data illustrate how much solid waste is entering the transfer stations through residential, multifamily, and commercial collection services combined. The amount of solid waste being generated is impacted by our population growth as well as consumption choices made by the community.

Table N2: Annual inbound solid waste tonnage by facility

	2018	2019	2020	2021	2022	2023	6 yr avg	% of 6 yr avg
CTR	233,044	229,036	232,426	251,847	242476	242090	238,487	60.8%
West Van	97,792	105,299	125,247	116,719	130981	126573	117,102	29.9%
WTS	31,919	32,326	36,566	38,638	39849.4	40798	36,683	9.4%
Total	**362,755**	**366,661**	**394,239**	**407,204**	**413,306**	**409,461**	**392,271**	**100.0%**

Source: CRC Solid Waste Activity Reports

Annual customer (vehicle) trips by facility

Counting inbound vehicles illustrates how many self-haul customers are entering the transfer stations, including both residential and commercial customers. This data does not include curbside service trucks in the vehicle count.

Table N3: Annual customer (vehicle) trips by facility

	2018	2019	2020	2021	2022	2023	6 yr avg	% of 6 yr avg
CTR	177,703	174,982	213,410	222,730	230341	230796	208,327	62.2%
West Van	63,231	68,075	93,699	89,987	128282	125187	94,744	28.3%
WTS	25,956	28,001	35,067	36,889	28097	38252	32,044	9.6%
Total	**266,890**	**271,058**	**342,176**	**349,606**	**386,720**	**394,235**	**335,114**	**100.0%**

Source: CRC Solid Waste Activity Reports

Outbound tonnage

Outbound tonnage data illustrate how much solid waste is being sent to the landfills. Showing outbound tonnage per year will reflect changes in population and potential impacts from waste reduction and recycling education efforts while outbound data per facility allows regional planners to evaluate staffing and potential traffic impacts based on how busy the transfer station is.

Table N4: Outbound tonnage

	2018	2019	2020	2021	2022	2023	6 yr avg	% of avg total
CTR	228,018	225,708	225,416	245,333	234,585	232,571.7	231,939	59.0%
West Van	117,984	120,906	118,986	135,915	131,591	121,406.29	124,465	31.7%
WTS	32,020	32,260	36,696	38,244	39,454.6	40,535.66	36,535	9.3%
Total	**378,022**	**378,874**	**381,098**	**419,492**	**405,630.6**	**394,513.65**	**392,938**	**100.0%**

Source: CRC Solid Waste Activity Reports

Outbound containers

Outbound containers reflect the number of containers that are filled with municipal solid waste to be brought to the landfill. Containers from West Van and CTR are transported by truck to Tidewater Barge where the waste is barged to Finley Buttes Landfill. Containers from WTS are transported by truck to the Wasco County Landfill. The use of annual data reflects changes over time.

Table N5: Outbound containers

	2018	2019	2020	2021	2022	2023	6 yr avg	% of avg total
CTR	7,777	7,843	7,583	8,177	8,097	7,874	7,892	58.3%
West Van	4,189	4,186	4,129	4,317	5,061	4,565	4,408	32.6%
WTS	1,041	1,062	1,246	1,286	1,355	1,425	1,236	9.1%
Total	**13,007**	**13,091**	**12,958**	**13,780**	**14,513**	**13,864**	**13,536**	

Source: CRC Solid Waste Activity Reports

Clark County waste stream analysis

A waste stream analysis examines the quantity and composition by sampling the municipal solid waste from predefined waste generating groups (e.g. single-family, multifamily, commercial) to determine the material components. Performing a waste stream analysis is a priority of the Clark County regional solid waste system and is included as an action item in the implementation plan.

Table N6: Waste Stream Analysis

Category	1993	1995	1999	2003	2008	2012
Paper	**26.2%**	**23.3%**	**21.8%**	**19.2%**	**18.3%**	**14.6%**
Newspaper	1.8%	2.0%	2.1%	1.6%	1.0%	0.7%
Cardboard	4.7%	5.3%	4.7%	4.0%	4.7%	3.1%
Office and Computer	0.9%	0.9%	0.9%	–	–	–
Mixed Waste Paper	7.7%	6.7%	4.2%	7.0%	5.8%	4.5%
Magazines	–	–	1.1%	–	–	–
Milk Cartons, Other	–	–	0.2%	–	0.2%	0.2%
Non-Recyclable Paper	11.1%	8.4%	8.5%	6.5%	6.5%	3.7%
Plastic	**10.4%**	**11.6%**	**12.9%**	**11.5%**	**13.2%**	**13.7%**
PET Bottles	0.2%	0.4%	0.4%	2.2%	0.8%	0.74%
HDPE Bottles	0.6%	0.7%	0.5%	–	0.6%	0.45%
Bottles 3-7	–	–	0.1%	–	0.1%	0.06%
Tubs	–	–	–	–	–	0.22%
Film and Bags	–	–	–	–	–	5.20%
Plastic Packaging	3.9%	6.9%	6.8%	7.7%	7.4%	0.36
Other Plastic Products	5.4%	3.0%	4.3%	1.7%	3.7%	6.06%
Expanded Polystyrene	0.3%	0.6%	0.8%	–	0.6%	0.62%
Metal	**6.2%**	**6.6%**	**7.2%**	**7.1%**	**6.8%**	**6.0%**
Aluminum Cans	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%
Aluminum Containers	0.1%	0.1%	0.1%	–	–	–
Tin Cans	0.9%	1.1%	0.9%	–	0.9%	0.6%
Mixed Metals/Materials	2.2%	1.5%	2.9%	3.3%	2.4%	3.3%
Ferrous Metals	2.1%	2.5%	2.1%	3.1%	2.8%	1.4%
White Goods	0.3%	0.6%	0.2%	–	–	–
Non-Ferrous Metals	0.2%	0.3%	0.3%	0.2%	0.3%	0.6%
Aerosol Cans	–	0.1%	0.2%	0.1%	–	–
Glass	**2.7%**	**2.7%**	**3.2%**	**2.2%**	**2.8%**	**2.5%**
Clear Bottles	1.4%	1.4%	1.5%	1.0%	1.0%	0.9%
Brown Bottles	0.4%	0.4%	0.7%	0.5%	0.5%	0.5%
Green Bottles	0.3%	0.4%	0.4%	0.3%	0.3%	0.4%
Non-Recyclable Glass	0.6%	0.5%	0.5%	0.5%	0.9%	0.8%
Organic	**28.9%**	**26.8%**	**26.3%**	**29.5%**	**17.7%**	**22.7%**
Food Wastes	12.1%	11.9%	14.5%	15.3%	16.3%	20.4%
Yard Debris	5.8%	4.1%	3.3%	3.8%	1.5%	2.3%
Recoverable Wood	11.0%	10.8%	8.5%	10.4%	9.7%	9.8%
Other Materials	**17.8%**	**19.8%**	**23.0%**	**15.5%**	**19.7%**	**21.2%**
Construction/Demolition	8.4%	8.9%	7.4%	7.6%	6.0%	9.4%
Tires	0.1%	0.3%	0.3%	–	–	–
Rubber Products	0.6%	0.2%	0.3%	–	–	–
Disposable Diapers	2.1%	2.8%	3.1%	–	–	–
Textiles	4.6%	5.7%	3.5%	–	–	–
Carpet	–	–	2.8%	4.5%	1.9%	3.0%
Leather	0.0%	0.1%	0.1%	–	–	–
Hazardous Waste	1.8%	1.5%	2.4%	1.2%	2.1%	0.2%
Medical Waste	–	–	–	–	–	0.0%
Animal Excrement	–	–	–	–	–	1.8%
Household Batteries	–	–	–	–	–	0.1%
E-Waste	–	–	–	–	–	0.1%
Fines	–	–	2.8%	–	–	–
Ash	0.2%	0.3%	0.3%	–	–	–
Reusable Products	–	–	–	2.2%	–	–
Remaining Waste	**8.0%**	**9.3%**	**5.7%**	**15.0%**	**21.6%**	**19.1%**
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**99.8%**

Source: Historical Waste Stream Analysis reports

Southwest regional waste stream analysis

To obtain data about the composition of disposed waste in the state of Washington, the Washington State Department of Ecology commissioned a contractor to conduct a four-season municipal solid waste characterization study in 2020-2021. The following table represents data from the southwest region, including samples taken from the West Vancouver Materials Recovery Facility in Vancouver.

Table N8: Southwest WGA Overall Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**18.5%**	**3.1%**	**92,721**	**15,428**
PAPER PACKAGING	**10.1%**	**2.1%**	**50,451**	**10,276**
Newspaper Packaging	0.0%	0.0%	0	0
Cardboard & Kraft Packaging	4.4%	0.9%	22,215	4,626
Mixed/Low-grade Paper Packaging	2.8%	1.8%	14,139	8,841
Aseptic Containers	0.1%	0.0%	428	131
Gable Top Containers	0.1%	0.1%	642	264
Other Polycoated Packaging	0.0%	0.0%	190	90
Compostable Paper Packaging	2.1%	0.7%	10,607	3,749
R/C Paper Packaging	0.4%	0.1%	2,230	570
PAPER PRODUCTS	**8.5%**	**2.1%**	**42,270**	**10,258**
Newspaper Products	0.2%	0.1%	1,239	375
Cardboard & Kraft Paper Products	1.1%	1.8%	5,738	9,155
Magazines	0.1%	0.1%	716	435
High-Grade Paper Products	0.2%	0.1%	1,136	545
Other Groundwood Paper Products	0.0%	0.1%	209	342
Mixed/Low-grade Paper Products	1.7%	0.5%	8,737	2,636
Compostable Paper Products	3.7%	0.7%	18,591	3,482
R/C Paper Products	1.2%	0.8%	5,903	4,027
PLASTIC	**16.1%**	**2.8%**	**80,705**	**14,188**
PLASTIC PACKAGING	**11.1%**	**2.6%**	**55,703**	**12,952**
#1 PETE Plastic Bottles	0.6%	0.1%	2,758	555
#1 PETE Plastic Non-bottles	0.4%	0.1%	2,046	397
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	927	253
#2 HDPE Plastic Jars and Tubs	0.3%	0.2%	1,735	1,206
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	614	128
#3 PVC Plastic Packaging	0.0%	0.0%	9	12
#4 LDPE Plastic Packaging	0.0%	0.0%	8	9
#5 PP Plastic Packaging	0.7%	0.1%	3,502	670
#6 PS Plastic Packaging	0.1%	0.0%	681	219
#7 Other/Unknown Plastic Packaging	2.4%	1.8%	11,899	9,099
Expanded Polystyrene Packaging	0.9%	0.2%	4,516	1,199
PLA Compostable Packaging	0.0%	0.0%	45	46
Plastic Merchandise Bags	0.3%	0.0%	1,730	219
Packaging Film Plastic	2.4%	0.5%	12,227	2,693
Transportation Packaging Film Plastic	1.2%	0.6%	5,758	3,094
Flexible Plastic Packaging	0.1%	0.0%	342	87
R/C Plastic Packaging	1.4%	1.6%	6,907	7,971
PLASTIC PRODUCTS	**5.0%**	**1.1%**	**25,002**	**5,500**
#1 PETE Plastic Products	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	54	88
#3 PVC Plastic Products	0.0%	0.0%	39	64
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	49	49
#6 PS Plastic Products	0.0%	0.0%	103	47
#7 Other/Unknown Plastic Products	0.9%	0.3%	4,612	1,371
PLA Compostable Products	0.0%	0.0%	25	19
Plastic Garbage Bags	1.2%	0.2%	5,949	1,155
Plastic Non-bag Film Products	0.9%	0.9%	4,574	4,730
Bulky Rigid Plastic Products	1.0%	0.4%	4,993	1,865
R/C Plastic Products	0.9%	0.5%	4,604	2,392
GLASS	**1.5%**	**0.5%**	**7,645**	**2,252**
Clear Glass Containers	0.7%	0.2%	3,599	948
Green Glass Containers	0.4%	0.2%	1,764	879
Brown/Other Colored Glass Containers	0.2%	0.1%	1,105	669
Plate Glass	0.0%	0.0%	158	164
Non-glass Ceramics	0.1%	0.1%	611	534
R/C Glass	0.1%	0.1%	408	313
METAL	**4.8%**	**1.1%**	**24,150**	**5,451**
Aluminum Beverage Cans	0.4%	0.1%	1,908	608
Aluminum Foil/Containers	0.2%	0.1%	890	301
Other Aluminum	0.1%	0.1%	611	303
Other Non-ferrous Metal	0.1%	0.1%	617	385
Food Cans - Tinned	0.4%	0.1%	1,971	440
Food Cans - Coated	0.0%	0.0%	201	153
White Goods	0.2%	0.2%	1,051	1,166
Other Ferrous Metal	2.0%	0.8%	10,042	4,103
R/C Metal	1.4%	0.6%	6,860	2,992
ORGANICS	**17.3%**	**2.8%**	**86,526**	**13,782**
Edible Food Waste- Vegetative	6.0%	1.5%	29,909	7,443
Inedible Food Waste- Vegetative	3.4%	0.6%	17,032	3,247
Edible Food Waste- Meats/Fats/Oils	1.4%	0.6%	7,133	2,879
Inedible Food Waste- Meats/Fats/Oils	0.4%	0.3%	2,207	1,329
Yard/Garden Waste- Leaves and Grass	0.5%	0.4%	2,343	2,055
Yard/Garden Waste- Prunings	0.7%	0.4%	3,302	2,247
Animal Manure	2.2%	0.6%	10,801	3,037
Animal Carcasses & Offal	0.0%	0.0%	0	0
Food Processing Wastes	2.4%	2.2%	11,854	11,169
R/C Organics	0.4%	0.2%	1,946	794
WOOD DEBRIS	**16.9%**	**3.1%**	**84,737**	**15,751**
Natural Wood	0.1%	0.1%	307	335
Treated Wood	0.3%	0.2%	1,672	1,065
Painted Wood	4.9%	1.8%	24,611	8,925
Dimensional Lumber	3.3%	1.3%	16,546	6,352
Engineered Wood	2.7%	1.0%	13,300	4,921
Pallets & Crates	3.0%	1.7%	15,141	8,425
Other Untreated Wood	0.0%	0.0%	156	122
Wood By-products	0.8%	0.8%	3,805	3,779
R/C Wood Debris	1.8%	0.8%	9,199	4,116
CONSTRUCTION MATERIALS	**12.3%**	**3.4%**	**61,357**	**17,158**
Plastic Lumber	0.0%	0.0%	90	77
Insulation	1.1%	1.8%	5,722	8,805
Asphalt Paving	0.0%	0.0%	0	0
Concrete	2.0%	1.3%	10,017	6,723
Drywall	3.0%	1.9%	15,034	9,684
Carpet	1.0%	0.8%	5,052	3,759
Carpet Padding	0.4%	0.6%	1,890	2,850
Soil, Rocks, & Sand	1.3%	0.9%	6,265	4,545
Asphalt Roofing	0.6%	0.8%	2,968	4,120
Plastic Floor Covering	0.0%	0.0%	0	0
Ceramics & Brick	0.2%	0.2%	1,210	1,033
R/C Construction Materials	2.6%	1.4%	13,108	6,902
CONSUMER PRODUCTS	**6.1%**	**1.5%**	**30,394**	**7,363**
Televisions - LCD	0.2%	0.2%	879	1,028
Televisions - CRT	0.0%	0.0%	0	0
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.1%	0.1%	307	497
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.1%	0.2%	646	814
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.0%	0.0%	0	0
Textiles- Organic	1.5%	0.4%	7,607	1,916
Textiles- Synthetic/Mixed/Unknown	0.7%	0.3%	3,719	1,334
Shoes/Purses/Belts	0.1%	0.1%	509	316
Tires & Other Rubber	0.4%	0.5%	2,216	2,306
Furniture	2.5%	1.2%	12,640	6,178
Mattresses	0.4%	0.5%	1,870	2,385
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**0.8%**	**0.4%**	**4,013**	**2,072**
Pesticides	0.0%	0.0%	1	2
HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
Compact Florescent Lamps	0.0%	0.0%	16	17
Florescent Tubes	0.0%	0.0%	0	0
Water-based Paint	0.3%	0.4%	1,311	1,933
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	48	46
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	48	78
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	0	0
Caustic Cleaners	0.0%	0.0%	69	64
Dry-cell Batteries- Single Use	0.0%	0.0%	106	57
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	42	68
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.1%	0.1%	313	474
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.2%	0.1%	1,155	737
Sharps	0.0%	0.0%	10	10
Pharmaceuticals & Vitamins	0.0%	0.0%	124	150
Other Cleaners/Chemicals	0.0%	0.0%	69	113
Personal Care Products	0.1%	0.0%	314	142
Other Potentially Hazardous Wastes	0.1%	0.1%	387	454
RESIDUALS	**5.6%**	**2.3%**	**27,825**	**11,294**
Disposable Diapers	2.6%	0.6%	12,990	3,107
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.0%	40	45
Fines/Sorting Residues	1.0%	0.3%	5,081	1,262
Sludges & Other Special Industrial Wastes	1.9%	2.2%	9,714	11,004

Estimated Origin Specified Disposed Tons	**500,073**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**104**	

Table N9: Southwest WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**19.8%**	**5.5%**	**54,283**	**15,050**
PAPER PACKAGING	**11.4%**	**3.7%**	**31,294**	**10,055**
Newspaper Packaging	0.0%	0.0%	0	0
Cardboard & Kraft Packaging	5.2%	1.6%	14,355	4,264
Mixed/Low-grade Paper Packaging	3.5%	3.2%	9,587	8,816
Aseptic Containers	0.0%	0.0%	85	67
Gable Top Containers	0.1%	0.1%	275	240
Other Polycoated Packaging	0.0%	0.0%	26	43
Compostable Paper Packaging	2.2%	1.3%	6,031	3,636
R/C Paper Packaging	0.3%	0.2%	936	446
PAPER PRODUCTS	**8.4%**	**3.6%**	**22,989**	**9,952**
Newspaper Products	0.0%	0.0%	119	92
Cardboard & Kraft Paper Products	2.1%	3.3%	5,651	9,154
Magazines	0.1%	0.1%	361	376
High-Grade Paper Products	0.3%	0.2%	881	535
Other Groundwood Paper Products	0.1%	0.1%	209	342
Mixed/Low-grade Paper Products	1.6%	0.9%	4,484	2,417
Compostable Paper Products	2.1%	1.1%	5,754	3,007
R/C Paper Products	2.0%	1.5%	5,529	4,024
PLASTIC	**17.9%**	**5.1%**	**49,110**	**13,912**
PLASTIC PACKAGING	**12.8%**	**4.7%**	**35,158**	**12,822**
#1 PETE Plastic Bottles	0.3%	0.2%	852	419
#1 PETE Plastic Non-bottles	0.2%	0.1%	502	253
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	305	211
#2 HDPE Plastic Jars and Tubs	0.2%	0.2%	650	421
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	101	63
#3 PVC Plastic Packaging	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	3	3
#5 PP Plastic Packaging	0.3%	0.2%	804	428
#6 PS Plastic Packaging	0.1%	0.1%	287	200
#7 Other/Unknown Plastic Packaging	4.0%	3.3%	10,945	9,097
Expanded Polystyrene Packaging	0.9%	0.4%	2,510	1,054
PLA Compostable Packaging	0.0%	0.0%	33	45
Plastic Merchandise Bags	0.1%	0.0%	332	122
Packaging Film Plastic	2.1%	0.9%	5,653	2,592
Transportation Packaging Film Plastic	1.9%	1.1%	5,214	3,033
Flexible Plastic Packaging	0.0%	0.0%	61	34
R/C Plastic Packaging	2.5%	2.9%	6,906	7,971
PLASTIC PRODUCTS	**5.1%**	**1.8%**	**13,952**	**5,040**
#1 PETE Plastic Products	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	54	88
#3 PVC Plastic Products	0.0%	0.0%	39	64
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	39	46
#6 PS Plastic Products	0.0%	0.0%	43	38
#7 Other/Unknown Plastic Products	1.0%	0.5%	2,611	1,288
PLA Compostable Products	0.0%	0.0%	18	17
Plastic Garbage Bags	0.9%	0.4%	2,524	1,040
Plastic Non-bag Film Products	1.6%	1.7%	4,338	4,726
Bulky Rigid Plastic Products	0.5%	0.4%	1,370	1,087
R/C Plastic Products	1.1%	0.8%	2,917	2,223
GLASS	**1.1%**	**0.7%**	**3,052**	**2,023**
Clear Glass Containers	0.5%	0.3%	1,322	793
Green Glass Containers	0.3%	0.3%	924	785
Brown/Other Colored Glass Containers	0.3%	0.2%	697	637
Plate Glass	0.0%	0.0%	0	0
Non-glass Ceramics	0.0%	0.0%	46	75
R/C Glass	0.0%	0.0%	63	57
METAL	**4.4%**	**1.6%**	**12,168**	**4,479**
Aluminum Beverage Cans	0.4%	0.2%	970	561
Aluminum Foil/Containers	0.1%	0.1%	355	273
Other Aluminum	0.1%	0.1%	234	244
Other Non-ferrous Metal	0.1%	0.1%	329	305
Food Cans - Tinned	0.1%	0.1%	302	185
Food Cans - Coated	0.0%	0.0%	8	9
White Goods	0.0%	0.0%	0	0
Other Ferrous Metal	2.7%	1.4%	7,515	3,967
R/C Metal	0.9%	0.7%	2,456	1,836
ORGANICS	**12.8%**	**4.7%**	**35,096**	**12,990**
Edible Food Waste- Vegetative	4.0%	2.5%	10,928	6,881
Inedible Food Waste- Vegetative	1.3%	0.8%	3,482	2,237
Edible Food Waste- Meats/Fats/Oils	1.1%	1.0%	3,136	2,672
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.5%	1,294	1,299
Yard/Garden Waste- Leaves and Grass	0.3%	0.5%	937	1,244
Yard/Garden Waste- Prunings	0.4%	0.3%	1,105	957
Animal Manure	0.7%	0.5%	1,970	1,392
Animal Carcasses & Offal	0.0%	0.0%	0	0
Food Processing Wastes	4.3%	4.1%	11,854	11,169
R/C Organics	0.1%	0.1%	390	313
WOOD DEBRIS	**18.1%**	**5.1%**	**49,462**	**13,935**
Natural Wood	0.1%	0.1%	165	257
Treated Wood	0.4%	0.3%	1,047	898
Painted Wood	4.6%	2.9%	12,474	7,824
Dimensional Lumber	3.8%	1.9%	10,528	5,140
Engineered Wood	2.3%	1.2%	6,297	3,322
Pallets & Crates	4.6%	2.8%	12,558	7,733
Other Untreated Wood	0.0%	0.0%	0	0
Wood By-products	1.4%	1.4%	3,805	3,779
R/C Wood Debris	0.9%	0.8%	2,588	2,255
CONSTRUCTION MATERIALS	**17.5%**	**5.9%**	**47,904**	**16,156**
Plastic Lumber	0.0%	0.0%	27	45
Insulation	2.0%	3.2%	5,532	8,802
Asphalt Paving	0.0%	0.0%	0	0
Concrete	3.5%	2.4%	9,583	6,686
Drywall	5.3%	3.5%	14,523	9,655
Carpet	1.3%	1.3%	3,644	3,577
Carpet Padding	0.6%	1.0%	1,749	2,841
Soil, Rocks, & Sand	0.7%	0.8%	1,790	2,306
Asphalt Roofing	0.0%	0.0%	109	111
Plastic Floor Covering	0.0%	0.0%	0	0
Ceramics & Brick	0.3%	0.4%	865	978
R/C Construction Materials	3.7%	2.3%	10,083	6,403
CONSUMER PRODUCTS	**2.7%**	**1.0%**	**7,510**	**2,782**
Televisions - LCD	0.0%	0.0%	0	0
Televisions - CRT	0.0%	0.0%	0	0
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.2%	0.3%	466	760
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.0%	0.0%	0	0
Textiles- Organic	1.4%	0.6%	3,697	1,580
Textiles- Synthetic/Mixed/Unknown	0.6%	0.4%	1,553	1,040
Shoes/Purses/Belts	0.1%	0.1%	181	180
Tires & Other Rubber	0.6%	0.8%	1,613	2,224
Furniture	0.0%	0.0%	0	0
Mattresses	0.0%	0.0%	0	0
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**1.1%**	**0.8%**	**3,036**	**2,058**
Pesticides	0.0%	0.0%	0	0
HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
Compact Florescent Lamps	0.0%	0.0%	4	6
Florescent Tubes	0.0%	0.0%	0	0
Water-based Paint	0.5%	0.7%	1,311	1,933
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	8	13
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	0	0
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	0	0
Caustic Cleaners	0.0%	0.0%	0	0
Dry-cell Batteries- Single Use	0.0%	0.0%	23	27
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	42	68
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.1%	0.2%	292	473
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.3%	0.3%	956	735
Sharps	0.0%	0.0%	2	2
Pharmaceuticals & Vitamins	0.0%	0.0%	5	9
Other Cleaners/Chemicals	0.0%	0.0%	69	113
Personal Care Products	0.0%	0.0%	7	9
Other Potentially Hazardous Wastes	0.1%	0.2%	317	451
RESIDUALS	**4.4%**	**4.0%**	**12,147**	**10,966**
Disposable Diapers	0.3%	0.3%	871	813
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.0%	0	0
Fines/Sorting Residues	0.6%	0.2%	1,562	583
Sludges & Other Special Industrial Wastes	3.5%	4.0%	9,714	11,004

Estimated Origin Specified Disposed Tons	**273,767**	*Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.*
Sample Count	**48**	

Table N10: Southwest WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**23.3%**	**1.9%**	**32,663**	**2,687**
PAPER PACKAGING	**10.8%**	**1.1%**	**15,208**	**1,547**
Newspaper Packaging	0.0%	0.0%	0	0
Cardboard & Kraft Packaging	3.5%	0.9%	4,968	1,313
Mixed/Low-grade Paper Packaging	3.0%	0.4%	4,152	610
Aseptic Containers	0.2%	0.1%	307	109
Gable Top Containers	0.2%	0.1%	345	106
Other Polycoated Packaging	0.1%	0.1%	157	79
Compostable Paper Packaging	3.1%	0.6%	4,320	864
R/C Paper Packaging	0.7%	0.1%	959	202
PAPER PRODUCTS	**12.4%**	**1.5%**	**17,456**	**2,172**
Newspaper Products	0.8%	0.3%	1,067	359
Cardboard & Kraft Paper Products	0.1%	0.1%	84	136
Magazines	0.2%	0.2%	317	216
High-Grade Paper Products	0.1%	0.1%	198	82
Other Groundwood Paper Products	0.0%	0.0%	0	0
Mixed/Low-grade Paper Products	2.5%	0.6%	3,493	816
Compostable Paper Products	8.6%	1.2%	11,999	1,627
R/C Paper Products	0.2%	0.1%	297	161
PLASTIC	**17.2%**	**1.2%**	**24,177**	**1,644**
PLASTIC PACKAGING	**12.6%**	**0.9%**	**17,721**	**1,232**
#1 PETE Plastic Bottles	1.3%	0.2%	1,760	350
#1 PETE Plastic Non-bottles	1.0%	0.2%	1,407	290
#2 HDPE Plastic Natural Bottles	0.4%	0.1%	572	131
#2 HDPE Plastic Jars and Tubs	0.2%	0.1%	230	137
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	463	106
#3 PVC Plastic Packaging	0.0%	0.0%	9	12
#4 LDPE Plastic Packaging	0.0%	0.0%	6	9
#5 PP Plastic Packaging	1.8%	0.4%	2,591	512
#6 PS Plastic Packaging	0.3%	0.1%	381	88
#7 Other/Unknown Plastic Packaging	0.6%	0.1%	898	210
Expanded Polystyrene Packaging	1.1%	0.3%	1,502	440
PLA Compostable Packaging	0.0%	0.0%	9	7
Plastic Merchandise Bags	0.9%	0.1%	1,330	178
Packaging Film Plastic	4.4%	0.5%	6,240	697
Transportation Packaging Film Plastic	0.0%	0.0%	64	37
Flexible Plastic Packaging	0.2%	0.1%	258	77
R/C Plastic Packaging	0.0%	0.0%	1	2
PLASTIC PRODUCTS	**4.6%**	**0.8%**	**6,455**	**1,099**
#1 PETE Plastic Products	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	55	25
#7 Other/Unknown Plastic Products	1.1%	0.3%	1,599	401
PLA Compostable Products	0.0%	0.0%	7	9
Plastic Garbage Bags	2.3%	0.3%	3,186	480
Plastic Non-bag Film Products	0.1%	0.1%	182	170
Bulky Rigid Plastic Products	0.7%	0.6%	960	838
R/C Plastic Products	0.3%	0.1%	467	176
GLASS	**2.4%**	**0.6%**	**3,390**	**786**
Clear Glass Containers	1.4%	0.3%	1,930	412
Green Glass Containers	0.5%	0.3%	704	373
Brown/Other Colored Glass Containers	0.2%	0.1%	271	134
Plate Glass	0.0%	0.0%	0	0
Non-glass Ceramics	0.3%	0.4%	408	516
R/C Glass	0.1%	0.1%	77	78
METAL	**3.7%**	**0.5%**	**5,143**	**722**
Aluminum Beverage Cans	0.5%	0.1%	769	198
Aluminum Foil/Containers	0.3%	0.1%	467	114
Other Aluminum	0.0%	0.0%	37	41
Other Non-ferrous Metal	0.1%	0.2%	198	222
Food Cans - Tinned	1.1%	0.3%	1,612	397
Food Cans - Coated	0.1%	0.1%	193	152
White Goods	0.0%	0.0%	0	0
Other Ferrous Metal	0.8%	0.3%	1,117	410
R/C Metal	0.5%	0.3%	750	464
ORGANICS	**34.5%**	**2.9%**	**48,338**	**4,017**
Edible Food Waste- Vegetative	13.0%	1.9%	18,267	2,721
Inedible Food Waste- Vegetative	8.8%	1.6%	12,372	2,182
Edible Food Waste- Meats/Fats/Oils	2.5%	0.7%	3,510	955
Inedible Food Waste- Meats/Fats/Oils	0.6%	0.2%	817	261
Yard/Garden Waste- Leaves and Grass	0.8%	1.2%	1,155	1,613
Yard/Garden Waste- Prunings	1.5%	1.4%	2,147	2,033
Animal Manure	6.2%	1.9%	8,647	2,687
Animal Carcasses & Offal	0.0%	0.0%	0	0
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	1.0%	0.5%	1,424	713
WOOD DEBRIS	**2.2%**	**1.0%**	**3,134**	**1,440**
Natural Wood	0.1%	0.2%	134	215
Treated Wood	0.1%	0.2%	175	271
Painted Wood	1.0%	0.9%	1,464	1,234
Dimensional Lumber	0.3%	0.2%	483	314
Engineered Wood	0.4%	0.3%	530	450
Pallets & Crates	0.1%	0.2%	158	255
Other Untreated Wood	0.1%	0.1%	113	102
Wood By-products	0.0%	0.0%	0	0
R/C Wood Debris	0.1%	0.0%	77	47
CONSTRUCTION MATERIALS	**1.4%**	**0.9%**	**1,913**	**1,299**
Plastic Lumber	0.0%	0.0%	0	0
Insulation	0.0%	0.0%	17	27
Asphalt Paving	0.0%	0.0%	0	0
Concrete	0.0%	0.0%	0	0
Drywall	0.0%	0.0%	0	0
Carpet	0.4%	0.6%	551	887
Carpet Padding	0.1%	0.2%	140	227
Soil, Rocks, & Sand	0.7%	0.7%	1,029	1,013
Asphalt Roofing	0.0%	0.0%	0	0
Plastic Floor Covering	0.0%	0.0%	0	0
Ceramics & Brick	0.0%	0.1%	50	80
R/C Construction Materials	0.1%	0.1%	127	204
CONSUMER PRODUCTS	**3.8%**	**1.0%**	**5,394**	**1,348**
Televisions - LCD	0.2%	0.4%	343	551
Televisions - CRT	0.0%	0.0%	0	0
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.0%	0.0%	0	0
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.0%	0.0%	0	0
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.0%	0.0%	0	0
Textiles- Organic	2.4%	0.7%	3,378	1,051
Textiles- Synthetic/Mixed/Unknown	0.8%	0.4%	1,150	578
Shoes/Purses/Belts	0.2%	0.2%	291	257
Tires & Other Rubber	0.2%	0.1%	233	205
Furniture	0.0%	0.0%	0	0
Mattresses	0.0%	0.0%	0	0
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**0.6%**	**0.2%**	**870**	**236**
Pesticides	0.0%	0.0%	1	2
HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
Compact Florescent Lamps	0.0%	0.0%	2	4
Florescent Tubes	0.0%	0.0%	0	0
Water-based Paint	0.0%	0.0%	0	0
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	28	40
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.1%	48	78
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	0	0
Caustic Cleaners	0.0%	0.0%	54	59
Dry-cell Batteries- Single Use	0.0%	0.0%	47	30
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.0%	0.0%	21	33
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.1%	0.0%	192	47
Sharps	0.0%	0.0%	8	10
Pharmaceuticals & Vitamins	0.1%	0.1%	113	150
Other Cleaners/Chemicals	0.0%	0.0%	0	0
Personal Care Products	0.2%	0.1%	290	139
Other Potentially Hazardous Wastes	0.0%	0.0%	66	52
RESIDUALS	**10.9%**	**1.9%**	**15,224**	**2,678**
Disposable Diapers	8.5%	2.1%	11,964	2,994
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.0%	0	0
Fines/Sorting Residues	2.3%	0.8%	3,259	1,102
Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
Estimated Origin Specified Disposed Tons			**140,246**	
Sample Count			**24**	

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table N9: Southwest WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	**6.7%**	**2.4%**	**5,774**	**2,075**
PAPER PACKAGING	**4.6%**	**1.7%**	**3,950**	**1,447**
Newspaper Packaging	0.0%	0.0%	0	0
Cardboard & Kraft Packaging	3.4%	1.4%	2,892	1,222
Mixed/Low-grade Paper Packaging	0.5%	0.3%	401	277
Aseptic Containers	0.0%	0.0%	36	29
Gable Top Containers	0.0%	0.0%	23	25
Other Polycoated Packaging	0.0%	0.0%	7	11
Compostable Paper Packaging	0.3%	0.3%	257	297
R/C Paper Packaging	0.4%	0.3%	334	291
PAPER PRODUCTS	**2.1%**	**1.4%**	**1,825**	**1,216**
Newspaper Products	0.1%	0.1%	53	58
Cardboard & Kraft Paper Products	0.0%	0.0%	3	5
Magazines	0.0%	0.0%	38	31
High-Grade Paper Products	0.1%	0.1%	56	64
Other Groundwood Paper Products	0.0%	0.0%	0	0
Mixed/Low-grade Paper Products	0.9%	0.8%	760	664
Compostable Paper Products	1.0%	0.8%	838	660
R/C Paper Products	0.1%	0.1%	77	67
PLASTIC	**8.6%**	**2.6%**	**7,418**	**2,254**
PLASTIC PACKAGING	**3.3%**	**1.6%**	**2,825**	**1,357**
#1 PETE Plastic Bottles	0.2%	0.1%	146	100
#1 PETE Plastic Non-bottles	0.2%	0.1%	137	99
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	51	49
#2 HDPE Plastic Jars and Tubs	1.0%	1.3%	856	1,121
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	50	34
#3 PVC Plastic Packaging	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.1%	0.1%	107	65
#6 PS Plastic Packaging	0.0%	0.0%	13	7
#7 Other/Unknown Plastic Packaging	0.1%	0.0%	56	30
Expanded Polystyrene Packaging	0.6%	0.4%	504	362
PLA Compostable Packaging	0.0%	0.0%	3	4
Plastic Merchandise Bags	0.1%	0.0%	67	39
Packaging Film Plastic	0.4%	0.2%	333	210
Transportation Packaging Film Plastic	0.6%	0.7%	480	609
Flexible Plastic Packaging	0.0%	0.0%	22	18
R/C Plastic Packaging	0.0%	0.0%	0	0
PLASTIC PRODUCTS	**5.3%**	**2.2%**	**4,594**	**1,909**
#1 PETE Plastic Products	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0
#5 PP Plastic Products	0.0%	0.0%	10	16
#6 PS Plastic Products	0.0%	0.0%	5	7
#7 Other/Unknown Plastic Products	0.5%	0.3%	403	245
PLA Compostable Products	0.0%	0.0%	1	1
Plastic Garbage Bags	0.3%	0.2%	238	151
Plastic Non-bag Film Products	0.1%	0.1%	55	61
Bulky Rigid Plastic Products	3.1%	1.5%	2,663	1,263
R/C Plastic Products	1.4%	1.0%	1,219	867
GLASS	**1.4%**	**0.7%**	**1,203**	**599**
Clear Glass Containers	0.4%	0.4%	346	316
Green Glass Containers	0.2%	0.2%	136	133
Brown/Other Colored Glass Containers	0.2%	0.2%	137	153
Plate Glass	0.2%	0.2%	158	164
Non-glass Ceramics	0.2%	0.1%	157	114
R/C Glass	0.3%	0.3%	268	297
METAL	**7.9%**	**3.5%**	**6,839**	**3,022**
Aluminum Beverage Cans	0.2%	0.1%	170	123
Aluminum Foil/Containers	0.1%	0.1%	68	56
Other Aluminum	0.4%	0.2%	340	175
Other Non-ferrous Metal	0.1%	0.1%	90	78
Food Cans - Tinned	0.1%	0.0%	57	38
Food Cans - Coated	0.0%	0.0%	0	0
White Goods	1.2%	1.4%	1,051	1,166
Other Ferrous Metal	1.6%	1.1%	1,411	965
R/C Metal	4.2%	2.7%	3,654	2,317
ORGANICS	**3.6%**	**2.6%**	**3,092**	**2,254**
Edible Food Waste- Vegetative	0.8%	0.9%	714	810
Inedible Food Waste- Vegetative	1.4%	1.0%	1,178	885
Edible Food Waste- Meats/Fats/Oils	0.6%	0.6%	487	489
Inedible Food Waste- Meats/Fats/Oils	0.1%	0.1%	97	101
Yard/Garden Waste- Leaves and Grass	0.3%	0.3%	251	267
Yard/Garden Waste- Prunings	0.1%	0.1%	50	53
Animal Manure	0.2%	0.3%	183	252
Animal Carcasses & Offal	0.0%	0.0%	0	0
Food Processing Wastes	0.0%	0.0%	0	0
R/C Organics	0.2%	0.2%	132	155
WOOD DEBRIS	**37.3%**	**8.4%**	**32,141**	**7,199**
Natural Wood	0.0%	0.0%	9	14
Treated Wood	0.5%	0.6%	450	504
Painted Wood	12.4%	4.8%	10,673	4,113
Dimensional Lumber	6.4%	4.3%	5,534	3,718
Engineered Wood	7.5%	4.2%	6,473	3,602
Pallets & Crates	2.8%	3.9%	2,425	3,334
Other Untreated Wood	0.1%	0.1%	43	66
Wood By-products	0.0%	0.0%	0	0
R/C Wood Debris	7.6%	4.0%	6,533	3,443
CONSTRUCTION MATERIALS	**13.4%**	**6.5%**	**11,540**	**5,629**
Plastic Lumber	0.1%	0.1%	62	63
Insulation	0.2%	0.3%	174	230
Asphalt Paving	0.0%	0.0%	0	0
Concrete	0.5%	0.8%	435	705
Drywall	0.6%	0.9%	512	748
Carpet	1.0%	0.9%	858	739
Carpet Padding	0.0%	0.0%	0	0
Soil, Rocks, & Sand	4.0%	4.4%	3,446	3,784
Asphalt Roofing	3.3%	4.8%	2,860	4,119
Plastic Floor Covering	0.0%	0.0%	0	0
Ceramics & Brick	0.3%	0.4%	295	321
R/C Construction Materials	3.4%	3.0%	2,899	2,569
CONSUMER PRODUCTS	**20.3%**	**7.8%**	**17,490**	**6,683**
Televisions - LCD	0.6%	1.0%	536	867
Televisions - CRT	0.0%	0.0%	0	0
Television Peripherals	0.0%	0.0%	0	0
Computer Monitors - CRT	0.0%	0.0%	0	0
Computer Monitors - LCD	0.0%	0.0%	0	0
Computers	0.4%	0.6%	307	497
Computer Peripherals	0.0%	0.0%	0	0
Computer Printers	0.2%	0.3%	180	292
Audio Equipment	0.0%	0.0%	0	0
Electronic Gaming Equipment	0.0%	0.0%	0	0
Other Consumer Electronics	0.0%	0.0%	0	0
Textiles- Organic	0.6%	0.3%	532	259
Textiles- Synthetic/Mixed/Unknown	1.2%	0.7%	1,017	602
Shoes/Purses/Belts	0.0%	0.0%	38	39
Tires & Other Rubber	0.4%	0.7%	370	574
Furniture	14.7%	7.2%	12,640	6,178
Mattresses	2.2%	2.8%	1,870	2,385
R/C Consumer Products	0.0%	0.0%	0	0
HAZARDOUS AND SPECIAL WASTES	**0.1%**	**0.1%**	**107**	**63**
Pesticides	0.0%	0.0%	0	0
HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
Compact Florescent Lamps	0.0%	0.0%	9	15
Florescent Tubes	0.0%	0.0%	0	0
Water-based Paint	0.0%	0.0%	0	0
Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Water-based Adhesives/Glues	0.0%	0.0%	12	20
Oil-based Paint	0.0%	0.0%	0	0
Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Field & Lawn Markings	0.0%	0.0%	0	0
Primers/Sealings/Coatings	0.0%	0.0%	0	0
Water Repellents & Waterproofers	0.0%	0.0%	0	0
Solvents	0.0%	0.0%	0	0
Caustic Cleaners	0.0%	0.0%	15	25
Dry-cell Batteries- Single Use	0.0%	0.0%	36	40
Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Wet-cell Batteries	0.0%	0.0%	0	0
Gasoline/Kerosene	0.0%	0.0%	0	0
Motor Oil	0.0%	0.0%	0	0
Antifreeze	0.0%	0.0%	0	0
Other Vehicle Fluids	0.0%	0.0%	0	0
Oil Filters	0.0%	0.0%	0	0
Explosives	0.0%	0.0%	0	0
Medical Wastes	0.0%	0.0%	6	8
Sharps	0.0%	0.0%	0	0
Pharmaceuticals & Vitamins	0.0%	0.0%	6	5
Other Cleaners/Chemicals	0.0%	0.0%	0	0
Personal Care Products	0.0%	0.0%	18	29
Other Potentially Hazardous Wastes	0.0%	0.0%	4	4
RESIDUALS	**0.5%**	**0.4%**	**454**	**341**
Disposable Diapers	0.2%	0.2%	154	160
Ash	0.0%	0.0%	0	0
Dust	0.0%	0.1%	40	45
Fines/Sorting Residues	0.3%	0.2%	260	193
Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
Estimated Origin Specified Disposed Tons			**86,059**	
Sample Count			**32**	

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Baseline CIP—recommended phase 1 projects

A requirement for solid waste management planning includes a description of capital project needs over the next 20 years. Below are estimates identified during the Regional Solid Waste System Study (Appendix I).

Table N7: Transfer Station 20 Year—Capital Improvements Program

	Description	2024 Cost Estimate	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033–43
CTR — Phase 1 and 1A Improvements												
Phase 1	Provide onsite queue capacity. Access road on adjacent parcel. Ramp to south entrance to transfer station. New scale with bypass lanes.	$3,500,000	$800,000	$2,700,000	–	–	–	–	–	–	–	–
Phase 1A	Option to expand existing transfer station on west side of existing building. The 11,000 sf expansion would be on existing property	$3,000,000	–	–	$200,000	$2,800,000	–	–	–	–	–	–
Total CTR Improvements (2024$)	–	**$6,500,000**	**$800,000**	**$2,700,000**	**$200,000**	**$2,800,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0/yr**
Annual Budget (Cost in Budget Year)	–	–	**$800,000**	**$2,794,500**	**$214,245**	**$3,104,410**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0/yr**
Accumulated Budget	–	**$6,913,155**	**$800,000**	**$3,594,500**	**$3,808,745**	**$6,913,155**	**$6,913,155**	**$6,913,155**	**$6,913,155**	**$6,913,155**	**$6,913,155**	**$6,913,155/yr**
West Van Transfer Station Improvements		**2024 Cost Estimate**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033–43**
Phase 1 Site Improvements	–											
Access improvements	New exit ramp and entrance off Old Lower River Rd.	$1,400,000	–	–	$400,000	$1,000,000	–	–	–	–	–	–
Phase 2 — Utilities /site work	Water line extension : Retaining structure for top load	$2,000,000	–	–	–	$300,000	$1,700,000	–	–	–	–	–
Phase 2B	Expansion for organics and top load	$6,700,000	–	–	–	–	$1,000,000	$4,000,000	$1,700,000	–	–	–
Phase 3 — New Office Center	Relocate office and new employee parking	$2,200,000	–	–	–	–	–	–	–	$1,100,000	$1,000,000	–
Phase 4 — New Recycle /HHW Center	New Entrance and HHW / Recycle Drop off Center	$3,000,000	–	–	–	–	–	–	–	$1,500,000	$1,500,000	–
Total West Van Improvements (2024 $)	–	**$15,300,000**	**$0**	**$0**	**$400,000**	**$1,300,000**	**$2,700,000**	**$4,000,000**	**$1,700,000**	**$2,600,000**	**$2,500,000**	**$0/yr**
Annual Budget (Cost in Budget Year)	–	–	**$0**	**$0**	**$428,490**	**$1,441,333**	**$3,098,312**	**$4,750,745**	**$2,089,734**	**$3,307,926**	**$3,292,023**	**$0/yr**
Accumulated Budget	–	**$18,408,563**	**$0**	**$0**	**$428,490**	**$1,869,823**	**$4,968,135**	**$9,718,881**	**$11,808,615**	**$15,116,541**	**$18,408,563**	**$18,408,563/yr**
Washougal		**2024 Cost Estimate**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033–43**
Transfer Station Improvements	–											
Site Improvements	–	$600,000	$200,000	$400,000	–	–	–	–	–	–	–	–
Building Expansion	–	$4,100,000	–	$2,000,000	$2,100,000	–	–	–	–	–	–	–
Total Washougal Improvements (2024 $)	–	**$4,700,000**	**$200,000**	**$2,400,000**	**$2,100,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0/yr**
Actual Budget (Cost in Budget Year)	–	–	**$200,000**	**$2,484,000**	**$2,249,573**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0/yr**
Accumulated Budget	–	**$4,933,573**	**$200,000**	**$2,684,000**	**$4,933,573**	**$4,933,573**	**$4,933,573**	**$4,933,573**	**$4,933,573**	**$4,933,573**	**$4,933,573**	**$4,933,573/yr**
Total Improvements (2024 $)		**$26,500,000**	**$1,000,000**	**$5,100,000**	**$2,700,000**	**$4,100,000**	**$2,700,000**	**$4,000,000**	**$1,700,000**	**$2,600,000**	**$2,500,000**	**$0/yr**
Accumulated CIP—Revenue Requirements in Budget Year		–	**$1,000,000**	**$5,278,500**	**$2,892,308**	**$4,545,743**	**$3,098,312**	**$4,750,745**	**$2,089,734**	**$3,307,926**	**$3,292,023**	**$0/yr**
Total Accumulated Budget		**$30,255,291**	**$1,000,000**	**$6,278,500**	**$9,170,808**	**$13,716,551**	**$16,814,863**	**$21,565,608**	**$23,655,342**	**$26,963,268**	**$30,255,291**	**$30,255,291/yr**

Phase 2 — Facilities Plan—Key Assumptions (2023)

CTR — Phase 1: 1. Complete site evaluation and design in 2024 | 2. Complete permitting and begin construction by end of 2024 | 3. Complete Construction of Phase 1A in 2027 if County decides not to expand CTR onto adjacent parcel | 4. Assumes County decides to site and build satellite Transfer Station and dedicate CTR to commercial only | 5. If by 2026 County sites new transfer station phase 1A would not be constructed.

West Van: 1. West Van start date has been set at 2026 due to staff capacity concerns however every attempt to begin work in 2024 should be made | 2. Phase 1 and 2 should proceed to permitting and design in 2026 | 3. If by end of 2024 the MRF is to remain for extended period (3-5 years); then design and construction should proceed with Option 2A or 2B | 4. CIP assumes building Option 2B — full expansion of MRF building to manage organics and increase bale storage; however if the decision if to build only 2A the budget can re deuced by $3M | 5. All CIP improvements to be in place by 2030

Washougal: 1. Planning and design of Washougal Improvements should proceed in 2023 | 2. Site plan assumes new office complex and new location. | 3. If the final plan is revised to relocate existing office the budget is expected to be reduced by about $600,000

O

APPENDIX O:
List of education and outreach programs

Summary of existing solid waste education and outreach programs			
Program Description	**Led by**	**Audience**	**Delivery method**
Workshop series – educating community members on waste reduction, composting, and green cleaning.	Composter Recycler	Residents	Virtual In person Supplies
Volunteer training and management — Annual volunteer training concerning composting, waste reduction, and green cleaning; manages volunteer "payback" efforts	Composter Recycler	Residents	Virtual In person
Resources for home composting systems — backyard compost bins, worm bins, bokashi buckets, websites, social media, newsletters, handouts	Composter Recycler	Residents	Web-based
Compost demonstration sites – field training sessions showing a variety of composting methods and equipment	Composter Recycler	Residents	In person
Online resources for curbside food waste collection – websites, social media, newsletters, handouts	Green Business Green Schools	Businesses Schools	Web-based
Community hub composting — Provides residents with public access to food waste carts for composting.	Green Business Green Neighbors	Businesses Schools Residents	In person Supplies Web-based
Classroom worm bin lessons — Provide lessons to students and classroom worm bins	Green Schools	Schools	In person Supplies
Business support – Provides comprehensive educational training materials, containers, sort tables, and assistance to businesses implementing on-site waste prevention and food waste collection programs.	Green Business	Businesses	In person Printed materials Supplies Web-based
School cafeteria support — Provides comprehensive educational training materials, containers, sort tables, share tables, and assistance to schools implementing on-site waste prevention and food waste collection programs in cafeterias.	Green Schools	Schools	In person Printed materials Supplies
Food Waste Prevention Week – annual education campaign	Green Neighbors	Residents	In person Web-based
Recycling 101 and Recycling 201 Presentations – Provides residents with information about waste prevention, recycling, curbside organics, and household hazardous waste.	City of Vancouver Waste Connections Green Neighbors	Residents	In-person
Classroom curriculum — Provide lessons on sorting materials, recycling process, and composting	Green Schools	Schools	In person Printed materials
Waste prevention, recycling and composting assistance — Provide no-cost site visits, waste audits, and consultations to businesses and schools	Green Business Green Schools Waste Connections	Businesses Schools	In person Printed materials Supplies
Recycling and composting resources – Provide instructional guides, signage and videos for schools and businesses	Green Business Green Schools	Businesses Schools	In person Supplies
Contamination reduction and recycling advertising and social media campaigns	Green Neighbors	Residents	Printed ads Web-based
West Van Material Recovery Center tours	Waste Connections	Businesses Residents Schools	In person
Multifamily support – Supports property managers/owners and provides educational resources to residents including recycling bags, magnets and recycling instructions.	City of Vancouver Waste Connections Green Neighbors	Businesses Residents	In person Web-based

Summary of existing solid waste education and outreach programs			
Program Description	**Led by**	**Audience**	**Delivery method**
Recycling Done Right Clean Cart Program – During this year-round program, Recycling Advocates inspect residential recycle carts for contamination and provide customer-specific recycling education.	City of Vancouver Waste Connections	Residents	In person Printed materials
Annual Recycle Right newsletter	City of Vancouver Waste Connections Green Neighbors	Residents	Printed Web-based
RecycleRight app – Provides residents with reuse, recycling and disposal options, in-app reminders and alerts, and collection schedules	City of Vancouver	Residents	Web-based
Resources/educational materials – In partnership with the Master Gardeners Program of WSU, circulate information on natural gardening	WSU Extension Master Gardeners Green Neighbors	Residents	Printed materials
Nontoxic gardening workshops	WSU Extension Master Gardeners	Residents	In person Virtual
Natural Gardens at Pacific Community Park – Support the Natural Gardens and connecting volunteers to support maintenance. Maintain interactive map.	WSU Extension Master Gardeners	Residents	In person Virtual
Natural Garden Tour – public self-guided tour of natural gardens maintained without the use of synthetic chemicals. Gardens include a wide variety of features and innovative techniques to demonstrate successful practices which limit, or eliminate, the use of hazardous materials.	Composter Recyclers WSU Extension Master Gardeners Green Neighbors	Residents	In person Advertisement Digital campaigns
Backyard Habitat Certification – provides residents with education, support, guidance and assistance with the goal of achieving certification as a backyard habitat for their property. Backyard habitat areas are maintained without the use of household hazardous materials including pesticides, herbicides, insecticides and fungicides common in conventional gardening and landscaping practices.	Columbia Land Trust Green Neighbors	Residents	In person
Secure Your Load – provides educational messaging and load securement equipment and tools (cargo nets and rachet straps as provided by WA Dept of Ecology) to residents hauling unsecured loads to the transfer stations. Unsecured loads are a public safety concern as roadside litter pollutes the environment, contaminates our waterways and pose dangerous consequences for drivers encountering unavoidable debris on roadways.	WA Dept of Ecology Clark County	Residents Businesses	In person Advertisement Digital campaigns Printed material Supplies
Battery drop-off outreach – offering safe disposal resources and educational materials and local businesses collecting batteries. Advertise and promote drop-off locations to residents.	Green Business Green Neighbors	Businesses Residents	In person Supplies Printed materials
Event tabling – Attend community events and host a table to provide resources and answer questions about recycling and composting and promote upcoming workshops and classes	Composter Recycler Green Neighbors	Residents	In person
Green Awards – Recognize the accomplishments of individuals and organizations and celebrate their commitment to reducing harmful environmental impacts, educating others, and giving back to the community.	Green Business Green Schools	Residents Businesses Schools	In person Web-based

Summary of existing solid waste education and outreach programs			
Program Description	**Led by**	**Audience**	**Delivery method**
Student Summits — events for student green teams to learn more about sustainability and environmental justice and connect with other green teams working on sustainability projects and initiatives at their schools	Green Schools	Students	In person Virtual
WasteBusters – online pledge program to promote waste prevention	Green Neighbors	Residents	Web-based
Green Business certification – issues certification to businesses meeting criteria for sustainable practices.	Green Business	Businesses	In person
Morning Blend — Coordinate and support informal one hour peer to peer meetings for businesses to share best practices	Green Business	Businesses	In person
Fall Leaves Coupons – Coordinated outreach effort to connect Vancouver and Clark County residents with an annual coupon for free leaf disposal.	City of Vancouver Clark County Public Works Green Neighbors	Residents	Printed materials In person
RecycleRight app and Recycling A-Z Directory — Maintain the web and mobile based resource to assist residents in proper recycling of hard to recycle items. Through this resource residents can view, download, and print collection schedules, request collection of bulky items or electronic waste, and sign up for alerts.	City of Vancouver Waste Connections Columbia Resource Company Green Neighbors	Residents	Web-based

P

APPENDIX P: SWAC bylaws

CLARK COUNTY
SOLID WASTE ADVISORY COMMISSION
BYLAWS AND RULES

I. PURPOSE

A. The Clark County Solid Waste Advisory Commission (SWAC) has been established by Chapter 24.16 of the Clark County Code, pursuant to RCW 70A.205.110. The powers, purpose, and scope of the Clark County SWAC shall be limited to those described in Chapters 24.12.110 and 24.16.020 of the Clark County Code and set forth in these bylaws.

II. COMPOSITION AND TERMS

A. Members - The SWAC shall be composed of at least ten (10) members who shall provide ongoing public input, coordination, and information exchange between the SWAC and the groups they represent and serve without compensation.

B. Appointment - Members shall be appointed by the Clark County Councilors with recommendations from the Solid Waste Program staff ("Staff') and shall represent the following interests

- City of Vancouver
- Clark County Business
- Small Cities & Towns
- Solid Waste Industry
- Public Interest Groups
- North Clark County
- Southeast Clark County
- Southwest Clark County
- County-at-Large
- Agriculture

C. Terms - Each member's term shall be for three (3) years' duration, and all vacancies shall be filled within sixty (60) days. Members may be reappointed to serve consecutive terms.

III. OFFICERS

A. The officers of SWAC shall consist of a Chair and Vice-Chair elected by a majority of the appointed members of SWAC.

B. The election of officers shall take place when an office becomes vacant, either at the current officer's last meeting in office, or the meeting immediately following the notice of a vacancy of office.

C. In the event of a vacancy in the position of Chair, the Vice-Chair will assume the position of Chair to complete the remainder of the Chair's term. In the event of a vacancy in the position of Vice-Chair due to the Vice-Chair assuming the position of Chair or for any other reason, the Vice-Chair position shall be replaced by majority vote of all members of SWAC to complete the remainder of the Vice-Chair's term.

D. The term for each officer shall be two years unless the officer's position on SWAC expires or becomes vacant earlier.

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E. There is no limit to the number of terms an officer may serve.

IV. ATTENDANCE

A. Members will notify the Chair and Staff if the member is unable to attend and provide reason, if no reason or notification is provided the absence shall be considered unexcused.

B. In the event a member is absent from over 50 percent of all meetings during a twelve (12) month period or has accrued two (2) or more unexcused absences, that member shall lose his/her position on SWAC, barring exceptional circumstances that will be considered on an individual basis by the Officers and Staff.

V. MEETINGS

A. Regular meetings of SWAC will be held quarterly on the first Thursday with a minimum of four (4) meetings per year held in February, May, August, and November.

B. Special meetings may be called by the Chair or by majority vote of the commission.

C. When expedient and/or necessary, SWAC meetings may be held virtually via available technology(ies) with notification and communication following regular processes.

D. Informal or extra meetings of the SWAC which are educationally focused or that incorporate site tours towards the objective of familiarizing members with background, facilities or programs may be scheduled from time to time, or on a periodic schedule, as warranted.

E. A meeting may be canceled by the Chair for lack of a quorum, scheduling conflicts, or lack of need to meet.

F. The conduct of meetings shall be governed by Robert's Rules of Order, unless these bylaws conflict, in which case these bylaws shall supersede.

G. The Chair shall preside over the meetings of SWAC. In the absence of the Chair, the Vice-Chair shall preside. In the absence of both officers, the members present shall select from among themselves a Chair Pro-Tem who shall preside over the meeting until the return of one of the officers.

H. Quorum -A simple majority of filled seats.

I. Voting

i. Minutes of previous meetings may be approved by majority vote of the members present at the meeting for which the minutes were prepared.

ii. Approval of all other actions will require a majority vote of the entire membership of SWAC.

iii. A vote may be taken by email with the approval of the Chair.

iv. In the event of a tie, the Chair will decide the vote.

VI. COMMITTEES

A. The SWAC may choose to form standing or ad hoc committees to accomplish particular assignments and purposes related to either optimal functioning of the SWAC or in support of policy positions relevant to the Clark County Solid Waste Management Program. Examples of standing committees includes recruitment, or review and input on state legislative proposals and priorities. Ad hoc roles for individual or multiple SWAC members might include support to staff in the review of consultant projects or in the selection of vendors.

B. Standing Committees shall be established through approval of a Charter which is developed and reviewed, then adopted by the full SWAC membership by vote at a regular or special meeting or through email. Individuals or multiple SWAC members agreeing to participate in an ad hoc role for a limited term may be noted in the meeting minutes following a statement of the purpose and agreement by an appointed SWAC member(s) to participate in a specific project that may require additional time.

VII. STAFF

A. The SWAC shall be staffed by the Clark County Solid Waste Program, as necessary, to provide support to the SWAC.

B. Solid Waste Program Staff shall serve in a professional capacity as the SWAC's technical advisory and administrative officer/ s.

C. Minutes will be prepared by Staff and distributed prior to the next regularly scheduled meeting.

D. Agendas will be prepared by Staff from input from the Chair.

i. Staff will engage with Chair one month prior to regular meetings, to identify agenda items.

VIII. COMMUNICATIONS

A. Communications related to SWAC topics or the Solid Waste Program, outside of meetings, by a SWAC member to outside groups, policy makers, or the media shall be directed through the SWAC Chair and the Solid Waste Program Manager, unless in an assigned capacity as a SWAC representative.

B. Communications by SWAC members with Clark County staff, related to SWAC topics, shall be directed through the Chair and the Solid Waste Program Manager.

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C. SWAC members shall keep any confidential information acquired during their service protected and secured.

IX. AMENDMENTS

A. These Bylaws and Rules may be amended at any regular or special meeting of SWAC by majority vote of the entire SWAC membership. Amendments should be submitted in writing for discussion prior to the meeting. Final action will not be taken until a subsequent meeting. These bylaws will be reviewed at least every two years (normally odd years) at the Spring meeting.

X. SEVERANCE CLAUSE

A. Should any portion of these bylaws be declared unconstitutional or otherwise contrary to law, such decision shall not affect the validity of the remaining portion of these Bylaws and Rules.

Revised – March 17, 2021

These Bylaws and Rules are hereby amended and adopted in a duly noticed meeting held on May 6, 2021, by a majority vote by a majority of the SWAC members.

SWAC Chair _____ Date 05/17/21

APPENDIX Q: RSWSSC bylaws

Regional Solid Waste System Steering Committee
Bylaws

Article I.
Membership

The Regional Solid Waste System Steering Committee (RSWSSC) shall be comprised of the Public Works Directors or their designees from the Cities of, Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, the town of Yacolt and the Public Health Director for Clark County which is the lead agency for the regional effort. Members must be a signatory to an inter-local agreement with Clark County.

Article II.
Meetings of Members

Members shall meet semiannually throughout the year. Special meetings may be called by three members with at least 21 days notice to the lead agency who will inform all members. No business shall be conducted at a meeting unless a quorum is present. A quorum is defined as 50% of the membership plus one.

At least annually, the RSWSSC will review the recommendations set forth in the Comprehensive Solid Waste Management Plan so that necessary program funding may be incorporated into budgets and the results evaluated.

Article III.
Purpose of Committee

A project of the RSWSSC is the assessment and study of the practicality, advantages, disadvantages, and cost of forming a separate solid waste district, or other organizational structure(s), that would improve service to citizens and further the objectives of our regional solid waste program.

The meetings of the RSWSSC shall be a forum whereby system members may share information pertinent to the efficient and safe disposal of solid waste and efforts to reduce or divert solid waste from the landfill.

RSWSSC meetings are an opportunity for members to articulate their organizations' priorities so that both the shared and divergent priorities receive due professional consideration among partners in the system, thereby providing sound direction for the development and maintenance of the Regional Solid Waste System.

The RSWSSC will provide recommendations to policy-makers and elected officials on the budget process and monitor progress towards accomplishing the priorities for waste reduction, waste recycling, and other programs and goals set forth in the Comprehensive Solid Waste Management Plan, and shall play an important role in matters related to development of the Regional Solid Waste System.

The RSWSC members will have sufficient familiarity with regional programs and technical issues to provide knowledgeable review and comment into the following activities:

- Annual work plan process.
- Coordinated efforts to develop and bid contracts related to solid waste planning, programs or logistical systems.
- Initiatives to review and test technological advances.
- Program marketing efforts.

Article IV
Powers and Duties of the Committee

- Decision making process on special waste issues that are not clearly addressed under the existing collection, transfer and disposal contracts.
- All decisions by the group must be approved by a 2/3 vote of the members present including the lead agency.
- Develop an emergency management and response plan including a system for managing disaster debris and alternative disposal options
- Develop mutual aid contracts and/or joint vendor contracts – share resources and support.
- Address jurisdictional authority and responsibility left unclear by existing agreements and contracts.
- Participate in long term planning guidelines for development of SWMP.
- Implement the plan: annual review and coordinate budget development
- Receive an annual report to the committee from staff.

Article V
Bylaw Changes

- No change may be made to these bylaws that is in conflict with any written agreement or contract between the parties or is in conflict with the adopted SWMP.
- Changes to these bylaws require a unanimous vote of all current members.



R

APPENDIX R: Ecology compliance checklist

Solid Waste Management Planning Element	Regulation or Ordinance	Location in plan
A detailed inventory and description of all existing solid waste handling facilities including an deficiencies in meeting current solid waste handling needs.	RCW 70A.205.045(1)	***Section 10.2*** Conditions assessment
The estimated 20 year needs assessment for solid waste handling facilities	RCW 70A.205.045(2)	***RSWSS Appendix I*** ***Appendix N***
Review of federal, state, and local regulations and ordinances related to solid waste planning	RCW 70A.205.045(3)(a)	***Section 1.4*** Required content ***Appendix F***
Consideration given to the comprehensive land use plan of each jurisdiction	RCW 70A.205.045(3)(b)	***Section 1.6*** Relationship to other plans
Plan supportive of state's solid waste management plan and solid waste priorities	Recommended by Ecology	***Section 1.6*** Relationship to other plans
Financing Solid Waste Infrastructure and Operations – Six year capital program for solid waste facilities	RCW 70A.205.045 (3)(c)	***Section 11.9*** Capital needs and financing plan ***Appendix I***
Financing Solid Waste Infrastructure and Operations – Plan for financing both capital and operational expenditures	RCW 70A.205.045 (3)(d)	***Chapter 11***: Funding and financing ***Appendix I***
Surveillance and control — permitting solid waste facilities, address illegal dumping and accumulation, enforcement	RCW 70A.205.045 (4)	***Chapter 3***: Enforcement
"Waste collection – Description of service areas and needs for each jurisdiction - WUTC or local - contracts - population density of each area served - projected needs of each jurisdiction for next 6 years"	RCW 70A.205 (5)	***Chapter 9***: Solid waste collection
Waste collection – Determination of service level (urban and rural designation)	RCW 70A.205.050	***Section 9.2*** Urban-rural designation
Waste reduction and recycling programs — Reduce waste generated	RCW 70A.205.045 (6)	***Chapter 4***: Waste reduction ***Appendix O***
Waste reduction and recycling programs — Incentives and mechanisms for source separation	RCW 70A.205.045 (6)	***Chapter 5***: Recycling
Waste reduction and recycling programs — Recycling opportunities	RCW 70A.205.045 (6)	***Section 5.5*** Existing recycling education and outreach programs
Identification and prioritization of waste reduction strategies	RCW 70A.205.045(7) (a)	***Chapter 4***: Waste reduction ***Chapter 6***: Organics
Recycling and waste diversion – Urban services (must include source separation)	RCW 70A.205.045 (7)(b)(i)	***Chapter 5***: Recycling
Recycling and waste diversion – Rural services (must include source separation)	RCW 70A.205.045 (7)(b)(i)	***Chapter 5***: Recycling
Recycling and waste diversion – Non-residential monitoring	RCW 70A.205.045 (7)(b)(ii)	***Chapter 5***: Recycling
Recycling and waste diversion – Organics management	RCW 70A.205.045 (7)(b)(iii)	***Chapter 6***: Organics ***Chapter 9***: Solid waste collection

Solid Waste Management Planning Element	Regulation or Ordinance	Location in plan
Recycling and waste diversion – Education programs	RCW 70A.205.045 (7)(b)(iv)	Embedded into chapters, intro to green programs ***Appendix O***
Recycling and waste diversion – Designation of recyclable materials	RCW 70A.205.045(7)(c)	***Section 5.3*** Designated recyclable material list ***Appendix L***
Recycling and waste diversion – Process for modifying list	Recommended by Ecology	***Section 5.3*** Designated recyclable material list
Recycling and waste diversion – Description of markets	RCW 70A.205.045(7)(c)	***Section 5.3*** Designated recyclable material list
Recycling and waste diversion – Description of waste composition	RCW 70A.205.045(7)(c)	***Section 5.2*** Conditions assessment ***Appendix N***
Assessment of plan costs on solid waste collection (WUTC review)	RCW 70A.205.045 (8)	***Appendix C***
Facility siting requirements	RCW 70A.205.110 & RCW 70A.205.045 (9)	***Appendix I***
Contamination reduction and outreach plan	RCW 70A.205.045 (10)	***Section 5.4*** Contamination reduction and outreach plan
SEPA documentation	Required by Ecology	***Appendix B***
Interlocal agreements	Required by Ecology	***Appendix D***
Resolution of plan adoption from all jurisdictions	Required by Ecology	***Appendix E***
SWAC participation	RCW 70A.205.110	***Section 1.4*** Required content ***Section 1.8*** The Solid Waste Advisory Committee
Evidence of public meeting(s)	Required by Ecology	***Section 1.4*** Required content
Change log of comments and responses from Ecology and WUTC review	Required by Ecology	***Appendix S***
Locally defined amendment and revision process	Recommended by Ecology	***Section 1.11*** Process of updating the plan
SWAC Bylaws	Recommended by Ecology	***Appendix P***
RSWSSC Bylaws	Recommended by Ecology	***Appendix Q***
Moderate risk waste plan	RCW 70A.300.310	***Chapter 7***: Moderate risk wastes

S

APPENDIX S: Ecology comments

2025–2030 Clark County COMPREHENSIVE SOLID AND HAZARDOUS WASTE MANAGEMENT PLAN (Plan)

This review is grouped into four sections

- Section A – Required revisions to meet the minimum requirements for Plan approval.
- Section B – Recommended revisions to expand on or update information in the Plan and improve consistency with local Plans statewide.
- Section C – Minor edits to correct typos and improve clarity and readability.
- Section D – What to include in your final submittal packet.

Section A: Revisions required for Plan approval

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
1	Appendix C, pg. 212	**Utilities and Transportation Commission (UTC) six-year cost assessment** During the UTC's review of the cost assessment questionnaire (CAQ), it was found that the estimated tip/disposal fee forecast section did not provide the required fee data. The UTC was then provided with an updated CAQ and completed their review. Per previous communication from the UTC and Ecology, remove "in contract negotiations – determining tip fees now" and replace with the required data provided to the UTC during their review. Additionally, the CAQ submitted only covered years 2023-2028. Please add years 2029 and 2030 with the required data from the updated CAQ provided to the UTC. Finally, please discuss if impacts from the new contract are anticipated to affect the numbers provided to UTC, and if so, what that impact may look like.	Edits can be found in ***Appendix C – page 232*** Removed "in contract negotiations…" Added years 2029 and 2030 Updated 2025 MSW tip fees to actual instead of projection. Since the fee adjustments are based on CPI and PAAD 5, these are estimates. Used an updated percentage to estimate future tip fees based on 2024 increases (4.55%). Updated the bottom of the UTC questionnaire to reflect edits in GRAM email sent 11/5/24.
2	Chapter 5 Recycling, 5.2 Conditions Assessment, pg. 59	**Description of waste composition** In Appendix R, Ecology Checklist, description of waste composition is stated to be located in section 5.2 of the Plan. In this section waste composition is discussed generally as changing due to various conditions, but no actual waste composition is shown. Add detailed waste composition descriptions in the form of text or a data table per RCW 70A.205.045(7)(c) or reference the appendix that this data is located in. Ecology highly recommends the use of the Washington Waste Characterization Study (2020 – 2021) for this section and discourages the use of the 2012 data. The Washington Waste Characterization Study (2020-2021) sampled in Clark County. Insertion of pages 89-93 of the study into the Plan would largely satisfy this requirement. The Plan states, "...from predefined waste generating groups..." in both Appendix N and in this section but does not identify who the generators are. Please identify the predefined generators.	While we intentionally omitted the 2020-2021 data as it was not representative of the entire regional system, we understand the desire for updated numbers and have added the specified tables to ***Appendix N: Clark County municipal solid waste data***. Text was added at the end of section ***5.2 on page 59*** to introduce the tables and refer to the appendix. Added (e.g. single-family, multifamily, commercial) to both areas mentioned. ***Pages 60*** and ***510***.
3	Chapter 5 Recycling, 5.3 Designated recyclable materials list, pg. 63	**Designated Recyclables List: process for modifying, etc.** On page 64 it says batteries are not on the list, but on page 63, "Household batteries" is one of the bullets. Please clarify. There is also a Designated Recyclables List in Appendix L. Please reference Appendix L here and if there will be two lists, explain why and the differences between them. The same should be done with the list found in the (updated through 2030) UTC Cost Assessment Questionnaire. As noted in comment 4 regarding the Organics Management Laws, the Designated Recyclables List must include Organic Materials starting in at least 2027, and specifically include food starting in at least 2030. This pertains to those areas in Organics Recycling Collection Areas. From a residential collection viewpoint, the UTC looks to this list to ensure the g-certificated hauler is in compliance with your Plan by collecting the specified materials. From a non-residential viewpoint, the UTC also looks to what is identified as a recyclable material in the Plan. That is because landfill-bound waste generated from non-residential sources in g-certificate-served areas belongs to the g-certificated hauler. Only materials identified as a recyclable material in the Plan may be picked up by a different hauler for recycling via Chapter 81.80 RCW. The list as currently written is only for single-family curbside recycling. Please include mention of non-residential recyclable materials, including at least organic materials and food per the above 2027 and 2030 deadlines. There is mention of support for commercial composting in areas such as section 6.4, but discussion near the Designated Recyclables List would be helpful. In Appendix R, Ecology Checklist, a process for modifying the list is stated to be in section 5.3 of the Plan but does not seem to be there. Update Plan to include language on a process for modifying the designated recyclables list. An example process can be found in the Thurston County Solid Waste Management Plan for Years 2021 to 2026 pg. 85 of the Plan. The Guidelines for Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions also offers an example process at the end of Appendix F. also offers an example process at the end of Appendix F.	Removed discrepancy on the first sentence, second paragraph of ***page 64*** Appendix L was referenced in the last sentence of the first paragraph on ***page 64***. Updated language to highlight more. Add "organic materials/food (see Chapter 6: Organics) to the designated recyclables list on ***page 64***. Replaced the lead into the list of designated recyclables to be "residential and commercial services:" on ***page 64*** Some of this language was included in the Description of markets section. Updated the section to include Process for modifying the designated recyclable list as a separate section with separate heading for clarity as well as added additional information to show it will be managed through a review process. ***Page 65***

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
4	Chapter 6 Organics, pg. 74	**Organics Management Law 1.0 & 2.0** RCW 70A.205.040(3)(a) requires Solid Waste Management Plans (SWMPs) developed, updated, or amended after July 1, 2024, to consider transition to collection requirements in RCW 70A.205.540, as well as identifying both priority areas to site organic management facilities and volumetric capacity required to manage the County's organic materials consistent with the goals of RCW 70A.205.007. There is some discussion in section 6.4, however, please do the following to meet the requirements. More detail may be found in the draft Guidelines for Siting, Capacity, and ORCAs on Box. • Priority areas for organic materials management facilities: Identify specific area(s) within Clark County that fit the criteria as described in RCW 70A.205.040(3)(a)(i). A map is recommended, but not required. Please take the following steps to ensure identified sites are not in overburdened communities. · First, an organics management facility should not be in any of the 16 areas identified as overburdened communities based on total levels of cumulative air pollution. The list of areas can be found on Ecology's Improving air quality in overburdened communities webpage. · Secondly, use the Council on Environmental Quality's Climate and Economic Justice Screening Tool, or CJEST. The addresses of potential sites should be entered into the CJEST tool. The tool will immediately identify if the identified location is disadvantaged. If it is identified as disadvantaged, an organics management facility should not be sited at that location. The CJEST tool assumes that if a location has at least one environmental burden and an associated socioeconomic burden, the community is identified as disadvantaged. • Capacity needed: Identify the organic materials management facility volumetric capacity required to support the County in reaching the goal to reduce annual organics going to landfill by 75% compared to 2015 levels. To view Ecology's approximation of the volume of 75% of the organic materials Clark County disposed of in 2015, see the Estimated 75% of County OM Disposal in 2015 spreadsheet on Box. • Communicate the above to your Planning Dept. for use in the Comprehensive Plan: Show the communication between the leads on this Plan and the leads for the Clark County Comprehensive Plan regarding the above, so they may use it to fulfill their obligation to reflect this in the Comprehensive Plan. • Plan ahead for meeting Organics Recycling Collection Area (ORCA) obligations: To show consideration of the transition to the requirements of RCW 70A.205.540, first look at the Organics Recycling Collection Areas map and related Local Government Requirements Workbook to help distinguish the areas where the requirements will apply. Then, for each Organics Recycling Collection Area, show how the County and its city partners intend to meet the requirements that phase in during 2027 and 2030. Which areas plan to apply for an exemption from Ecology, and on what grounds? What contracts or ordinances will need drafted? Etc. Also consider if ORCA boundaries might change during the years covered by your Plan. For example, are any jurisdictions on the cusp of the 25,000-population threshold? Include in your Plan the intention to check the map and workbook annually and bring any new areas into compliance in a timely manner. • As part of ORCA planning, check your Designated Recyclables List: Ensure your Designated Recyclables List includes organics, and includes food waste starting at least in 2030. This positions the County to comply with the ORCA requirements. Note that designating an item as recyclable is not the same as stating it is collected in some or all of your planning area. On the residential side, a g-certificated hauler must comply with services as outlined in a Solid Waste Management Plan, and thus this is important for provision of the ORCA services needed in 2027 and 2030. On the non-residential side, designating a material as recyclable in a Solid Waste Management Plan ensures a transporter of recyclables seeking to collect these materials from non-residential sources may do so under Chapter 81.80 RCW. A summary of Organics Management Law 1.0 and 2.0 can be found here: Organics Management Law - Washington State Department of Ecology. Other resources in regards to Plan development can be found in Ecology's Box library under, Organics Management Laws & Resources.	***Chapter 6*** in its entirety has been rewritten to incorporate the identified changes in section 6.3 Organics management law. Note that the Council on Environmental Quality's resource was not able to be opened by the link provided. Nor was it available when attempting a general search online.

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
5	Chapter 9 Solid Waste Collection, pg. 124	**Population density of each area served** In Appendix R, Ecology Checklist, population density of each area served is stated to be located in Chapter 9 of the Plan, but it is not clearly stated anywhere in the chapter. Add clear information on population density of each area served per RCW 70A.205.045(5)(c). A great place to add it would be in or near Table 2.2.1. Population density by county and city/town can be found in the tables on this Office of Financial Management (OFM) webpage. To find the population density of the unincorporated area, Ecology summed the square miles of the cities as shown in the tables and subtracted that from the county area. Then we divided the city population (available on this other OFM webpage) by the square miles of unincorporated area, and got 451.5 persons per square mile. This density could be used as an approximation or starting point for the population densities of the areas served by the g-certificated haulers. Ecology has provided the starting population density data for you that can be found in the Clark County 's Box folder under Data.	Table added to ***page 32***
6	Chapter 9 Solid Waste Collection, 9.2 Conditions Assessment, pg. 125	**Urban vs rural and the service levels** As noted in Section 9.2, RCW 70A.205.045(7)(b)(i) requires certain levels of recycling service, depending on if an area is designated as urban or rural. Section 9.2 does not provide detail regarding which areas are designated urban or rural, nor if each area is receiving the minimum services required per RCW 70A.205.045(7)(b)(i). It appears from the Plan that curbside recycling is offered to all residences, including multifamily, in all incorporated and unincorporated areas countywide. If this is correct, then please add a statement to that effect to show all areas are receiving adequate services to meet RCW 70A.205.045(7)(b)(i). A closely related RCW is 70A.205.050. While Section 9.2 notes how Clark County would determine if an area is urban or rural in general terms, it stops short of actually clearly defining those criteria, nor doing any such designation of areas. It may be useful to use the Comprehensive Plan map and its coding of areas as urban or rural, with some clarification as needed. This would allow you to default to the Comprehensive Plan's criteria, which almost certainly align with the criteria as outlined in 70A.205.050. There are other options, but at the end of the day, the Plan needs to convey which portions of the planning area are designated as urban, and which are rural, and the criteria by which that determination was made (which may be broadly stated if referring to the County Comprehensive Plan).	Updated entire ***section 9.2*** Urban-rural designation for clarity and to provide link to the Clark County Comprehensive Plan maps. ***Page 135***
7	Appendix C of Appendix I, page, pg. 443	**Make legible the summarized financial data in the Regional Solid Waste System Study** Appendix C of Appendix I, which would give the financial estimate for the 20-year capital improvements program, is illegible. Please provide the table in a different format or ensure it can be read. This helps satisfy both RCW 70A.205.045(2) and RCW 70A.205.045(3)(c).	***Appendix N*** was updated to include this table in a new format to make it legible. The table as shown in Appendix I remains as that was part of the final report.
8	Chapter 11 Funding and Financing, pg. 158, and Chapter 12 Implementation Schedule, 12.3 Implementation Schedule pg. 171	**Funding the solid waste system – six years** While the Plan adequately identifies facility needs and the capital improvement costs for the planning period mainly via The Summary of Phase 1 Report, Regional Solid Waste System Study presented as Appendix I of the Plan, the Plan needs more in regard to the operations. This should show revenues and expenditures during the planning period. For an example, see Kitsap County's Solid and Hazardous Waste Plan 2019-2022. Table 12.3.1 discusses recommendations/actions and their timeline but project costs are not included, despite introductory text implying it would. This may be one area to provide the data.	The entire ***chapter 11*** has been updated to align with the newly signed Master Service Agreement. Removed reference to cost from ***table 12.3***. Added notes for next review to add a cost column to this table.

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
9	Various locations within the Plan	**New CRC Contract** During Ecology's review of the Plan, a new contract with CRC was negotiated with Clark County and City of Vancouver. Though the Plan is a snapshot in time and does mention the development of the contract, this is a significant update, and the details of that contract should be reflected within the Plan. Please provide an overview of the contract, major changes and the financial impact of the contract.	Updated actions in ***12.3.1*** to reflect MSA has now been signed. Updated planning area section to include public ownership. Added additional transfer and disposal action item for initiating an environmental site assessment per MSA. ***Page 166*** Capacity language was updated ***Page 151*** Transportation and disposal contracts was updated ***Page 162*** Evaluation of ownership options was updated

Section B: Recommended revisions

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
10	Cover	**Retitle to reflect the Hazardous Waste Management Plan** While the bulk of this plan is the Comprehensive Solid Waste Management Plan required by Chapter 70A.205 RCW, it is very significant that the Local Hazardous Waste Plan required by Chapter 70A.300 RCW is also found herein. They are separate plans with separate requirements. Please update the title on the cover to reflect both plans, such as, "Comprehensive Solid and Hazardous Waste Management Plan". (The Contamination Reduction and Outreach Plan mentioned in the Executive Summary is not necessary to call out, as it is ultimately an element of the overall Comprehensive Solid Waste Management Plan.)	Received email from Ecology on 11/13/24 with the understanding that this will be put in the parking lot until next revision.
11	Chapter 1 Background and Administration, 1.11 Process of updating the Plan, pg. 24	**Plan amendments and revisions** Ecology applauds Clark for including a locally-defined amendment process. However, the paragraph describing the process at the top of page 24 could use more clarity. Who does the approving of the decision to move forward with the amendment? What does ratification look like (does each signatory to the plan adopt the amendment in the same manner in which they adopted the original plan)? See Ecology's Guidelines for Development of Local Comprehensive Solid Waste Management Plans and Plan Revisions, Appendix G for an example process.	Revised language to include who moves forward and ratification process using the Guidelines as reference. See Section 1.11 starting on ***page 23***
12	Chapter 3 Enforcement, 3.2 Regulating Agencies, pg. 40	**RCW 170A.205.130** The Plan presents bullets that address CCPH's enforcement responsibilities. The bullet referring to landfills states: "CCPH's responsibilities for processing and evaluating permits for solid waste disposal facilities are defined in RCW 70A.205.130. These state regulations require jurisdictional health departments to evaluate solid waste permit applications…" RCW 170A.205.130 is "statute" or "law", rather than "regulations". (The term "regulations" would refer to Washington Administrative Code (WAC). Remove "These state regulations require" and replace with either "This statute requires" or "This law requires".	Suggested edit accepted and implemented - Updated ***page 40*** to say "This statute requires"

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
13	Chapter 5 Recycling, starts pg. 58 Other relevant locations within the Plan	**Residential designated recyclable materials lists between cities** In this chapter it is discussed that the County and the six cities and one town develop and support a regional solid waste system that offers consistency. If accurate, and the cities share consistency between their lists, include the following language or similar near the designated recyclable materials list in this chapter or other relevant locations within the Plan: "The County and cities maintain consistency in accepted residential recyclable materials lists in an effort for harmonization and to reduce contamination." The above language was drafted based on the consistency language found in regards to the Residential Outreach Work Group (ROW) on page 70. If not accurate, please explain the differences between the jurisdictions' accepted residential recyclable materials lists.	Suggested edit was altered as the statement provided was very similar to the introduction paragraph talking about statewide uniformity. Added a leading sentence to clearly state this belief is shared locally. See introductory statement in the third paragraph under 5.3 Designated recyclable material list ***pg 64***
14	Chapter 7 Moderate Risk Waste, 7.2 Conditions assessment, pg. 88	**Use of permit** The Plan states, "Fully regulated businesses are required to have a dangerous waste permit and may be subject to inspections from Ecology staff." While this is true of treatment, storage, and disposal facilities, this section seems to be referring to Medium and Large Quantity Generators, which are not required to have a permit, but are required to register for an EPA/State ID with Ecology. If this is the proper interpretation, update sentence to "Fully regulated businesses are required to register for an EPA/State ID number and may be subject to inspections from Ecology Staff."	Suggested edit accepted and implemented – update first paragraph on ***page 98***
15	Chapter 7 Moderate Risk Waste, 7.2 Conditions assessment, final disposal methods, pg. 89	**Facilities managing hazardous waste within the jurisdiction** RCW 70A.300.350(3)(c) requires an inventory of all generators of hazardous waste, which is found in this Plan in Appendix M. However, it goes on to require an inventory of all facilities managing hazardous waste within the jurisdiction. Update Appendix M to include a list of facilities managing hazardous waste within the jurisdiction or update the list in Appendix M to include some sort of added indicator that a generator is also a facility managing hazardous waste. In reviewing Appendix M, most all facilities managing hazardous waste are included there. Ecology has provided a list of these facilities for reference. Also, include language within the final disposal methods section of Chapter 7 Moderate Risk Waste that points to this information.	Opted to include within the body of the plan in lieu of reworking the appendix. Added the following language to section 7.2 under Final disposal methods "For a list of facilities managing hazardous waste within Clark County, refer to Table 7.2.1" This edit can be found on the top of ***page 100.*** Used the table provided by Ecology for reference.

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
16	Chapter 7 Moderate Risk Waste, 7.2 Conditions assessment pg. 90	**Commercial dangerous waste** This section states, "State laws prohibit commercially generated MRW from being disposed of as municipal solid waste, but not all businesses comply." Ecology is not aware of any state law that prohibits commercially generated MRW (SQG waste) from being disposed of at a municipal solid waste landfill. On the contrary, WAC 173-303-171(1)(e)(v) explicitly states that a Small Quantity Generator (SQG) may dispose of their dangerous waste at a municipal solid waste landfill. Please update this section accordingly. Even though it is legal, Ecology does not encourage disposal of SQG waste at municipal solid waste landfills. However, if the County is not accepting SQG waste at their MRW facilities, some businesses may see this as their only option. SQGs on a limited budget may not be able to afford disposal through a commercial dangerous waste transporter as the County alluded to in this section. As noted in this section, Clark County has a process to invoice businesses for handling and disposal of dangerous waste. Clark County may consider updating their operations to accept business waste. Many counties across the state operate or support facilities that accept moderate risk waste from both households and SQGs and invoice the SQGs to help cover costs, similar to what the County is already doing. This would reduce the amount of SQG waste disposed of in municipal solid waste, and better meet the obligation to provide a program for MRW per RCW 70A.300.350(1)(a). In section 7.5, it appears that this is an option being considered, but the implementation schedule in Chapter 12 kicks it to the future. Ecology would like to see the County more seriously consider it in the near-term years of this Plan. This also relates to comment number 34, below.	Updated the leading sentence based on this new understanding. See middle of ***page 101***. Accepting SQG waste at the transfer stations is included in the plan as "future" as it is an ongoing conversation while we address barriers such as ownership decisions, traffic impacts, capacity, permitting limitations, additional administrative costs, etc. Including it in the plan as a future goal is of local importance to ensure the conversation continues while we work through other decisions that will impact this decision.
17	Chapter 7 Moderate Risk Waste, 7.3 Expanded recycling or disposal options, pg. 93	**Lights** HB 1185 passed early this year, making outdated much of the text under the Lights header. Starting January 1, 2029, the sale of mercury containing lights within Washington state will be prohibited (except for lights already in stock or stores, which may be sold until July 1, 2029). Another important change from HB1185 is that daily collection limits increase January 1, 2025, as follows: • Unlimited screw base compact fluorescent lamps. • 15 pin-based compact or linear fluorescent lamps. • Two High intensity discharge lamps. • (There's also a separate 15-light limit on registered residential curbside collection or mail-back) Finally, the program will now sunset in 2035 (unless a cost-benefit analysis points to ending the program sooner). More information on HB 1185is on the Washington Legislature page. or in the Legislative Changes 2009-2024 document on Box. Update Plan with new information on mercury containing lights and program impacts. Add link to LightRecycle.org.	Replaced the entire Lights section in 7.3, ***page 104***
18	Chapter 7 Moderate Risk Waste, 7.3 Expanded recycling or disposal options, pg. 94	**Motor oil - Chapters 70A.224 and 43.21A RCW: Used oil and PCB BMPs (best management practices)** The used oil section addresses how used oil is managed at collection locations but does not mention best management practices within those processes. Update Plan to incorporate best management practices language for used oil. This can be found through EPA's Preventing and Detecting PCB Contamination in Used Oil guidance.	Added the link to additional best management practices following the listed safety handling practices. Section Motor oil ***page 105***

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
19	Chapter 7 Moderate Risk Waste, 7.3 Expanded recycling or disposal options, pg. 94	**Budget reserve for disposal of contaminated oil** The Plan should include a budget reserve for disposal of contaminated oil detected at any public used oil collection site administered by the local government per RCW 70A.224.020(1)(e). This could not be found in the MRW Chapter or Chapter 11, update the Plan to include this estimate.	This section of RSW70A.224.020(1)(e) states: An estimate of funding needed to implement the requirements of this chapter. This estimate shall include a budget reserve for disposal of contaminated oil detected at any public used oil collection site administered by the local government. In Clark County, we do not have a public used oil collection site administered by the local government. All oil collection sites are owned and operated by private companies.
20	Chapter 8 Miscellaneous waste, 8.2 Types of miscellaneous waste, pg. 104	**Agriculture waste definition** The source of the definition in quotes should be identified. It appears to be derived from WAC 173-304 but varies slightly from that rule's language. Note that it also varies from the more current definition of the term in WAC 173-350. Both of those rules specify that the enumerated wastes must come from farms, which the language here does not. Also, the text subsequently includes agricultural chemicals in the category; these are not explicitly included in the definitions from WAC 173-304 or WAC 173-350. Update Plan to use the definition from WAC 173-350-100, "Agricultural wastes" means wastes from farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, livestock manure, animal bedding, and carcasses of dead animals. Or identify the source of the definition in quotes.	Changed the definition. Removed all reference to agricultural chemicals. ***Page 114***
21	Chapter 8 Miscellaneous Waste, 8.2 Types of miscellaneous waste, pg. 109	**Contaminated soils definition** The definition described in the Plan appears to be from a previous version of WAC 173-350. The current language defining contaminated soil is: "'Contaminated soil" means soil containing one or more contaminants from a release and when moved from one location to another for placement on or into the ground: (a) Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model Toxics Control Act—Cleanup, that would be established for existing land use at the location where soil is placed; or (b) Contains contaminants that affect pH, and pH of the soil is below 4.5 or above 9.5 or is not within natural background pH limits that exist at the location where soil is placed. Update Plan to include the above current definition of contaminated soil.	Suggested edit accepted and implemented – update on ***page 119***
22	Chapter 10 Transfer and Disposal, 10.2 Conditions assessment, pg. 147	**Use of special waste** Change "special wastes" to "miscellaneous wastes" or "waste requiring special handling" due to a different legal definition of "special wastes."	Our fee schedule and contract still call these items special wastes, which creates a consistency problem. We incorporated the following edit to hopefully satisfy both state and local uses of the terms: "Waste requiring special handling such as tires, appliances, and asbestos..." We retained the reference in section 10.2 under Central Transfer and Recycling Center on ***page 153*** as the application is called a "special waste application".

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
23	Appendix H, Facility Categories pg. 311, 312	**Use of Special waste** In the Limited purpose landfill bullet, change "special wastes" to "miscellaneous wastes" or "waste requiring special handling" due to a different legal definition of "special wastes." In the Small-scale specialized incinerator bullet, change "special wastes" to "miscellaneous wastes" or "waste requiring special handling" due to a different legal definition of "special wastes."	Suggested edit accepted and implemented – update on ***page 318***
24	Chapter 8 Miscellaneous Waste, 8.2 Types of miscellaneous waste, pg. 111	**Disaster debris** The section on disaster debris could also mention that documented adherence to proper procedures is important to support requests to the Federal Emergency Management Agency for reimbursement of local costs.	Suggested edits added as a new sentence at the end of paragraph 1 ***page 121***.
25	Chapter 8 Miscellaneous Waste, 8.2 Types of miscellaneous waste, pg. 111	**Dredge spoils** Sediments typically have never been considered to fall within the MSW handling system, as they aren't municipal solid waste. They should be evaluated for the need to be handled under a solid waste permit If sediments contain contaminants at concentrations that exceed a cleanup level under Model Toxics Control Act that would be established for existing land use at the location where the material is to be placed, or that would affect pH, and pH of the soil is below 4.5 or above 9.5 or is not within natural background pH limits that exist at the location where sediment is to be placed, then the sediment needs to be managed under a solid waste permit. Update section with this language instead "Dredge spoils consist of soils and other organic materials generated by dredging operations. Dredge spoils should be evaluated in a manner similar to soils to determine their use as fill may require a solid waste handling permit. This includes characterizing the material to determine if it designates as a dangerous waste, in which case it would need to be managed under the Dangerous Waste Regulations, WAC 173-303. If the material does not, then the evaluation of the material's contaminants relative the cleanup levels that would apply at the location of the proposed use as fill would need to be performed to determine if that use requires a solid waste handling permit."	Suggested edits added – replaced paragraph on ***page 122***
26	Chapter 8 Miscellaneous Waste, 8.2 Types of miscellaneous waste, pg. 112	**Industrial process waste or sludge** The Plan here incorrectly states that Ecology regulates industrial process waste or sludge as solid waste in Clark County. By virtue of their being industrial in origin, these materials are by definition solid wastes, and so their handling would be regulated by CCPH Environmental Public Health Division. The biosolids also mentioned here would be regulated directly by Ecology. Update Plan to distinguish between municipal wastewater treatment sludge or industrial wastewater treatment sludge being handled as solid waste, and municipal wastewater treatment sludge being handled as biosolids.	The section received text updates from a regional partner. See section Industrial process waste or sludge, ***page 122***, and please let us know if additional edits are required.
27	Chapter 8 Miscellaneous Waste, 8.2 Types of miscellaneous waste, pg. 114	**6PPD & 6PPDQ discussion** Ecology recommends mentioning emerging concerns over leachate associated with tires and 6PPD. See Ecology's Tire anti-degradant (6PPD) and 6PPD-quinone webpage for more information.	Suggested edit added to section Tires ***pg 124***
28	Chapter 10 Transfer and Disposal, 10.2 Conditions Assessment, pg. 141	**Transportation and disposal contracts** The Plan describes the April 1990 contract between Clark County, the City of Vancouver and CRC as a long-term contract. While acknowledging that the text states that the current contract runs through December 31, 2027, it would be helpful to also identify the original term of that 1990 contract. Has it been extended to that 2027 expiration through the amendments mentioned in the text, or has it always been for 25 years from the start of services in 1992? Update the Plan to clarify the contract's previous status and describe the new contract in place that was negotiated after this Plan was submitted to Ecology (see comment 9).	This section was rewritten to incorporate the new MSA language with simplified language referencing the old contract to show length of agreement with CRC. ***Page 151***

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
29	Chapter 10 Transfer and Disposal, 10.2 Conditions Assessment, pg. 142	**Central Transfer and Recycling Center** The shipment of containerized waste by barge is described, and the Plan indicates that Tidewater Barge Lines is the contracted transport company that manages all transportation segments from the transfer station to the landfill. Specify within the Plan who the contract is between.	Updated to reflect contract is between Tidewater and CRC. ***Page 154***.
30	Chapter 10 Transfer and Disposal, 10.2 Disposal sites in Clark County, pg. 150	**Rufener Landfill** The Rufener Landfill is described as "decommissioned." Ecology's records are that the decommissioning was approved by the County Board of Commissioners effective August 20, 2013. If it's intended that post-closure care is ended, Ecology is missing documentation in our files. Under WAC 173-350-400(6)(g) as it was in place in 2013: (g) The owner or operator shall record maps and a statement of fact concerning the location of the disposal facility as part of the deed with the county auditor not later than three months after closure. Could Clark County provide a copy of the maps and statement of facts, showing that it's recorded with the deed with the County? If accurate, update the description of the Rufener Landfill to state that the County decommissioned the landfill and ended post-closure care in 2013.	Documentation was submitted to Ecology for verification and approved via email. The last sentence was added to the CSWMP to add clarity on ***page 160***.
31	Chapter 10 Transfer and Disposal, 10.2 Conditions assessment, pg. 154	**What considerations should be made to handle the anticipated growing population** Does the projection of waste disposed in landfills assume a constant disposed mass per capita over the period, so that the change stated here reflects only population growth? Or does the projection also make assumptions about changes in disposed mass per capita over the period? This section doesn't discuss planning issues arising from potential changes to the waste inputs to the solid waste system. Such changes seem likely in response to recent legislated policy changes intended to affect waste generation and management. Those policy changes are particularly relevant to organics management. Another local government grappling with a growing population and evolving tonnage makeup is King County. They have completed the "Re+ Plan" as a strategy to not only divert more materials from the landfill, but to outline which materials are being targeted for such diversion via new policies, etc., which in turn informs their current solid waste management planning efforts. More information is on the Re+ Plan webpage. Another strategy they've implemented that's not touched on in the Re+ Plan is a Fixed Annual Charge as part of their rate structure, to help move away from reliance on tip fees as income, since the aforementioned policy changes could impact both the makeup and per capita amount of material coming across the scales.	The resources and suggestions provided in this comment have been reviewed. Note that the projections and analysis as stated in the CSWMP reflect population growth only and was not including waste diversion legislation that is upcoming. At the time of this preliminary draft, planning efforts concerning capacity are reacting to the anticipated growth in Clark County (which is significantly higher than the rest of the state) and are focused on siting the north transfer station, moving or expanding the MRF, and moving toward a regional entity to manage the public ownership of the transfer stations and overall regional system. Our team has referenced the "Re+ Plan" and will take this approach into consideration at the next plan revision. Note that our tip fee structure was just agreed upon our Master Service Agreement and is intended to remain until December 31, 2032.
32	Chapter 10 Transfer and Disposal, 10.5 Planning issues, pg. 155	**Pending contract negotiations at time of plan revision** In the last paragraph on pg. 155, it is stated that "the initiation of the monthly inspection is pending contract negotiations at the time of this plan revision." If contract negotiations have concluded, please provide an update on how monthly inspections have or have not been incorporated.	Updated – Chapter 10, Section 10.5 Planning issues, ***pg 163***

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
33	Chapter 11 Funding and Financing solid Waste Infrastructure and Operations, 11.2 Funding and finance, pg. 160, 162	**RCW 70A.305, the Hazardous Waste Cleanup- Model Toxics Control Act – 2019 adjustments** In 2019, the legislature made changes to update the model toxics control program and its primary funding mechanism. A goal was more stability for programs such as LSWFA. Part of the act repealed RCW 70.105D.070 Toxics Control Accounts, which traditionally funded LSWFA. Another part created the Model Toxics Control Operating Account and deemed it the funding source for LSWFA. Add the following language to the bottom of the last paragraph on pg. 160 with the above language: "In 2019, the legislature made changes to update the model toxics control program and its primary funding mechanism. A goal was more stability for programs such as LSWFA. Part of the act repealed RCW 70.105D.070 Toxics Control Accounts, which traditionally funded LSWFA. Another part created the Model Toxics Control Operating Account and deemed it the funding source for LSWFA." Both informational paragraphs under the header "Local Solid Waste Financial Assistance" contain outdated information. Update the first paragraph of the Local Solid Waste Financial Assistance of Grants section on pg. 162 with the following language: "Clark County, cities, and town may apply for grants from Ecology's Local Solid Waste Financial Assistance (LSFWA) grants program to partially fund mandates from the state for solid waste management activities. The LSFWA grant program is funded by the state's Local Toxics Control Operating Account (see Legislation, above). Grant funded programs must comply with the CSWMP. A 25% local match is required, and activities and expenditures must be approved by Ecology staff. The LSFWA grants are usually offered by Ecology on a biennial cycle." The detailed (and currently incorrect) information in the second paragraph could be replaced by a link to Ecology's Local solid waste financial assistance program grants webpage.	The entire chapter 11 has been updated to align with the newly signed Master Service Agreement and the addition of more detailed tables outlining the future projections. Suggested edit added - Chapter 11 Funding and Financing, 11.6 Grants, ***page 182***
34	Chapter 11 Funding and Financing solid Waste Infrastructure and Operations, 11.2 Funding and finance, pg. 162	**Suggest discussion of use of Local Solid Waste Financial Assistance (LSWFA)** Discussion of how Clark County (and its cities/town) traditionally uses its LSWFA funds could help the County and its stakeholders plan for future use of the funds. One item Ecology notices is that within Clark County, there exists three household hazardous waste facilities and six Pollution Prevention Assistance staff talking with Small Quantity Generators (SQGs), but no facility for SQGs to self-haul their waste to. We encourage Clark to consider expanding the services at one or more of its HHW facilities to serve SQGs. Many counties across the state use the bulk of their LSWFA funds to support their MRW facilities, and while the direct cost of disposal of SQG waste is not eligible for LSWFA reimbursement, the fixed costs of the facility and staff are. Local governments almost always charge SQGs to dispose at their MRW facilities, which helps offset disposal costs and encourage waste reduction. This also relates to comment number 16, above.	The entire ***chapter 11*** has been updated to align with the newly signed Master Service Agreement and the addition of more detailed tables outlining the future projections. Clark has received the recommendation for adding SQG to one or more of our HHW drop off facilities. Refer to our response in comment 16 for information on our decision to retain this action item as a future goal.
35	Chapter 12 Implementation Schedule, Section 12.3 Implementation Schedule, pg. 171	**Table 12.3.1 - Timeline** Table should include all years of the Plan; future is used instead of 2030. Please include 2030.	Year 2030 was added and marked accordingly.
36	Appendix Other relevant location within the Plan	**Solid Waste Advisory Committee (SWAC) meeting notes** This could be a link to the meeting notes on Clark County's website in a relevant location within the Plan. If Clark County would like to include SWAC notes as an appendix, include a set of notes that shows SWAC participation for each the Preliminary draft and Final Plan.	This link was included in the original preliminary draft on ***page 16***. To increase visibility, we added the following with a hyperlink to the 1.4 Required content in the first paragraph of ***page 11***. "All meeting agendas and minutes demonstrating participation are available to the public on the Solid Waste Advisory Commission website."

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
37	Appendix A definitions and Acronyms, pg. 180	**Composted material** The definition describes organic solid waste that has been processed "…in compliance with the requirement of this chapter", which appears to be a reference to some unspecified statute or regulation. Update the definition to include the specified statue or regulation.	Suggested edit added – As defined in RCW 70A.205.015 ***Page 199***
38	Appendix A definitions and Acronyms, pg. 181	**Environmental Impact Statement definition** The definition describes an EIS in the context of the National Environmental Policy Act, but does not mention the State Environmental Policy Act, which is a more likely context for most actions associated with the SWMP. If that is the correct association, update definition accordingly.	Added the statement "The Environmental Impact Statement process is a required component of the SEPA review." Added to ***page 200***
39	Appendix A definitions and Acronyms, pg. 182	**Parts per million (ppm) definition** Mass of a material per unit volume would be a density. PPM is an expression of the concentration of a chemical or contaminant in a sample of either liquid or solid material. PPM is a ratio of like units of measurement and has no units itself, although the units on the parameters used in the ratio may sometimes be noted, e.g., ppmv for the ratio of volume of chemical to volume of sampled medium. Update definition to "an expression of the concentration of a chemical or contaminant in a sample of either liquid or solid material."	Suggested edit added to ***page 204***
40	Appendix A definitions and Acronyms, pg. 183	**Polychlorinated biphenyl definition** Update definition to include the common abbreviation PCBs, and as the plural, since the definition refers to a group of chemicals.	Suggested edit added to ***page 204***
41	Appendix A definitions and Acronyms, pg. 183	**Resource Conservation and Recovery Act (RCRA) definition** In addition to the hazardous waste standards of RCRA Subtitle C as described in the definition, Subtitle D of RCRA also sets out federal criteria for facilities that dispose of non-hazardous solid wastes, and the federal permitting program for municipal solid waste landfills which authorized state MSW landfill permit programs must meet or exceed. Update the definition to "Federal law establishing the framework for a national system of solid waste control. Subtitle D of the Act is dedicated to non-hazardous solid waste requirements, and Subtitle C focuses on hazardous solid waste."	Suggested edit added to ***page 205***
42	Appendix G Operating non-operating, abandoned, and closed disposal sites, pg. 306	**Circle C Landfill** In addition to the status noted in the comments, if accurate, add the following language: "the landfill is currently the focus of site assessment work under a Brownfields grant obtained by the City of Vancouver in conjunction with Clark County."	Suggested edit added to ***page 314***
43	Appendix G Operating non-operating, abandoned, and closed disposal sites, pg. 306	**Lady Island Landfill** Lady Island landfill is the only operating disposal site in Clark County. Add Lady Island landfill to the subsection "Disposal Sites in Clark County" in Section 10.2.	Suggested edit added to ***page 160***
44	Appendix G Operating non-operating, abandoned, and closed disposal sites, pg. 307	**Leichner Landfill** In addition to the status noted in the comments, if accurate, add the following language: "The landfill is a cleanup site under MTCA, and is currently in performance monitoring to confirm that the cleanup action has attained cleanup standards."	Suggested edit added to ***page 315***

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
45	Appendix J, pg. 457 Appendix C, pg. 214	**Discounts for low-income customers (RCW 81.77.195)** Appendix J, Equity Plan, does not explicitly state low-income customer discounts as a goal. Examples of where the Equity Plan lightly touches on discounts include mention of an "Elderly assistance program," a statement of the Clark County currently having no low-income discount program in place, and survey responses regarding the importance of financial assistance, concerns about waste services for the disabled and elderly, and how disposal and recycling rates are determined. In section 11.2, page 159, low-income customer discounted rates are described, and it says Clark County reserves the right to consider requesting such rates in the future. This broad sentiment is echoed in the UTC Cost Assessment Questionnaire (CAQ) as Y with an unknown date of implementation. These references to low- income discounted rates would not be considered "in plan" per RCW 81.77.195. To be considered, "adopted by the county in its Plan," per the RCW, the County would need to designate a year of anticipated implementation within the planning period on the UTC CAQ and pair this with an explicit description of its intention to move forward with discounted rates and the planned timeline within the body of Plan text. The County does not need to develop the specific rate amounts and details of collection and incorporate them into the Plan. That can be done later when making the request to the Utilities and Transportation Commission. But again, to consider low-income rates to be adopted within a solid waste management plan, the County must clearly outline its position and intention to move forward on such rates and expected timeline within the planning period. If seeking low-income customer discounted rates during the planning period, update the low-income customers discounted rate section of the CAQ to include a year within this planning period, and describe within the main body of the Plan the County's intentions and expected timeline. If low-income customer discounted rates are not being considered during this planning period, update the cost assessment questionnaire from Y to N.	The original language was provided based on early GRAM meeting conversations and reviewed by the UTC. Understanding the expectation has evolved, we updated the UTC checklist to show interest in discounted rates but marked the year as unknown. Additionally, we removed the language reserving the right and replaced it with the current status as well as the intention to add it to the next plan revision. We were hoping to have the flexibility to include it this revision, however with the timeline to submit the final draft we are unable to plan for and commit to a year this planning cycle. ***Page 172***
46	Appendix K Remedial Action Sites, pg. 476	**Exclusion of disposal sites from Appendix G** It appears that the list in this appendix does not include disposal sites that are listed in Appendix G, even if they may be subject to cleanup actions. If that is the intent, please note this in the introductory description of the table.	The information pulled for Appendix K is from ECY list referenced in the introduction. The items on Appendix G are limited to landfills that are or previously were receiving waste in Clark County. In an effort to retain the information from the original source, we have added the following statement: This list is not inclusive of all disposal sites as listed in Appendix G as the data is limited to information provided by the Ecology database. ***Page 482***

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
47	Chapter 4 or 5 or other relevant location within the Plan	**Provide information on state solid waste-related legislation** Senate Bill 5397, RCW 70A.245 Recycling, Waste, and Litter Reduction: In Chapter 4 Waste Reduction, there is an opportunity to add new information about plastic packaging rules, and timelines for the bans. Senate Bill 5022 which was codified in 2021 as Chapter 70A.245 RCW Recycling, Waste, and Litter Reduction In addition to other regulations, this new law sets the following notable requirements: • Minimum Post-Consumer Recycled Content (PCR) Requirements. Minimum PCR content requirements are established for plastic beverage containers, trash bags, and household cleaning and personal care product containers. · See Ecology's Recycled content minimums webpage for more information. • Expanded Polystyrene Prohibitions. It is prohibited to sell or distribute in or into Washington three types of expanded polystyrene products: Portable containers designed for cold storage; Food service products; and Void filling packaging products. These restrictions apply beginning June 1, 2023, for void filling packaging products, and June 1, 2024, for cold storage containers and food service products. · See Ecology's Expanded polystyrene (EPS) ban webpage for more information. • Food Service Products on Request. Beginning January 1, 2022, food service businesses may only provide single-use utensils, straws, condiment packaging, and beverage cup lids only after affirming that the customer wants the product. · See Ecology's Single-use serviceware webpage for more information.	As a recommendation but not a requirement, we added a simplified version to retain the flow of the CSWMP as drafted. See paragraph 3 under 4.2 Conditions assessment referencing how legislation can lead to waste reduction. Top of ***page 50***.
48	Chapter 4 or 5 or other relevant locations within the Plan	**Single-use plastic bag ban** During the 2020 legislative session, the Legislature passed a statewide ban on single-use plastic bags, RCW 70A.530 an effort to reduce plastic pollution, litter, and waste. See Ecology's Washington's single-use plastic bag ban webpage for more information.	Suggested edit added to ***page 73*** last paragraph under What intervention points….
49	Appendix F Regulations governing the management of solid waste, pg. 298	**WAC 173-408 Landfill Methane Emissions** The implementing regulation for Chapter 70A.540 RCW, which is Chapter 173-408 WAC, Landfill Methane Emissions, should be added to this list. This rule became effective earlier in 2024. Also, the title on Chapter 70A.540 RCW is slightly off; the correct title is "Landfills–Methane Emissions". Add to the list and update the title of the chapter to "Landfills-Methane Emissions".	Suggested edit added to ***page 307***

Chapter C: Minor edits

Comment Number	Plan section—page #	Comments	Clark County Include section & page #s if applicable
50	Chapter 1 Background and Administration, 1.10 Administration, pg. 21	**Use of a "Approval" vs "Issuance"** The last sentence states, "Approval of permits by local health departments may be appealed by Ecology to the Washington Pollution Control Hearings Board." Ecology may appeal a JHD's issuance of a permit or of a permit renewal, rather than an approval of a permit, as provided for in RCW 70A.205.130 and RCW 70A.205.135. Update sentence to, "Issuance of permits or of permit renewals by local health departments may be appealed by Ecology to the Washington Pollution Control Hearings Board."	Suggested edit added to ***page 21***
51	Chapter 7 Moderate Risk Waste, 7.1 Introduction, pg. 86	**Clark County Public Health Programs** The distinction between the two programs is helpful., but inclusion of language that points out that usually in other counties, these two functions are usually performed by separate departments. Including a sentence about this unusual structure would provide additional clarity. At the end of the paragraph under the header "Clark County Public Health Solid Waste and Recycling Programs" Ecology suggests the following language: "In many other counties, these operations and outreach activities are performed by a separate department from the solid waste enforcement activities, but Clark happens to house them under the same umbrella." entities are separate in other counties would provide clarity on the structure of Clark County Public Health.	Suggested edit added to ***page 20*** in the Background and Administration chapter. Note that while this structure was accurate at the time the preliminary draft was moved through the public commenting, Clark County Solid Waste & Recycling programs are currently undergoing a reorganization and will be moved to Public Works. This will be updated with the next revision.
52	Chapter 7 Moderate Risk Waste, 7.1 Introduction, pg. 86	**Chapter 70A.300.310 RCW Reference** The reference to Chapter 70A.300.310 RCW in the third paragraph is the requirement for Ecology to create a hazardous waste management plan. The correct reference for local hazardous waste management plans is RCW 70A.300.350 and RCW 70A.300.360 for amending Plans with used oil recycling elements. Update sentence to "RCW 70A.300.350 outlines the requirement for local government to prepare and implement a plan for the management of hazardous waste, including specific elements for collections, public education, and data collection."	Suggested edit added to ***page 96***
53	Chapter 8 Miscellaneous Waste, 8.2 Types of miscellaneous waste, pg. 106	**Ash disposal** The Plan discusses ash generated and landfilled by the Georgia-Pacific mill at Camas but doesn't identify the landfill that receives the mill ash. The subsequent subsection "Paper and mill wastes" should be referenced here to direct readers to a description of GP's ash disposal.	Added the sentence "For more information on disposal, refer to Paper and mill wastes below." See top of ***page 116***
54	Chapter 8 Miscellaneous Waste, 8.2 Types of miscellaneous waste, pg. 110	**Construction and demolition wastes typo** The last sentence of the third paragraph contains a typo. The clause "…will impact a business' generator status" should be "…will impact a business's generator status".	Suggested edit added to ***page 120***
55	Chapter 10 Transfer and Disposal, 10.1 Introduction, pg. 140	**Sentence clarity** It might be clearer and more accurate to say that "Transfer stations are central collection facilities where solid waste in unloaded from route and commercial collection vehicles or private vehicles and reloaded into larger containers or vehicles for shipment to a landfill or other processing facility." The text of the second paragraph is unclear. It refers to contractual agreements between waste haulers and municipalities and an interlocal agreement between the County and municipalities. It then references MSW collected by the contracted hauler being delivered to designated transfer facilities operated by CRC. Are there multiple haulers involved, as the first sentence suggests, or only a single hauler, as indicated in the second sentence? Update the Plan to add clarity to the introduction of this chapter.	Suggested edit added to ***page 150***
56	Chapter 10 Transfer and Disposal, 10.2 Introduction, pg. 140	**Carbone decision of 1994 by the US Supreme Court** The discussion in the first paragraph describes the so-called Carbone decision of 1994 by the US Supreme Court but doesn't mention it by name. The name of the decision should be identified, since the second paragraph does then reference it by name.	Suggested edit added to ***page 151*** Added in the first paragraph.
57	Chapter 10 Transfer and Disposal, 10.5 Planning Issues, pg. 153	**Term consistency** The Plan references HB1181 in two locations. In the first instance, it is identified as E2SHB1181. Please use HB1181 for consistency.	All have been identified and corrected
58	Appendix D, pg. 218	**City of Camas ILA** Multiple unsigned Camas ILAs included in Plan, please remove.	All have been identified for removal.
59	Appendix L, pg. 486	**Designated Recyclables List formatting** The text above the table says materials in the minimum service level ordinance are yellow with orange hatching. However, the distinction instead seems to be via a column, which works well. Remove the text about the formatting.	Suggested edit made to ***page 494***
60	Various locations within Plan	**Typo LSWFA** When Local Solid Waste Financial Assistance is mentioned, it is accompanied by the acronym, LSFWA. The acronym should be LSWFA, update the Plan accordingly.	All have been identified and corrected.
61	Various locations within Plan	**Acronyms** Review acronyms throughout and consider using long name the first time it appears in a section for accessibility.	Our CSWMP was reviewed by our PIO for use of our internal written style guide standards. This note has been added to parking lot to implement next revision. For the current draft, corrected where identified.

Section D: What to include in your final submittal packet

The items listed below can be uploaded to: Clark County Box Folder.

A transmittal letter formally requesting final Plan review and identifying it as both a Solid and Hazardous Waste Management Plan.

- An electronic version of your Plan. Ideally, your Plan will include all of the below in one PDF.
  The required documents include:
  - Your UTC cost assessment – update with the version submitted directly to UTC outside of your preliminary draft, and discuss if impacts from the new contract are anticipated to affect the numbers provided to UTC, and if so, what that impact may look like
  - All SEPA documentation – already submitted with your preliminary draft.
  - Copies of all interlocal agreements – Appendix D
  - Resolutions of adoption from all participating jurisdictions – New resolutions adopting the final draft of the Plan need to be included in your packet.
  - Evidence your SWAC had adequate time to review and advise on the submittal of the final Clark County Plan.
  - Additional documents recommended to be in a Plan include:
  - A response summary indicating how you addressed Ecology's comments and the public comments you received on the preliminary draft Plan - We suggest you include your responses to Ecology's comments in the table above and add the response summary to the Plan as an Appendix.
  - Copies of your WSDA and UTC review letters – The WSDA and UTC have already provided you their review letters. We suggest you include them in your Plan in the Appendix with your comment response summary.


CLARK COUNTY, WASHINGTON

Attachment C
Council City Manager Update Aug 4

CITY OF Vancouver WASHINGTON

MEMORANDUM

DATE: August 4, 2025

TO: City Council

FROM: Steve Wall, Interim Public Works Director
Will Elder, Environmental Services Manager
Julie Gilbertson, Solid Waste Supervisor
Cary Driskell, Assistant City Attorney

RE: City Adoption of Clark County's Comprehensive Regional Solid Waste Management Plan

City Council is scheduled to consider adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP) for 2025–2030 on August 11th. This Plan, led by Clark County and developed in partnership with cities and stakeholders across the region, is required under chapters 70A.205 and 70A.300 RCW and fulfills state planning obligations for solid and hazardous waste management. Staff provided an update on the development of the CSWMP to Council on August 14, 2023, and returned on March 25, 2024, with an interlocal agreement (ILA) with Clark County to support joint planning for the CSWMP.

The updated Plan reflects changes in regulations, population growth, and regional system needs since the 2015 version. It incorporates recent legislative developments, including the Organics Management Law, and provides an implementation roadmap through 2030. The Plan covers all core service areas: waste reduction, recycling, organics, collection and transfer, household hazardous waste, and funding. Notable additions include new facility siting criteria, transfer station capacity planning, expanded food waste programs, and alignment with the Climate Action Framework.

City staff and our Solid Waste Advisory Commission (SWAC) representative have been actively engaged throughout the three-year development process. The Plan received public comments, Ecology review, and feedback from all participating jurisdictions and includes such things as a new implementation schedule, ongoing update process, and updated interlocal agreements to improve long-term planning continuity between the various agencies.

Adoption of the Plan supports regional coordination and maintains eligibility for state grant funding (e.g., LSWFA). There are no new fiscal obligations for the City beyond what is already included in the 2025–2026 budget. Final adoption by Clark County Council is anticipated in September once all participating cities have approved, followed by final submittal to Ecology.

Staff recommends Council adopt the resolution of support, consistent with prior workshops and our long-standing interlocal solid waste planning partnership with Clark County.

Attachment B
Interlocal Agreement for Planning

DocuSign Envelope ID: 7D810B6D-5A74-402B-B0FC-C29CAE5C630C

INTERLOCAL AGREEMENT
HDC.2160

between

CLARK COUNTY
P.O. Box 9825, Vancouver, WA 98666

and

CITY OF VANCOUVER
P.O. Box 1995, Vancouver, WA 98666

Project:	Update to Comprehensive Solid Waste Management Plan
Contract Name:	CCPH City of Vancouver CSWMP Interlocal HDC.2160
Contract Period:	Upon Execution - For Three Years

County Contacts		
Program	**Fiscal**	**Contract**
Joelle Loescher 360.397.8126 Joelle.Loescher@clark.wa.gov	Kayla Mobley 564.397.8235 Kayla.Mobley@clark.wa.gov	Rebecca Addington 564.397.8415 GCT@clark.wa.gov

City Contacts		
Program	**Fiscal**	**Contract**
Julie Gilbertson 360.487.7162 julie.gilbertson@cityofvancouver.us	Shannon Turk 360.487.7132 shannon.turk@cityofvancouver.us	Anna Vogel 360.487.8429 anna.vogel@cityofvancouver.us

This Contract for governmental services, where both parties are public agencies, pursuant to RCW 39.34.080 is entered into between Clark County, hereinafter referred to as County, and City of Vancouver, hereinafter referred to as City. County and City agree to all terms and conditions, exhibits, and requirements of this contract.

CITY OF VANCOUVER:

04/01/24
Eric Holmes, Date
City Manager

CLARK COUNTY:

Kathleen Otto 04/02/24
Kathleen Otto, Date
County Manager

CITY OF VANCOUVER:

04/01/24
Jonathan Young, Date
City Attorney

APPROVED AS TO FORM ONLY:

Amanda Migchelbrink 04/01/24
Amanda Migchelbrink, Date
Deputy Prosecuting Attorney

DocuSign Envelope ID: 7D810B6D-5A74-402B-B0FC-C29CAE5C630C

BETWEEN CLARK COUNTY AND CITY OF VANCOUVER DESIGNATING CLARK COUNTY AS THE LEAD AGENCY FOR THE REVISION OF THE COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

Pursuant to Chapter 39.34 RCW and RCW 70A.205.040, this Interlocal Agreement (Agreement) is entered into between Clark County and the City of Vancouver, establishing the obligations of the Parties for the maintenance and adoption of the Clark County Comprehensive Solid Waste Management Plan (CSWMP).

WHEREAS, RCW 70A.205.010 and RCW 70A.300.007 assigns primary responsibility for solid waste and moderate risk waste planning to local government; and

WHEREAS, RCW 70A.205.040 and RCW 70A.300.350 require or authorize counties, in cooperation with the various cities located within such county, to prepare a coordinated comprehensive solid & hazardous waste management plan; and

WHEREAS, under RCW 70A.205.075, all solid waste management plans must be maintained in current condition by periodic updates that include the estimated long-range planning needs for solid waste handling facilities projected twenty years into the future and local governments may also periodically update their hazardous waste plans; and

WHEREAS, the City and the County (Parties), recognize that our citizens and businesses, public policymakers, and local government staff benefit from cooperative, coordinated, and shared approaches to managing the regional solid waste system; and

WHEREAS, RCW 70A.205.040(4)(c) outlines that cities may authorize the county to prepare a plan for the city's solid waste management for the inclusion in the CSWMP; and

WHEREAS, this Agreement serves to meet a common interest between Clark County and the Cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver and Washougal and the Town of Yacolt designating Clark County as the lead agency responsible for maintaining and updating the CSWMP and is part of other related agreements and understandings.

WHEREAS, the Parties previously entered into a Solid Waste Interlocal Agreement on December 19, 2005 and have enjoyed a lengthy, productive, and effective working relationship in coordinating a wide range of solid waste disposal and collection issues; and

WHEREAS, in order to successfully develop, finance, and manage the Regional Solid Waste System, it is desirable that all waste generated in Clark County, including waste generated in incorporated cities and towns within the county, be disposed of through the Regional Solid Waste System and that the City and County agree that all waste generated in the corporate limits of the City shall be disposed of at Finley Buttes disposal site and transfer sites for the disposal of solid waste generated within the corporate limits of the City; and

WHEREAS, the Parties wish to adopt, maintain, and enforce minimum levels of service for residential source separation and collection of recyclables, including residential curbside recycling programs, multi-family recycling diversion programs, and residential yard waste/organics collection programs; and

WHEREAS, as part of this Agreement, the City agrees to authorize the County to prepare a plan for the City's solid waste management for inclusion in the CSWMP; and

WHEREAS, the Parties wish to continue working to develop and implement environmentally sound and cost-effective solid waste management programs including waste reduction and recycling diversion programs that reduce greenhouse gas emissions as appropriate from the disposed waste stream.

NOW, THEREFORE, in consideration of the mutual benefits and covenants contained herein, it is hereby agreed:

1. Purpose of agreement. The Parties intend this Agreement to provide for continued cooperation by both Parties in the updating of the CSWMP, implementation of that plan, and periodic updates or replacement of that plan, all in compliance with Chapters 70A.205 and 70A.300 RCW.

2. Public Ownership of Transfer Stations. In recognition that the Parties desire to continue to move toward a more regionalized and standardized solid waste management system.
   2.1. The COUNTY and CITY are committed to public ownership of the existing Central Transfer, West Van, and any future to-be-built transfer station(s) (excluding the existing transfer station in Washougal). These parties, along with any other municipal entity within the COUNTY that chooses to participate, will create a regional, multi-jurisdictional entity COUNTY successor to own and provide solid waste disposal and transfer services to those participating jurisdictions. As a statement of intent, both the COUNTY and CITY assert their strong preference for regional-entity ownership by a COUNTY successor, and that ownership by COUNTY or CITY is disfavored.
   2.2. In furtherance of this, the COUNTY and CITY shall negotiate the terms of an interlocal agreement pursuant to chapter 39.34 RCW that identifies a statutory mechanism for formation of the entity to be the COUNTY successor, a general initial framework for shared, representational governance by all participating jurisdictions, and establishes a transparent and accountable timeline for formation of the entity by December 31, 2029.
   2.3. In the event the COUNTY, CITY, and other participating jurisdictions are unable to form this anticipated regional entity by December 31, 2030, the COUNTY and CITY agree to meet and determine in good faith how one or both entities will temporarily own and govern the solid waste transfer facilities until such time as the regional entity can be formed and become operational, which is not anticipated to take longer than 24 months.

3. Authority and responsibilities.

3.1. County shall act as lead agency for review of the CSWMP, and for preparation of the revised CSWMP, incorporating both solid waste and moderate risk waste elements.

3.2. It is understood that the planning effort will be informed by the Solid Waste Advisory Committee (SWAC) and the Regional Solid Waste System Steering Committee (RSWSSC).

3.2.1. The City, its staff and policymakers shall be partners and participants with the County and the SWAC and RSWSSC in the regularly scheduled plan review, update(s) and implementation and will be afforded opportunity to propose plan modifications.

3.3. It is understood that the Washington State Department of Ecology (Ecology) will consider approval of the revised CSWMP only after all local jurisdictions participating in the planning process have adopted the revised CSWMP.

3.4. The responsibilities of all parties in the management, planning, operations, and collection services of solid waste programs (including moderate risk waste) will be delineated in the adopted CSWMP.

3.5. No separate entity is being created by this Agreement.

4. Limitations.

4.1. Nothing in this Agreement shall supersede any authority granted to either the County or the City, or otherwise imply any control by one Party over the other Party.

4.2. Nothing in this Agreement shall obligate either Party to provide personnel or assume operation and maintenance responsibilities for the other party's facilities or operations. Nor shall any provision of this agreement change in any manner the rules and restrictions under which either Party operates.

5. Dispute resolution. Any disputes arising under the terms of this agreement shall be resolved through a negotiated effort to reach consensus. The Parties may agree to mediation as part of such effort.

6. Plan development process. The Parties agree to the following process for development of, updates to, and replacement of the CSWMP.

6.1. Revision process

6.1.1. With input from SWAC and RSWSSC, the County will develop a draft and circulate that draft to Ecology and all cities within the Regional Solid Waste System. The County will make that draft available to the public for comments on their website.

6.1.2. After good faith consideration of any responses from the public, cities and town, and

Ecology, County staff will prepare a final draft. After consultation with the city/town, SWAC, and RSWSSC, County will have the discretion to decide whether to change the final draft as a result of the responses.

6.1.3. Upon adoption, as defined herein, County will submit the adopted final draft to Ecology.

6.2. Amendments and updates

6.2.1. All proposed amendments will be evaluated per the process defined in the CSWMP.

6.2.2. Cities and towns that have signed the Agreement to join the Regional Solid Waste System may send possible amendments to the County for formal proposal. Upon such proposal, the County shall conduct the plan development process as outlined in this section.

6.2.3. The County shall prepare CSWMP updates as required by Chapter 70A.205 RCW, 70A.300 RCW, or by Ecology.

7. Plan adoption. If within 90 days of receiving the final draft CSWMP from the County, the City does not pass a resolution either adopting or disapproving the plan and delivers that resolution to the County, the City authorizes the County to include the City's solid waste plan prepared by the County in the CSWMP. All participating jurisdictions will be notified by the County when the CSWMP is adopted by County Council and when the CSWMP is approved by Ecology.

8. Term. Commencing on the effective date as outlined below in this Agreement, this Agreement shall continue for three years from the date of execution and may be extended upon mutual agreement and subject to City Council approval for an additional term. This Agreement may be rescinded, terminated as herein provided, or as outlined in the adopted subsequent plan. Any party hereto may withdraw and terminate its rights and obligations under this Agreement with the understanding that:

8.1. Notice of intent to withdraw and develop an independent plan shall be given to all parties, including SWAC and RSWSSC, and shall be provided with 12 months' notice; and

8.2. Prior to termination, a withdrawing City must have prepared and received approval from Ecology for their independent solid waste management plan; and

8.3. Each Party will remain responsible for its own costs, whether incurred during this Agreement or otherwise.

9. Effective date. This Agreement shall be effective upon its execution by the Clark County Council after execution by all other participating governments. The Parties agree that in the

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event this Agreement is approved on or after the effective date, the terms and conditions hereof shall be construed as having been in full force and effect as of the effective date.

10. Entire agreement and modification. This Agreement embodies the entire agreement and understanding between the Parties hereto with respect to its subject matter and supersedes all prior agreements and understandings, whether written or oral, relating to its subject matter. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each Party, following authorization by Vancouver's City Council.

11. Indemnification / Hold harmless. City shall defend, indemnify and hold County, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the negligent acts, errors or omissions of City in performance of this Agreement, except for injuries and damages caused by the sole negligence of County. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of City, its officers, officials, employees, and volunteers, City's liability, including the duty and cost to defend, hereunder shall be only to the extent of the City's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the City's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

12. Public Records Act. Notwithstanding the provisions of this Agreement to the contrary, to the extent any record, including any electronic, audio, paper or other media, is required to be kept or indexed as a public record in accordance with the Washington Public Records Act, RCW Chapter 42.56, as may hereafter be amended, each party agrees to maintain all records constituting public records and to produce or assist both parties in producing such records, within the time frames and parameters set forth in state law. Each party further agrees that upon receipt of any written public record request from the public, shall, within two business days, notify the other party of receipt of the request by providing a copy of the request to the other party's Public Records Officer.

13. Recording or public listing. The Parties agree that this Agreement, after full execution, either will be recorded with the Clark County Auditor or listed by subject on Clark County's website or

other electronically retrievable public source, as required by RCW 39.34.040.

14. Severability. If any provision of this Agreement is held invalid, the remainder would then continue to conform to the terms and requirements of applicable law.

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CLARK COUNTY
STAFF REPORT

DEPARTMENT: Public Health **SR2024-1871**

DATE: March 26, 2024 @ 10:00 a.m.

REQUESTED ACTION:
Clark County Council approval to enter into an interlocal agreements with the City of Vancouver for the purpose of updating the comprehensive solid waste management plan. Also request approval for County Manager to sign the agreements and any amendments.

__X__ Consent ____ Hearing ____ County Manager

BACKGROUND
On October 3, 2023, the Clark County Council approved entering into an interlocal agreement with each of the cities and town in Clark County for the purpose of updating the Comprehensive solid waste management plan and included a template interlocal agreement that each would sign. Following that staff report approval, discussions between the County and City of Vancouver required edits to the interlocal agreement template. The revised interlocal agreement is attached for Council review and approval and includes a shorter agreement term and specific items related to public ownership of the transfer stations.

(Additional Background Information provided in staff report approved by the Clark County Council on October 3, 2023.)

The Clark County Comprehensive Solid Waste Management Plan (CSWMP) was developed to provide the community with goals and policies for implementing, evaluating, and modifying existing and future solid waste management programs. This Plan includes updated descriptions of existing conditions and programs to reflect progress and accomplishments over the previous years. It lists policies and practices reviewed by the Solid Waste Advisory Commission (SWAC), solid waste staff, representatives of the six cities and one town, interested citizens, solid waste industry representatives, and others. The Clark County Council and city councils adopted the policies and practices recommended by SWAC. The Clark County Council will guide solid waste policy into the future and outline programs and approaches for the coming five years.

This Plan addresses critical items needed for future decision-making on implementing improvements to the solid waste system in Clark County as follows:

- **Promotes sustainable practices** for governments, non-governmental organizations, businesses, and residents.
- **Reviews pertinent regulations** and other management plans.
- **Guidelines for the development** of programs, policies, and operating plans.
- **Planning for solid waste infrastructure** and operations (including facility siting criteria and process).
- **Background information to support facility permitting** decisions by Clark County Public Health and other state and local government agencies.
- **The technical support and justification for grant applications**, capital project fund requests, budget planning, and future programs.
- **Serves as education** and information to the public.

- **Identifies and presents opportunities for collaboration** with others in the region for collection and recycling services and potential ownership and operation of facilities, as well as with statewide agencies.

The Clark County Solid Waste Program is administered through Clark County Public Health and is comprised of Solid Waste Operations (SWO) and Solid Waste Education and Outreach (SWEO). The purpose of solid waste management activities in Clark County is to protect and preserve human health, environmental quality, and natural resources through efficient and effective community-based programs and services.

The Washington Solid Waste Management, Reduction, and Recycling Act (RCW 70A.205.075) requires all counties in the state to prepare a 20-year Comprehensive Solid Waste Management Plan. The Plan is prepared per the requirements and intent of RCW 70A.205.075 and Washington Department of Ecology's *Guidelines for the Development of Local Solid Waste Management Plans and Plan Revisions* (February 2010, Publication No. 10-07-005). The Plan must be developed in association with cities and towns located in the county and reviewed at least every five years to assess if the plan reflects the current state of the local solid waste system, including long-range handling and financing needs. Keeping the plan updated helps ensure that permits, grants, and services can be administered smoothly. Near the end of the five- year window, or Washington Department of Ecology (Ecology) deems an update is necessary, it should be determined whether an amendment or a revision is appropriate.

When the current plan receives final approval from Ecology (projected to be in 2025 for this plan) that begins the five-year period before another required review. This Plan should be reviewed again in 2027 to allow time for a revision, if necessary, with a goal of adopting an updated plan by 2029.

Any city that is a signatory to a county plan must enter into an interlocal agreement (ILA) with the county (RCW 70.95.080(2)). ILAs must be developed in accordance with Chapter 39.34 RCW, *Interlocal Cooperation Act.* They are an important tool in defining how to develop and maintain the plan. The ILA template is attached to this staff report.

COUNCIL POLICY IMPLICATIONS
N/A

ADMINISTRATIVE POLICY IMPLICATIONS
N/A

COMMUNITY OUTREACH
N/A

BUDGET IMPLICATIONS

YES	NO	
	X	Operating Budget Impacts
	X	Capital Budget Impacts
X		Action falls within existing budget capacity.
		Action falls within existing budget capacity but requires a change of purpose within existing appropriation. If YES, please complete the budget impact statement. If YES, please route this Staff Report through the Budget Director and then to the County Manager.
		Additional budget capacity is necessary and will be requested at the next supplemental or annual budget. If YES, please complete the budget impact

		statement. If YES, please route this Staff Report through the Budget Director and then to the County Manager. This action will be referred to the county council with a recommendation from the county manager.

BUDGET DETAILS

Dollar Amount	
Fund	4014
Cost Center	
BASUB	
Program	

Emily M. Zwetzig, Budget Director *(if applicable)*

DISTRIBUTION:
Council staff will post all Consent/Separate Business/Hearing staff reports to The Web.
https://www.clark.wa.gov/council-meetings

Rebecca Addington 03/13/24
Rebecca Addington
Management Analyst, Sr

Alan Melnick 03/13/24
Alan Melnick, MD, MPH, CPH
Public Health Director

Primary Staff Contact Name and Extension: Jeff Harbison ext. 8475

APPROVED:_____
CLARK COUNTY, WASHINGTON
CLARK COUNTY COUNCIL

DATE: _____

SR#_____

APPROVED:_____
Kathleen Otto,
County Manager

DATE: _____

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Amanda Migchelbrink Amanda.Migchelbrink@clark.wa.gov Deputy Prosecuting Attorney Security Level: Email, Account Authentication (None)	Amanda Migchelbrink Signature Adoption: Pre-selected Style Using IP Address: 64.4.181.35	Sent: 3/28/2024 4:30:09 PM Viewed: 4/1/2024 7:37:17 AM Signed: 4/1/2024 7:37:23 AM
Electronic Record and Signature Disclosure: Accepted: 4/1/2024 7:37:17 AM ID: c2d49d5c-ee79-4d95-b303-7df4cf8e4b3d		
Jonathan Young jonathan.young@cityofvancouver.us Security Level: Email, Account Authentication (None)	 Signature Adoption: Uploaded Signature Image Using IP Address: 67.51.183.252	Sent: 4/1/2024 7:37:24 AM Viewed: 4/1/2024 8:32:00 AM Signed: 4/1/2024 8:38:21 AM
Electronic Record and Signature Disclosure: Accepted: 4/1/2024 8:32:00 AM ID: 5c2a0edd-c089-475f-93ee-ec47a58518bd		
Eric Holmes eric.Holmes@cityofvancouver.us City Manager Security Level: Email, Account Authentication (None)	 Signature Adoption: Uploaded Signature Image Using IP Address: 67.51.183.252	Sent: 4/1/2024 8:38:22 AM Viewed: 4/1/2024 11:42:02 AM Signed: 4/1/2024 11:42:09 AM
Electronic Record and Signature Disclosure: Accepted: 4/1/2024 11:42:02 AM ID: 9e1d587d-512d-40f5-bc23-996023b5bdd1		
Kathleen Otto Kathleen.Otto@clark.wa.gov County Manager Clark County Security Level: Email, Account Authentication (None)	Kathleen Otto Signature Adoption: Pre-selected Style Using IP Address: 64.4.181.42	Sent: 4/1/2024 11:42:11 AM Viewed: 4/2/2024 1:50:54 PM Signed: 4/2/2024 1:50:59 PM
Electronic Record and Signature Disclosure: Accepted: 4/2/2024 1:50:54 PM ID: 1e98ad60-3c56-4fda-a156-a38bf6a202bb		

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Gerry Preston Gerry.Preston@clark.wa.gov Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 3/2/2024 7:39:52 AM ID: 3a05a3aa-2c42-46ff-aac6-a30b9cbdb795	COPIED	Sent: 4/2/2024 1:51:01 PM
Joelle Loescher joelle.loescher@clark.wa.gov Solid Waste Operations Program Manager Clark County Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	COPIED	Sent: 4/2/2024 1:51:01 PM Viewed: 4/3/2024 8:04:01 AM
Julie Gilbertson julie.gilbertson@cityofvancouver.us Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via DocuSign	COPIED	Sent: 4/2/2024 1:51:01 PM Viewed: 4/3/2024 9:53:07 AM

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	3/28/2024 4:30:09 PM
Certified Delivered	Security Checked	4/2/2024 1:50:54 PM
Signing Complete	Security Checked	4/2/2024 1:50:59 PM
Completed	Security Checked	4/2/2024 1:51:01 PM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

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If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign â€˜Withdraw Consentâ€™ form on the signing page of a DocuSign envelope instead of signing it. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

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You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

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To advise Clark County, WA of your new e-mail address

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at loann.vuu@clark.wa.gov and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

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Required hardware and software

Operating Systems:	WindowsÂ® 2000, WindowsÂ® XP, Windows VistaÂ®; Mac OSÂ® X
Browsers:	Final release versions of Internet ExplorerÂ® 6.0 or above (Windows only); Mozilla Firefox 2.0 or above (Windows and Mac); Safariâ„¢ 3.0 or above (Mac only)
PDF Reader:	AcrobatÂ® or similar software may be required to view and print PDF files
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	Allow per session cookies

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AN ORDINANCE of the City of Vancouver relating to changes to the City's Impact Fee Ordinance; adopting an amendment to section 20.915, of the Vancouver Municipal Code (VMC); allowing for a deferral of traffic and park impact fee payment, providing for severability, and setting an effective date.

Staff Report: 173-25

To: Mayor and City Council
From: City Manager
Date: August 11, 2025

Subject

Ordinance Amending Vancouver Municipal Code to Provide Impact Fee Deferral for Multi-family Residential Development

Key Points

- An amendment to VMC 20.915 allowing Park and Traffic Impact Fees on new development to be delayed from the building permit issuance date until the date a temporary or final certificate occupancy permit inspection is scheduled (23 months on average).
- Impact fee deferral is intended to be paired with other housing incentive options, including a companion amendment to VMC 14.04.235 (System development charges – Connection fees) allowing utility connection fees to be delayed from the connection application date until the date of the temporary occupancy permit inspection request (9 months on average).
- Provides housing developers with financial savings of interest costs from construction loans, as well as a decreased risk for lending entities and investors.
- Provides additional incentives to improve the financial feasibility of new housing developments and possibly increase housing production.

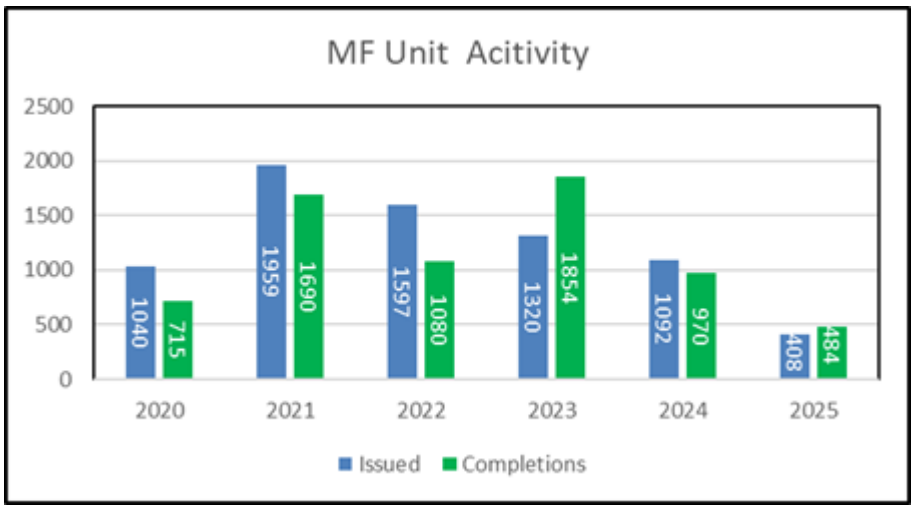
Strategic Plan Alignment

Housing and Human Needs – meeting basic needs and partnering with organizations to support the community.

High Performing Government – a government that is reliable, fiscally responsible, equitable, and open to compromise.

Present Situation

City of Vancouver residents continue to struggle with housing costs. American Community Survey data indicates approximately 50% of households in Vancouver are renters, and many of these households experience significant financial burdens from paying more than 30% of their household income for rent and utilities. In response, the City of Vancouver has been providing incentives to encourage an increase in affordable and market rate housing production through programs such as the Multifamily Tax Exemption (MFTE) program, the Construction Sales and Use Tax Deferral program, the Affordable Housing Fund, Community and Development Block Grant (CDBG) and HOME program funding, and also through zoning code amendments to promote density and development feasibility. Unfortunately, housing production within the city continues to fall well short of the annual production goal of 2,000 units needed to close the housing deficit.



(Graphic chart indicating multifamily unit permits and completions from 2020 through June 30, 2025)

Through the first six months of 2025, multifamily unit completions are only at one quarter of the annual goal.

Due to overshadowing market challenges, these incentives have not been sufficient to generate a substantial increase in housing starts. As an example, only two new projects have applied for and received final MFTE approval since the last major expansion of the MFTE program in 2023 (Grand Vista Apartments, a 79-unit income-based project, and Parkview Heights Townhomes, an 18-unit income-based project). As a result of the continued stall in housing development, additional actions by the City of Vancouver are necessary to further encourage development activity until market conditions improve.

In May 2025, City staff proposed six additional incentives that, when combined, have the potential to increase the rate of return on investment by 1-2% to spur additional production:

1. Deferral of MFTE fee in lieu of payments
2. 2-year waiver of MFTE application fees
3. Reduced minimum parking standards
4. Expedited development plan review timeline
5. Deferral of Park and Traffic Impact Fee payments
6. Deferral of system development charges (SDC) payments

The first four of these proposals have either been adopted by City Council or implemented through administrative action. The deferral of Impact Fees and SDC payments are the last two proposed changes awaiting City Council action.

Impact Fee Payment Deferral

The first proposed code text change is related to the City's development impact fee ordinance adopted under VMC section 20.915. Development impact fees are one-time charges assessed against new development projects to help pay for new or expanded public capital facilities that will directly address the increased demand for services created by those developments. The purpose of Impact Fees is to maintain and improve public infrastructure such as roads, parks, and schools up to the level of service standards set by the local jurisdiction to keep up with the increased demand created by development.

All developers pay a proportionate share towards capital projects based on the expected service

demands created by the development. The fees are paid into an interest-bearing account to await allocation towards infrastructure projects on the capital facility plan for parks, transportation and schools. Impact Fees may not be used for any purpose other than capital projects in the service district which the development is built. Impact fee calculation rates are set in VMC 20.915 and typically increase on an annual basis. Traffic Impact Fees are determined based upon the amount of average daily vehicle trips generated by the project and the district the project lies in. School and Park Impact Fees are based upon the number of units added by the development and the service district the project lies in.

Impact fees received from developers must be expended or encumbered within 10 years of receipt, or they may be subject to a refund. Currently, impact fees are calculated at the time permits are applied for (the vesting date) and collected at the time building permits are issued.

This proposed text change amends the development impact fee ordinance (VMC 20.915) providing a fee payment deferral option for multifamily housing development citywide. The change defers the timing of Traffic and Park Impact Fee payment from the time of building permit issuance to the time the applicant schedules the building temporary occupancy permit inspection at the completion of construction. Note that this deferral payment option will not apply to School Impact Fees. School Impact Fee payment will still be due at the time of building permits issuance. The estimated payment deferral period is expected to last 23 months on average but will vary based on the size of the project and duration of construction.

Because Impact Fees are governed by Title 20 of the Vancouver Municipal Code (VMC), this Impact Fee deferral proposal was reviewed by the Vancouver Planning Commission, which voted unanimously to recommend the proposed changes for approval by the City Council at a public hearing on July 8, 2025.

System Development Charge Fee Deferral (Companion amendment being presented under separate Council agenda item)
System Development Charges (SDCs) for water and sewer utility connections are also one-time fees collected between the time of building permit issuance and the final inspection for the utility connection. SDCs are intended to recover the costs of system enhancements and expansions to serve new development. The SDCs are calculated at the time the utility connection permit is requested. The variables for calculating SDC fees include the land use type (equivalent dwelling units) and size of meter requested. System Development Charge fees do not vest for any specified length of time. SDC's increase on January 1st every year based on a consumer price index standard per VMC 3.08.100.

Financial Impact
The benefits of the Impact Fee and SDC deferral to housing developers include reduced borrowing costs during construction, as well as a decreased risk for lending entities and investors. By delaying payment of these fees until new projects are nearing completion and occupancy, developers can avoid having to borrow additional funds and can possibly finance the payment of these fees through permanent financing, which typically has lower interest costs than construction financing.

The table below estimates the potential savings to a hypothetical 100-unit multifamily project by delaying the payment of Impact Fees by 23 months and SDCs by 9 months, which are the expected deferral periods based on previous projects. A typical 100-unit project could save $60,000 in borrowing costs with the proposed deferral.

Fee Type	Per unit	Total Fees	Interest @ 8%	Annual

				Interest Cost
Parks Impact Fee	$4,206	$420,600	$38,695	$20,189
Traffic Impact Fee	$1,316	$131,600	$12,107	$6,317
SDCs	$3,000	$300,000	$10,800	$14,403
TOTAL		$852,200	$61,602	$40,909

(Table showing potential financial interest savings for housing developers)

The deferral of impact fees and SDCs will have a negative financial impact to the City. By deferring collection of these fees, the City does not have immediate access to these funds to invest in infrastructure projects and system improvements, including new parks, roads and utilities. In addition, because collected funds are currently placed in interest-bearing accounts until expended, the City loses interest earned during the period between permit issuance and temporary occupancy permit inspection (9 months for SDCs and 23 months for Impact Fees).

The estimated financial impact to the City of the fee deferral is summarized below. These estimates are based on a 15% increase in housing production over the current rate of 700 housing units per year as a result of the additional incentives to spur new development. As the table below shows, the City experiences maximum deficits of $5.5M and $1.7M for Parks and Traffic Impact Fees, and a deficit of just under $1M in SDCs. Each of these deficits is replenished over time with the SDC deficit being eradicated in one year, while the Impact Fee deficits require 2-3 years to erase. In addition, the City is projected to forgo up to $600,000 in interest as a result of fee deferrals.

(Deferred)/Collected Fees	2026	2027	2028	2029
Parks Impact Fees	$ (2,927,376)	$ (2,628,750)	$ 3,381,624	$ 3,734,928
Traffic Impact Fees	$ (915,936)	$ (822,500)	$ 1,058,064	$ 1,168,608
System Development Charges (SDCs)	$ (963,000)	$ 2,433,000	$ 2,727,000	$ 2,988,000
Cumulative PIF	$ (2,927,376)	$ (5,556,126)	$ (2,174,502)	$ 1,560,426
Cumulative TIF	$ (915,936)	$ (1,738,436)	$ (680,372)	$ 488,236
Cumulative SDC	$ (963,000)	$ 1,470,000	$ 4,197,000	$ 7,185,000
Foregone Interest	$ (192,252)	$	$	$ -

		(291,782)	(114,195)	

(Table showing potential financial outcomes of fee deferrals over a four-year period)

The above analysis only reflects the deferred fees (and foregone interest income) projected under a higher level of housing production. Currently, the City's collection of Impacts Fees and SDCs, as well as interest income, is well below the above figures and budget forecasts because of depressed housing construction, so the alternative to a deferral of fees and potential for higher future fees is to continue to collect reduced fees from historically low levels of housing production. If the proposed deferral option is successful in advancing housing projects that would otherwise not have moved forward, then any impact fees and SDCs generated by those projects would be funds the City would not have otherwise received at all.

Advantage(s)

Provides additional incentive tools to encourage housing development.

Challenge(s)

1. Potential decrease in interest earned from interest-bearing accounts during the deferral period.
2. Potential delay in new infrastructure projects and investment in utility system improvements.

Budget Impact

The City's General Fund budget is not affected by impact fee or SDC collections. Collected development fees are specifically dedicated to fund capital improvements for park, transportation, water, and sewer infrastructure projects. As noted in the above financial analysis, a deferral of Impact Fees and SDC payments will likely delay those planned capital investments but may also result in an increase in funds available for capital investment in future years. There won't be a budget impact for park or transportation impact fees in 2025 or 2026 since the budgets have already been removed.

Prior Council Review

- City Council Housing Program Workshop - June 9, 2025
- Planning Commission Workshop - June 27, 2025
- Planning Commission Public hearing - July 9, 2025

Action Requested

On Monday, August 11, 2025, advance the ordinance, setting the date for the second reading and public hearing for Monday, August 18, 2025.

Staff Contact

Bryan Monroe, Associate Housing Project Coordinator, bryan.monroe@cityofvancouver.us

Attachments:

1. Presentation
2. Ordinance



CITY OF Vancouver WASHINGTON

Impact Fee and System Development Charge Payment Deferral

Vancouver City Council
1st reading- August 11, 2025
Public Hearing- August 18, 2025

Bryan Monroe- Associate Housing Coordinator-Economic Prosperity and Housing Department

Patrick Quinton- Director-Economic Prosperity and Housing Department



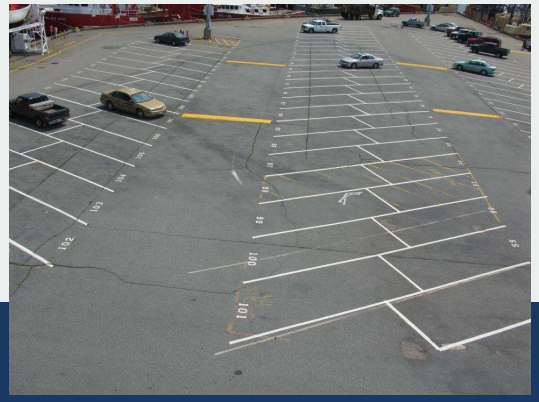
Agenda

- Current Incentives
- Housing Production
- Proposed Incentives
- Impact Fee Deferral
- System Development Charges
- Next Steps

Current Development Incentives

- Multifamily Tax Exemption (MFTE)
- Construction Sales Tax Deferral
- Affordable Housing Fund
- Federal CDBG/HOME
- Zoning code amendments

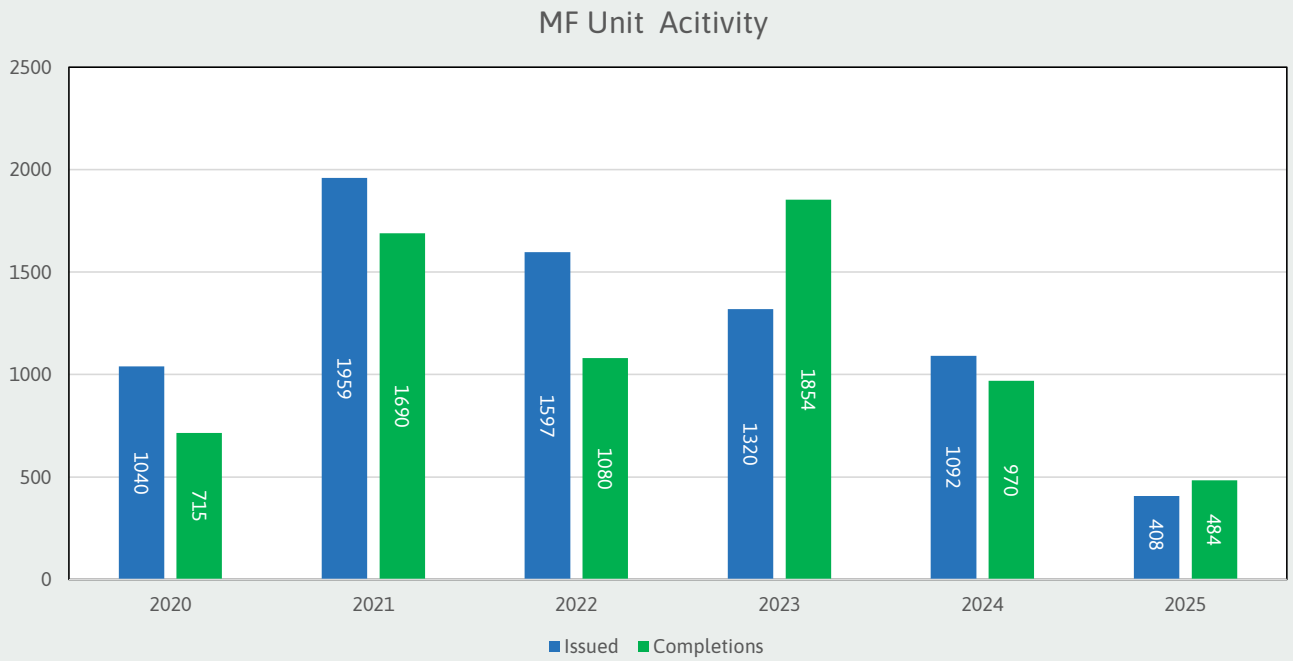








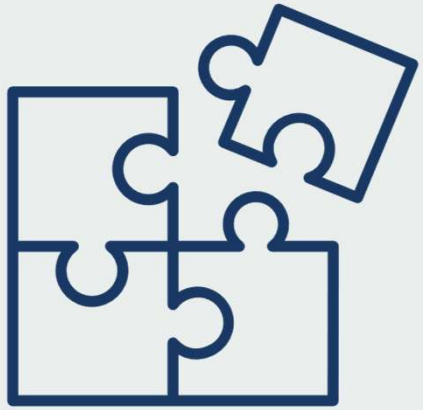
Housing Units Production





New Incentives

- Parking requirement reductions (Completed)
- MFTE Fee in Lieu deferred payment (Completed)
- 2-yr MFTE application fee waiver (Completed)
- Expedited permit review timeline (Completed)
- Impact Fee deferral
- System Development Charge (SDC) payment deferral



Impact Fees VMC 20.915

- One time fee for new developments
- Proportionate share of infrastructure costs to maintain level of service standards
- Impact Fees include Parks, Traffic, and School*
- Fees calculated upon building permit application
- Fees paid upon issuance of approved permit
- Fees placed in interest bearing accounts until encumbered
- Fees may only be used for projects on capital improvement plan
- Subject to refund if not encumbered after 10 years

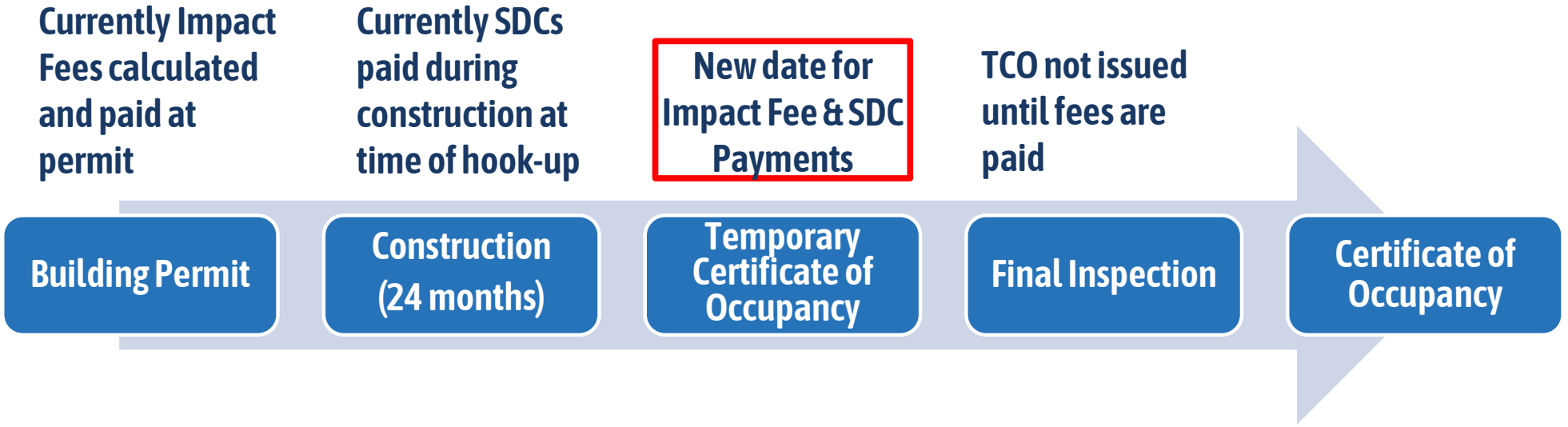
**Note that School Impact Fees are not included in the proposed change*

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- One time utility connection fee for new development
- Intended to recover cost of system enhancements and expansions to accommodate the population.
- Development owners are expected to pay proportionate share of costs to maintain level of service standards
- Fees calculated upon sewer or water connection permit.
- Fees do not vest and increase annually on January 1.

Proposed Change to SDC & Impact Fee Timeline

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Impact on New Development

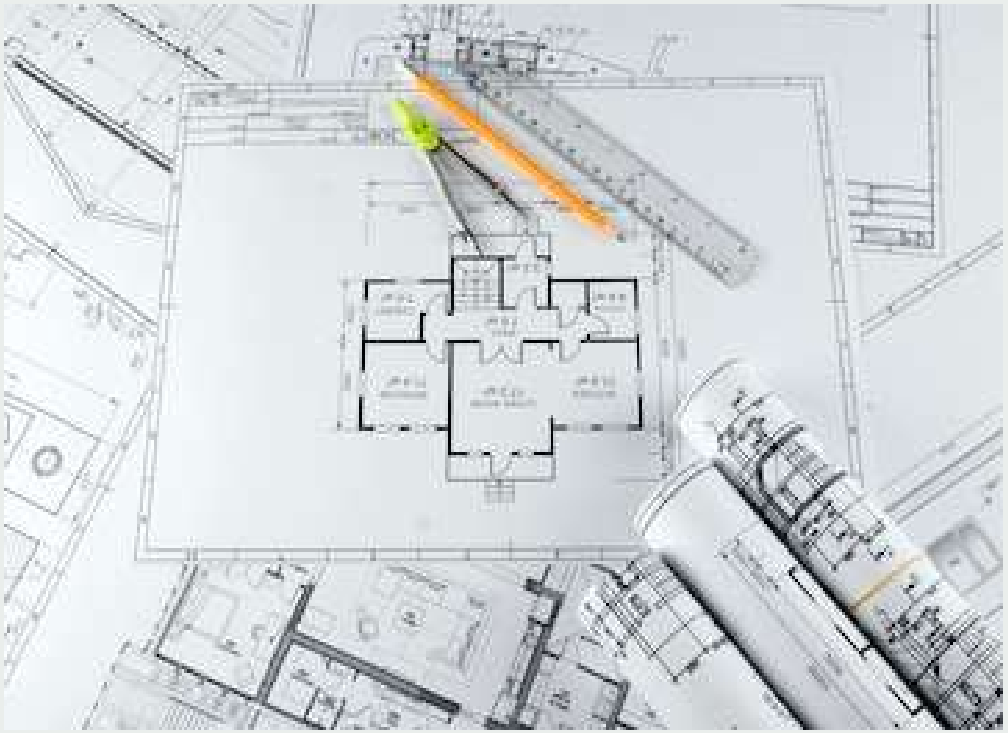
Potential savings of $60k for a 100-unit multifamily project

	Per Unit	Total Fees	Interest Cost @ 8%	Annual Interest Cost
Parks Impact Fee	$4,206	$420,600	$38,695	$20,189
Traffic Impact Fee	$1,316	$131,600	$12,107	$6,317
SDCs	$3,000	$300,000	$10,800	$14,403
TOTAL		$852,200	$61,602	$40,909

Financial Impacts to City

Deferred fees recovered within three years

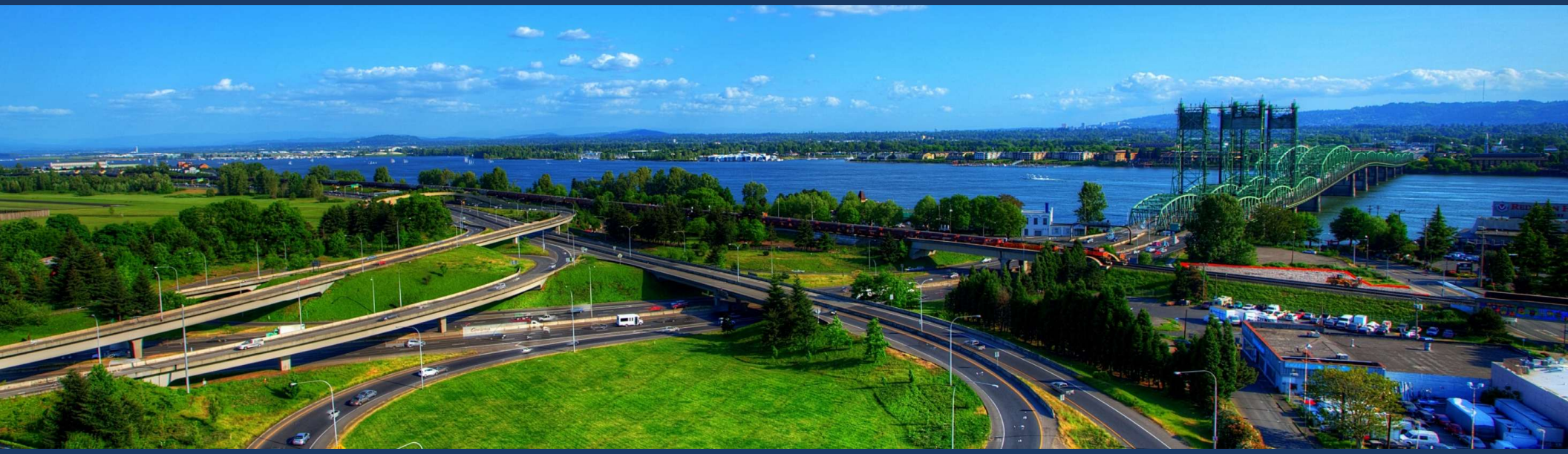
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Foregone Interest	$ (192,252)	$ (291,782)	$ (114,195)	$ -



Requested Actions

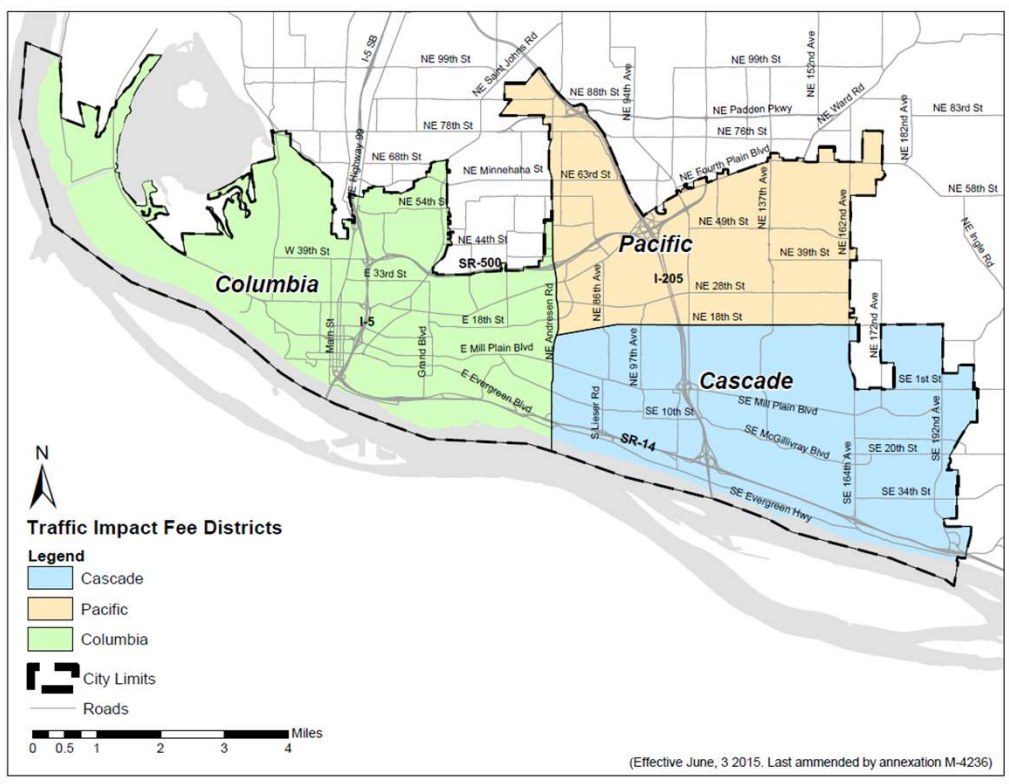
- Adopt zoning code text amendment to VMC 20.915 allowing for a deferral of traffic and park impact fee payment for multifamily housing developments.
- Adopt code text amendment to VMC 14.04.235 allowing for a deferral of system connection fee payment for multifamily housing developments.

Thank You



bryan.monroe@cityofvancouver.us | 360-487-7958

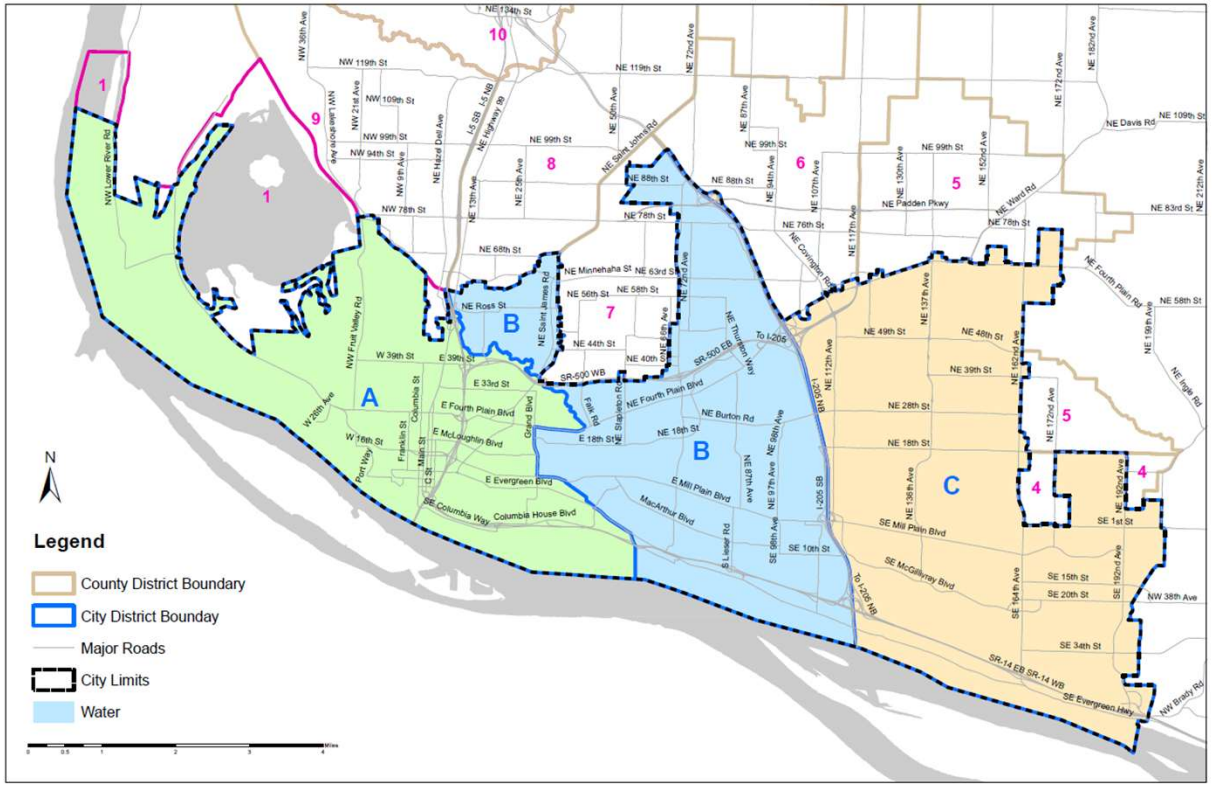
Traffic Fee Districts



2025 Fee Rate:
Columbia: $247 per trip
Cascade: $338 per trip
Pacific: $439 per trip

Average of $341 per trip
Standard mid-rise ADT is 4.54 per unit.

Park Fee Districts



2025 Fee rate:
$4,206 MF per unit

8/11/25 (Date of First Reading)
8/18/25 (Date of Public Hearing)

ORDINANCE NO. M- [Ordinance Number]

AN ORDINANCE of the City of Vancouver relating to changes to the City's Impact Fee Ordinance; adopting an amendment to section 20.915, of the Vancouver Municipal Code (VMC); allowing for a deferral of traffic and park impact fee payment, providing for severability, and setting an effective date.

WHEREAS, Washington State law (RCW 82.02.050) authorizes cities to adopt an impact fee program for the purpose of ensuring that adequate facilities are available to serve new growth and development under which developers pay a proportionate share of the cost of new facilities needed to serve new growth and development.

WHEREAS, the City of Vancouver adopted an impact fee ordinance in 1995 through Ordinance M-3201.

WHEREAS, according to data from the City of Vancouver permitting system, multifamily building permit issuance and completion rates continue to fall behind production goals aimed at relieving the effects of housing supply and demand.

WHEREAS, City Council desires to encourage additional housing production through provisions of housing development incentives, and

WHEREAS, City Council desires to amend the Impact Fee section of the Vancouver Municipal Code to allow for a deferred payment of the Traffic and Park fee for multifamily development, and

WHEREAS, the intent of the proposed impact fee payment deferral amendment is to reduce the upfront financial cost burden of housing development at the outset of construction thereby making financing of developments more attainable.

WHEREAS, the City Council finds that the amendment of the Impact Fee program set forth in this Ordinance will promote the general welfare of the people of Vancouver, and will encourage the development of additional multi-family housing units within the City; and

WHEREAS, with proper notice to the public, the Vancouver City Council conducted the first reading of the proposed ordinance on August 4, 2025, and a public hearing concerning the ordinance and proposed code change on August 11, 2025.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF VANCOUVER:

Section 1. **Recitals Adopted as Findings**. The City Council hereby adopts and incorporates by reference the above recitals and the information in SR_____ as findings as findings in support of this Ordinance.

Section 2. **Amendment**. Vancouver Municipal Code Section 20.915.020 entitled "Applicability" as initially codified by Ordinance Ord. M-3201 and last amended by Ordinance M-4340 is hereby amended as follows:

[...]

20.915.020 Applicability

A. *Uniform applicability.* This chapter shall be uniformly applicable to development that occurs within a designated service area or overlay service areas.

B. *For pre-development permit issuance.* No building permit shall be issued for a development in a designated service area or overlay service area as defined in this chapter unless the impact fee is calculated and paid pursuant to this chapter.

C. For new development requiring a building permit the impact fee(s) shall be calculated at ~~time~~ the time of building permit application. Impact fees shall be due and payable at the time the building permit issuance unless deferred, ~~is issued except~~ as provided in VMC 20.915.075 and 20.915.076. Notwithstanding the foregoing, all impact fees shall be recalculated for building permit applications that have not been issued within one year.

D. *For development not requiring a building permit.* For development not requiring a building permit (e.g., approval of a change in use of a building or land), the impact fee shall be calculated and imposed at the time of the associated development approval.

E. *For manufactured home parks.* For manufactured home parks, the impact fee shall be calculated and imposed at the time of site plan approval.

F. All impact fees shall be calculated using the impact fee rates in effect at the time of calculation. (Ord. M-4340 § 2, 2021; Ord. M-4325 § 3, 2020; Ord. M-3643, 2004)

[...]

Section 3. **New Section/Amendment**. Vancouver Municipal Code Section 20.915.076 entitled "Additional provisions for Deferral of Impact fees for Multifamily-Family Housing" to read as follows:

[...]

20.915.076 Additional provisions for Deferral of Impact fees for Multifamily-Family Housing.

A. Concurrent with the application for multifamily-family residential building permit, an application may be submitted for deferral of payment of traffic and park impact fees. If approved, eligible impact fees may be deferred until the payment deadline criteria provided in subsection C. For these purposes "multi-family" shall be defined as a building or portion designed or used as a residence by three or more households and containing three or more dwelling units.

B. The amount of impact fees deferred shall be determined by the fees in effect at the time the applicant applies for a deferral subject to annual recalculation as provided in VMC 20.915.020 C. "Applicant" as defined in this section shall include an entity that controls the applicant, that is controlled by the applicant or is under common control with the applicant.

C. The impact fee payment deferral period shall terminate on the date that an application for inspection for temporary, or final certificate occupancy (if no temporary certificate required), is submitted, or 36 months from issuance of the building permit, whichever event occurs first at which time any deferred impact fee shall be due. An application for deferral of impact fees under this section, or a deferral that has been approved prior to the issuance of a building permit, shall terminate upon expiration or denial of the concurrently submitted building permit application. The City may deny an application for temporary building occupancy inspection and withhold issuance of any building certificate occupancy permits until all deferred impact fees have been paid.

D. An impact fee deferral application must be submitted for each parcel to be developed. The deferral application shall include an impact fee deferral agreement and lien on forms provided by the City. The lien shall be recorded against the property, granted to the City of Vancouver in the amount of the deferral and shall be signed by all owners of the property, with signatures acknowledged as required for a property deed. The lien shall be binding on all successors, and subordinate to one deed of trust securing a mortgage for construction of the property granted by the impact fee deferral applicant.

E. Upon receipt of all deferred impact fees, the City of Vancouver shall execute release of the lien for the property. The property owner at that time shall be responsible for recording the release, at their expense.

F. The City of Vancouver may institute foreclosure proceedings for unpaid impact fees due.

[...]

Section 4. **Effective Date.** This ordinance shall be effective 30 days from passage.

DATE OF FINAL PASSAGE by the Vancouver City Council:

SIGNED this _____ day of _____, 2025.

_____
Anne McEnerny-Ogle, Mayor

Attest: Approved as to form:

_____	_____
Natasha Ramras, City Clerk	Nena Cook, City Attorney

SUMMARY

ORDINANCE NO. _____

AN ORDINANCE of the City of Vancouver relating to changes to the City's Impact Fee Program; adopting an amendment to section 20.915, of the Vancouver Municipal Code (VMC); allowing for a deferral of traffic and park impact fee payment, providing for severability, and setting an effective date.

The full text of this ordinance will be mailed upon request. Contact public records staff at (360) 487-8480, citypdr@cityofvancouver.us, or via Public Records Request -The City of Vancouver, WA.

AN ORDINANCE of the City of Vancouver relating to changes to the City's Water And Sewer Use – Regulations And Charges Ordinance; adopting an amendment to section VMC 14.04, of the Vancouver Municipal Code (VMC); allowing for a deferral of utility system development charges for connecting to city utility services, providing for severability, and setting an effective date.

Staff Report: 174-25

To: Mayor and City Council
From: City Manager
Date: August 11, 2025

Subject

Ordinance Amending Vancouver Municipal Code to Provide System Development Charge Deferral for Multi-Family Residential Development

Key Points

- An amendment to VMC 14.04.235 (System development charges – Connection fees) allowing utility connection fees to be delayed from the connection application date until the date of the temporary occupancy permit inspection request (9 months on average).
- The System Development Charge deferral is intended to be paired with other housing incentive options, including a companion amendment to VMC 20.915 allowing Park and Traffic Impact Fees on new development to be delayed from the building permit issuance date until the date a temporary or final certificate occupancy permit inspection is scheduled (23 months on average).
- Provides housing developers with financial savings of interest costs from construction loans, as well as a decreased risk for lending entities and investors.
- Provides additional incentives to improve the financial feasibility of new housing developments and possibly increase housing production.

Strategic Plan Alignment

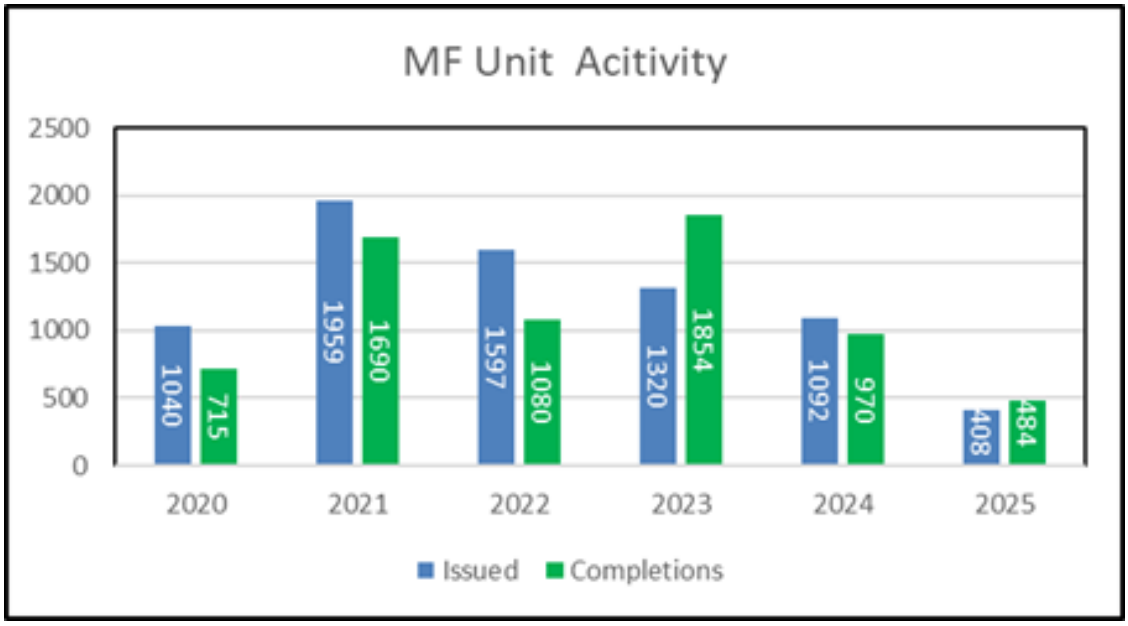
Housing and Human Needs – meeting basic needs and partnering with organizations to support the community.

High Performing Government – a government that is reliable, fiscally responsible, equitable, and open to compromise.

Present Situation

City of Vancouver residents continue to struggle with housing costs. American Community Survey data indicates approximately 50% of households in Vancouver are renters, and many of these households experience significant financial burdens from paying more than 30% of their household income for rent and utilities. In response, the City of Vancouver has been providing incentives to encourage an increase in affordable and market rate housing production through programs such as the Multifamily Tax Exemption (MFTE) program, the Construction Sales and Use Tax Deferral program, the Affordable Housing Fund, Community and Development Block Grant (CDBG) and HOME program funding, and also through zoning code amendments to promote density and

development feasibility. Unfortunately, housing production within the city continues to fall well short of the annual production goal of 2,000 units needed to close the housing deficit.



(Graphic chart indicating multifamily unit permits and completions from 2020 through June 30, 2025)

Through the first six months of 2025 multifamily unit completions are only at one quarter of the annual goal.

Due to overshadowing market challenges, these incentives have not been sufficient to generate a substantial increase in housing starts. As an example, only two new projects have applied for and received final MFTE approval since the last major expansion of the MFTE program in 2023 (Grand Vista Apartments, a 79-unit income-based project, and Parkview Heights Townhomes, an 18-unit income-based project). As a result of the continued stall in housing development, additional actions by the City of Vancouver are necessary to further encourage development activity until market conditions improve.

In May 2025, City staff proposed six additional incentives that, when combined, have the potential to increase the rate of return on investment by 1-2% to spur additional production:

1. Deferral of MFTE fee in lieu of payments
2. 2-year waiver of MFTE application fees
3. Reduced minimum parking standards
4. Expedited development plan review timeline
5. Deferral of Park and Traffic Impact Fee payments
6. Deferral of system development charges (SDC) payments

The first four of these proposals have either been adopted by City Council or implemented through administrative action. The deferral of impact fees and SDC payments are the last two proposed changes awaiting City Council action.

System Development Charge Fee Deferral

System Development Charges (SDCs) for water and sewer utility connections are also one-time fees collected between the time of building permit issuance and the final inspection for the utility connection. SDCs are intended to recover the costs of system enhancements and expansions to serve new development. The SDCs are calculated at the time the utility connection permit is requested. The variables for calculating SDC fees include the land use type (equivalent dwelling

units) and size of meter requested. System Development Charge fees do not vest for any specified length of time. SDC's increase on January 1 every year based on a consumer price index standard per VMC 3.08.100.

Impact Fee Payment Deferral (Companion amendment being presented under separate Council agenda item)
The first proposed code text change is related to the City's development impact fee ordinance adopted under VMC section 20.915. Development impact fees are one-time charges assessed against new development projects to help pay for new or expanded public capital facilities that will directly address the increased demand for services created by those developments. The purpose of impact fees is to maintain and improve public infrastructure such as roads, parks, and schools up to the level of service standards set by the local jurisdiction to keep up with the increased demand created by development.

All developers pay a proportionate share towards capital projects based on the expected service demands created by the development. The fees are paid into an interest-bearing account to await allocation towards infrastructure projects on the capital facility plan for parks, transportation and schools. Impact fees may not be used for any purpose other than capital projects in the service district which the development is built. Impact fee calculation rates are set in VMC 20.915 and typically increase on an annual basis. Traffic Impact Fees are determined based upon the amount of average daily vehicle trips generated by the project and the district the project lies in. School and Park Impact Fees are based upon the number of units added by the development and the service district the project lies in.

Impact fees received from developers must be expended or encumbered within 10 years of receipt, or they may be subject to a refund. Currently, impact fees are calculated at the time permits are applied for (the vesting date) and collected at the time building permits are issued.

This proposed text change amends the development impact fee ordinance (VMC 20.915) providing a fee payment deferral option for multifamily housing development citywide. The change defers the timing of Traffic and Park Impact fee payment from the time of building permit issuance to the time the applicant schedules the building temporary occupancy permit inspection at the completion of construction. Note that this deferral payment option will not apply to School Impact Fees. School Impact Fee payment will still be due at the time of building permits issuance. The estimated payment deferral period is expected to last 23 months on average but will vary based on the size of the project and duration of construction.

Because impact fees are governed by Title 20 of the Vancouver Municipal Code (VMC), this Impact Fee deferral proposal was reviewed by Vancouver Planning Commission which voted unanimously to recommend the proposed changes for approval by the City Council at a public hearing on July 8, 2025.

Financial Impact
The benefits of the impact fee and SDC deferral to housing developers include reduced borrowing costs during construction as well as a decreased risk for lending entities and investors. By delaying payment of these fees until new projects are nearing completion and occupancy, developers can avoid having to borrow additional funds and can possibly finance the payment of these fees through permanent financing, which typically has lower interest costs than construction financing.

The table below estimates the potential savings to a hypothetical 100-unit multifamily project by delaying the payment of impact fees by 23 months and SDCs by 9 months, which are the expected deferral periods based on previous projects. A typical 100-unit project could save $60,000 in

borrowing costs with the proposed deferral.

Fee Type	Per unit	Total Fees	Interest @ 8%	Annual Interest Cost
Parks Impact Fee	$4,206	$420,600	$38,695	$20,189
Traffic Impact Fee	$1,316	$131,600	$12,107	$6,317
SDCs	$3,000	$300,000	$10,800	$14,403
TOTAL		$852,200	$61,602	$40,909

(Table showing potential financial interest savings for housing developers)

The deferral of Impact Fees and SDCs will have a negative financial impact to the City. By deferring collection of these fees, the City does not have immediate access to these funds to invest in infrastructure projects and system improvements, including new parks, roads and utilities. In addition, because collected funds are currently placed in interest-bearing accounts until expended, the City loses interest earned during the period between permit issuance and temporary occupancy permit inspection (9 months for SDCs and 23 months for impact fees).

The estimated financial impact to the City of the fee deferral is summarized below. These estimates are based on a 15% increase in housing production over the current rate of 700 housing units per year as a result of the additional incentives to spur new development. As the table below shows, the City experiences maximum deficits of $5.5M and $1.7M for Parks and Traffic Impact Fees, and a deficit of just under $1M in SDCs. Each of these deficits is replenished over time with the SDC deficit being eradicated in one year, while the impact fee deficits require 2-3 years to erase. In addition, the City is projected to forgo up to $600,000 in interest as a result of fee deferrals.

(Deferred)/Collected Fees	2026	2027	2028	2029
Parks Impact Fees	$ (2,927,376)	$ (2,628,750)	$ 3,381,624	$ 3,734,928
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Foregone Interest	$ (192,252)	$ (291,782)	$ (114,195)	$ -

(Table showing potential financial outcomes of fee deferrals over a four-year period)

The above analysis only reflects the deferred fees (and foregone interest income) projected under a higher level of housing production. Currently, the City's collection of Impacts Fees and SDCs, as well as interest income, is well below the above figures and budget forecasts because of depressed housing construction, so the alternative to a deferral of fees and potential for higher future fees is to continue to collect reduced fees from historically low levels of housing production. If the proposed deferral option is successful in advancing housing projects that would otherwise not have moved forward, then any impact fees and SDCs generated by those projects would be funds the City would not have otherwise received at all.

Advantage(s)

Provides additional incentive tools to encourage housing development.

Challenge(s)

1. Potential decrease in interest earned from interest-bearing accounts during the deferral period.
2. Potential delay in new infrastructure projects and investment in utility system improvements.

Budget Impact

The City's General Fund budget is not affected by impact fee or SDC collections. Collected development fees are specifically dedicated to fund capital improvements for park, transportation, water, and sewer infrastructure projects. As noted in the above financial analysis, a deferral of impact fees and SDC payments will likely delay those planned capital investments but may also result in an increase in funds available for capital investment in future years. SDC revenues are budgeted for $5.7 million in 2026 which will need to be reduced by $5.1 million, to $600,000 since the majority of the activity will be deferred. As a result, some of the capital projects currently budgeted for in the 2025-2026 budget will be delayed until the next biennium.

Prior Council Review

City Council Housing Program Workshop June 9, 2025

Action Requested

On Monday, August 11, 2025, advance the ordinance, setting the date for the second reading and public hearing for Monday, August 18, 2025.

Staff Contact

Bryan Monroe, Associate Housing Project Coordinator, bryan.monroe@cityofvancouver.us

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CITY OF Vancouver WASHINGTON

Impact Fee and System Development Charge Payment Deferral

Vancouver City Council
1st reading- August 11, 2025
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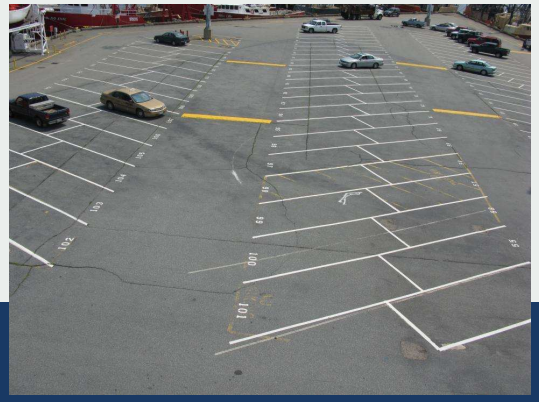
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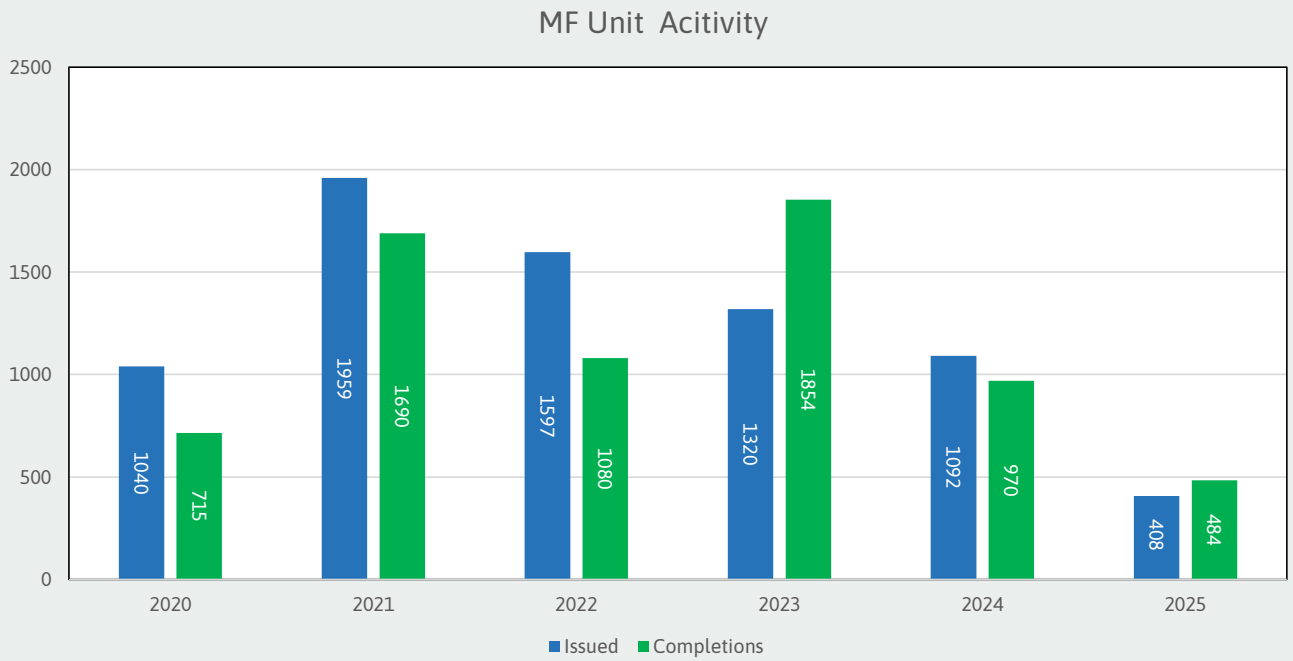








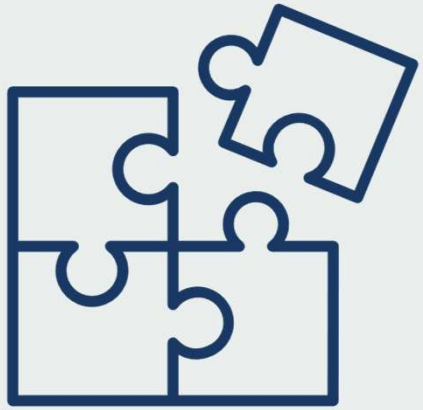
Housing Units Production





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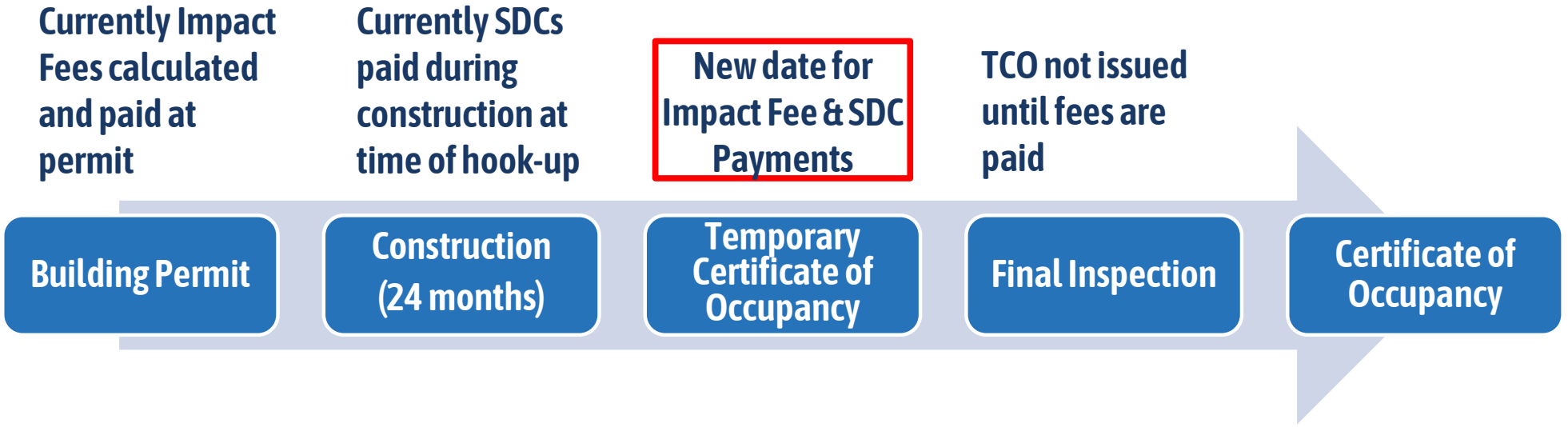
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Payment dates for multifamily development shifted to final inspection



Projects will save 9-23 months of interest costs by paying at TCO rather than building permit

Impact on New Development

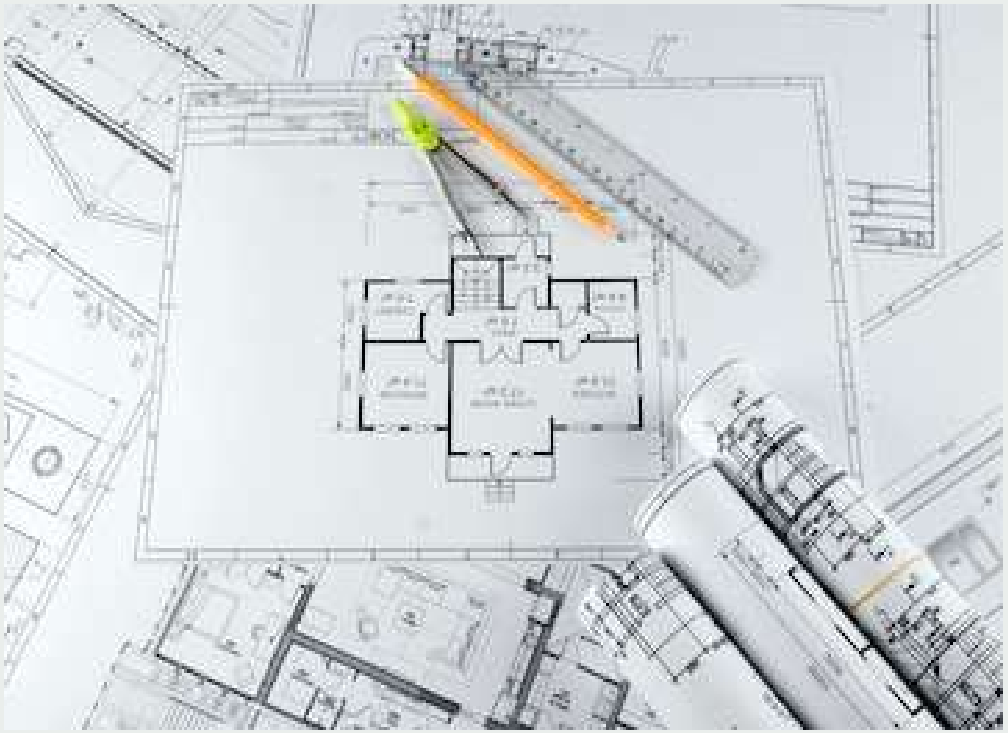
Potential savings of $60k for a 100-unit multifamily project

	Per Unit	Total Fees	Interest Cost @ 8%	Annual Interest Cost
Parks Impact Fee	$4,206	$420,600	$38,695	$20,189
Traffic Impact Fee	$1,316	$131,600	$12,107	$6,317
SDCs	$3,000	$300,000	$10,800	$14,403
TOTAL		$852,200	$61,602	$40,909

Financial Impacts to City

Deferred fees recovered within three years

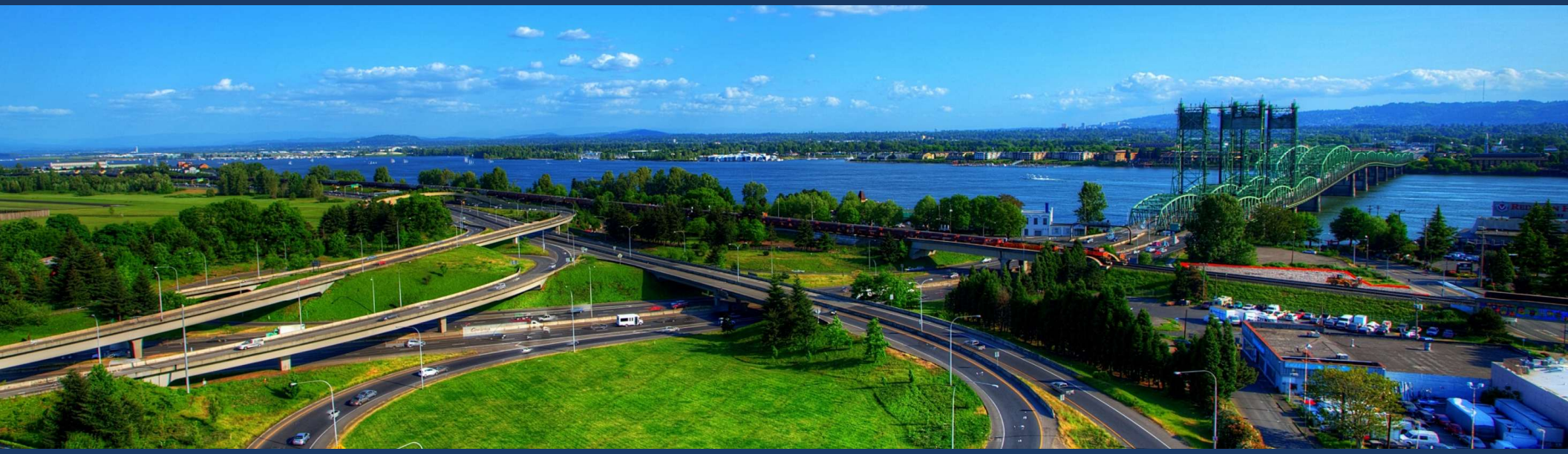
(Deferred)/Collected Fees	2026	2027	2028	2029
Parks Impact Fees	$ (2,927,376)	$ (2,628,750)	$ 3,381,624	$ 3,734,928
Transportation Impact Fees	$ (915,936)	$ (822,500)	$ 1,058,064	$ 1,168,608
System Development Charges (SDCs)	$ (963,000)	$ 2,433,000	$ 2,727,000	$ 2,988,000
Cumulative PIF	$ (2,927,376)	$ (5,556,126)	$ (2,174,502)	$ 1,560,426
Cumulative TIF	$ (915,936)	$ (1,738,436)	$ (680,372)	$ 488,236
Cumulative SDC	$ (963,000)	$ 1,470,000	$ 4,197,000	$ 7,185,000
Foregone Interest	$ (192,252)	$ (291,782)	$ (114,195)	$ -



Requested Actions

- Adopt zoning code text amendment to VMC 20.915 allowing for a deferral of traffic and park impact fee payment for multifamily housing developments.
- Adopt code text amendment to VMC 14.04.235 allowing for a deferral of system connection fee payment for multifamily housing developments.

Thank You



bryan.monroe@cityofvancouver.us | 360-487-7958

8/11/25 (Date of First Reading)
8/18/25 (Date of Public Hearing)

ORDINANCE NO. M- [ ]

AN ORDINANCE of the City of Vancouver relating to changes to the City's Water And Sewer Use – Regulations And Charges Ordinance; adopting an amendment to section VMC 14.04, of the Vancouver Municipal Code (VMC); allowing for a deferral of utility system development charges for connecting to city utility services, providing for severability, and setting an effective date.

WHEREAS, Washington State law (RCW 35.92.025) authorizes cities to charge property owners seeking to connect to municipal water or sewerage systems to serve new development.

WHEREAS, the City of Vancouver adopted a utility systems development charge fee in 1981 through Ordinance M-2135 most recently updated in 2022 through Ord M-4359, and

WHEREAS, according to data from the City of Vancouver permitting system, multifamily building permit issuance and completion rates continue to fall behind production goals aimed at relieving the effects of housing supply and demand.

WHEREAS, City Council desires to encourage additional housing production through provisions of housing development incentives, and

WHEREAS, City Council desires to amend the City's Water And Sewer Use Regulations And Charges Ordinance to allow for a deferred payment of the utility connection fees for multifamily development, and

WHEREAS, the intent of the proposed utility system development charge fee payment deferral is to reduce the upfront financial cost burden of housing development at the outset of construction thereby making financing of developments more attainable.

WHEREAS, the City Council finds that proposed utility system development charge fee payment deferral set forth in this Ordinance will promote the general welfare of the people of Vancouver, and will encourage the development of additional multi-family housing units within the City; and

WHEREAS, with proper notice to the public, the Vancouver City Council conducted the first reading of the proposed ordinance on August 11, 2025, and a public hearing concerning the ordinance and proposed code change on August 18, 2025.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF VANCOUVER:

Section 1. **Recitals Adopted as Findings**. The City Council hereby adopts and incorporates by reference the above recitals and the information in SR_____ as findings as findings in support of this Ordinance.

Section 2. **Amendment**. Vancouver Municipal Code Section 14.04.235 entitled "System development charges – Connection fees." as initially codified by Ordinance Ord. M-2135 and last amended by Ordinance M-4359 is hereby amended as follows:

14.04.235 System development charges – Connection fees

[...]

C. *Payment Required ~~Prior to Connection~~*. A system development charge is imposed as a connection charge pursuant to RCW 35.92.025 upon all lands in the city and all lands outside the

boundaries of the city which connect to either the city water system or sewerage system or to both. Unless deferred as noted herein, ~~The~~ system development charges shall be paid in full ~~with an~~ upon submittal of application for connection to the sewer system or water system; provided, that a building permit application or an application for expanded service has been filed. System development charges for multifamily housing development may be deferred until the scheduling of building occupancy permit inspection by the City provided that:

1. "Multifamily" shall be defined as a building or portion thereof designed or used as a residence by three or more households and containing three or more dwelling units.
2. A system development charge deferral application must be submitted for each utility connection permit. The system development charge deferral application shall include an agreement and property lien document on a form provided by the City, to be recorded against the property, granted to the City of Vancouver in the amount of the deferral in addition to the amount of any future system development charge increases taking effect prior to payment pursuant to VMC 14.04.235(I). The lien shall be signed by all owners of the property, with signatures acknowledged as required for a property deed. The lien shall be binding on all successors, and subordinate to one mortgage for construction of the property granted by the system development fee deferral applicant.
3. The system development charge payment deferral period shall terminate on the date that an application for inspection for temporary, or final certificate occupancy (if no temporary certificate required), is submitted, or 36 months from issuance of the building permit, whichever event occurs first, at which time any deferred impact fee shall be due. The City may deny an application for temporary building occupancy inspection and withhold issuance of any building occupancy permits until all deferred fees have been

paid. The City may withhold scheduling the occupancy permit inspection and issuance until the system development fees are paid in full.

4. Upon receipt of all deferred system development fees, the City of Vancouver shall execute release of the lien for the property. The property owner at that time shall be responsible for recording the lien release, at their expense.
5. The City of Vancouver may institute foreclosure proceedings for unpaid system development due.
6. System development charges are initially calculated at the time of utility connection application but are subject to increase until paid as provided for by VMC 14.04.235 (I).

In ~~any case~~ the event ~~in which~~ that a building permit expires from passage of time, any utility connection permit which had been issued for the use provided for in that building permit shall likewise expire and a new system development charge must be paid and a new utility connection permit secured.

[...]

Section 3. **Effective Date.** This ordinance shall be effective 30 days from passage.

DATE OF FINAL PASSAGE by the Vancouver City Council:

SIGNED this _____ day of _____, 2025.

_____
Anne McEnerny-Ogle, Mayor

Attest:

_____
Natasha Ramras, City Clerk

Approved as to form:

_____
Nena Cook, City Attorney

SUMMARY

ORDINANCE NO. _____

AN ORDINANCE of the City of Vancouver relating to changes to the City's "Water And Sewer Use – Regulations And Charges" ordinance; adopting an amendment to section 14.04.235 (C), of the Vancouver Municipal Code (VMC); allowing for a deferral of utility system development charge fee payment for multifamily housing development, providing for severability, and setting an effective date.

The full text of this ordinance will be mailed upon request. Contact public records staff at (360) 487-8480, citypdr@cityofvancouver.us, or via Public Records Request -The City of Vancouver, WA.

To: Mayor and City Council
From: City Manager
Date: August 11, 2025

Subject
Approval of Claim Vouchers

Action Requested
Approve claim vouchers for August 11, 2025.

Attachments:
1. August 11, 2025 Claim Vouchers

VOUCHER APPROVAL

We, the undersigned council members of the City of Vancouver, Clark County, Washington, do hereby certify that the merchandise or services hereinafter specified have been received and that the vouchers listed below are approved for payment in the amount of:

$ 8,420,529.91 this 11th day of August 2025.

MAYOR

COUNCILMEMBER

Cyndi A. Turner Digitally signed by Cyndi A. Turner Date: 2025.08.04 16:48:08 -07'00'

AUDITING OFFICER

COUNCILMEMBER

DATE	INCLUSIVE CHECK NUMBERS	CHECK TOTAL
July 28, 2025 - August 03, 2025	Accounts Payable Checks (see attached)	$ 8,284,501.85
July 28, 2025 - August 03, 2025	Hansen City Payments (see attached)	$ 7,186.43
July 28, 2025 - August 03, 2025	Visa Refunds (see attached)	$ 6,366.47
July 28, 2025 - August 03, 2025	Payroll Checks (see attached)	$ 122,475.16
TOTAL		$ 8,420,529.91

INVOICE PAYMENTS REPORT

Category	Type	Transaction Reference	Date	Amount	Payment Payee	Memo
Miscellaneous Payment	Check	26558	7/30/2025	120.00	Airport Green Neighborhood Association	2025 RecycleU
Miscellaneous Payment	Check	26559	7/30/2025	1,450.00	Cedar Lapp	Claim Payment - DOI: 06/24/2025 - RISK
Miscellaneous Payment	Check	26560	7/30/2025	715.87	Cosco Fire Protection Inc	FRI-371082
Miscellaneous Payment	Check	26561	7/30/2025	97.92	Dave Hamby	Claim Payment - DOI: 07/14/2025 - RISK
Miscellaneous Payment	Check	26562	7/30/2025	100.00	DuBois Park Neighborhood Association	2025 Resource Conservation Challenge
Miscellaneous Payment	Check	26563	7/30/2025	100.00	Evergreen Highlands Neighborhood Association	2025 Resource Conservation Challenge
Miscellaneous Payment	Check	26564	7/30/2025	100.00	Northcrest Neighborhood Association	2025 Resource Conservation Challenge - grant approved
Miscellaneous Payment	Check	26565	7/30/2025	100.00	North Image Neighborhood Association	2025 Resource Conservation Challenge
Miscellaneous Payment	Check	26566	7/30/2025	319.13	Patrick Craney	TreeFund Refund
Miscellaneous Payment	Check	26567	7/30/2025	115.46	Professional Credit Service	Refund Invoice 57718 negative trust
Miscellaneous Payment	Check	26568	7/30/2025	133.20	Raphael Verdile III	Refund parking permit #COV14366 - No longer needed
Miscellaneous Payment	Check	26569	7/30/2025	1,300.00	Washington State Labor Council	Permit R15761
Ad Hoc Payment	Check	26570	7/30/2025	209.49	Brittany Peal or Stephen Peal Jr	5410 NE 51ST CIR ,VANCOUVER,WA,98661
Ad Hoc Payment	Check	26571	7/30/2025	26.24	Foster,Richard or Sharon	11409 NE 29TH CIR ,VANCOUVER,WA,98682
Ad Hoc Payment	Check	26572	7/30/2025	90.26	Guidice,Aaron C	208 N KNOXVILLE WAY ,VANCOUVER,WA,98664
Ad Hoc Payment	Check	26573	7/30/2025	72.67	Hawkins,Pamela or Jennifer	503 NE 128TH AVE ,VANCOUVER,WA,98684
Ad Hoc Payment	Check	26574	7/30/2025	158.15	Hawkins Trust	503 NE 128TH AVE ,VANCOUVER,WA,98684
Ad Hoc Payment	Check	26575	7/30/2025	347.23	Hickman,Steve	15522 NE 84TH ST ,VANCOUVER,WA,98682
Ad Hoc Payment	Check	26576	7/30/2025	142.56	Hill,Charis or David	900 SLERET AVE ,VANCOUVER,WA,98664
Ad Hoc Payment	Check	26577	7/30/2025	174.44	Moore,Violet	15412 NE 83RD ST ,VANCOUVER,WA,98682
Ad Hoc Payment	Check	26578	7/30/2025	159.19	Reghitto,Chad	5310 NE 71ST ST ,VANCOUVER,WA,98661
Ad Hoc Payment	Check	26579	7/30/2025	163.23	Sneiderwine,William	14901 SE SUN PARK CT ,VANCOUVER,WA,98683
Ad Hoc Payment	Check	26580	7/30/2025	80.00	Town,Jane	17605 SE 23RD ST ,VANCOUVER,WA,98683
Ad Hoc Payment	Check	26581	7/30/2025	100.00	Vannostern,Donald	5515 NE 46TH AVE ,VANCOUVER,WA,98661
Supplier Payment	Check	26582	7/30/2025	1,490.88	Accurate Corporate Services Inc	
Supplier Payment	Check	26583	7/30/2025	36.40	Airgas, Inc	
Supplier Payment	Check	26584	7/30/2025	3,616.45	Allcon LLC	
Supplier Payment	Check	26585	7/30/2025	129.36	AL VAN EQUIP NW INC	
Supplier Payment	Check	26586	7/30/2025	142.80	American Sani-Can	
Supplier Payment	Check	26587	7/30/2025	7,483.02	Arborscape Ltd Inc	
Supplier Payment	Check	26588	7/30/2025	9,999.85	AT & T Mobility National Accounts LLC - Remit-To: AT & T Mobility	
Supplier Payment	Check	26589	7/30/2025	8,698.56	Bloomberg Finance LP - Remit-To: Bloomberg - Boston	
Supplier Payment	Check	26590	7/30/2025	907.65	Bounce-N-Battle LLC	
Supplier Payment	Check	26591	7/30/2025	38,413.90	Car Toys, Inc.	
Supplier Payment	Check	26592	7/30/2025	5,070.00	Cascade Inn	
Supplier Payment	Check	26593	7/30/2025	32,226.18	CFM Strategic Communications, Inc.	
Supplier Payment	Check	26594	7/30/2025	160.36	Cintas	
Supplier Payment	Check	26595	7/30/2025	1,375.00	Clark County Fire District 5	

*Please contact Procurement Services if you would like to review the justification for EMERGENCY procurement.

INVOICE PAYMENTS REPORT

Category	Type	Transaction Reference	Date	Amount	Payment Payee	Memo
Supplier Payment	Check	26596	7/30/2025	239,749.42	Clark County - Remit-To: Clark County - Treasurer Vancouver	
Supplier Payment	Check	26597	7/30/2025	275,179.92	Clary Longview LLC	
Supplier Payment	Check	26598	7/30/2025	16,874.66	Columbia Resource Company	
Supplier Payment	Check	26599	7/30/2025	43,298.56	Core and Main LP - Remit-To: Core and Main LP	
Supplier Payment	Check	26600	7/30/2025	63,950.84	Datec Inc	
Supplier Payment	Check	26601	7/30/2025	434.00	David Wong	
Supplier Payment	Check	26602	7/30/2025	400.00	Donald Lane Riggs	
Supplier Payment	Check	26603	7/30/2025	19,200.00	FFA Architecture and Interiors, Inc	
Supplier Payment	Check	26604	7/30/2025	4,357.84	Genuine Parts Company - Remit-To: NAPA - Vancouver	
Supplier Payment	Check	26605	7/30/2025	10,120.81	Hawks Ridge Assisted Living	
Supplier Payment	Check	26606	7/30/2025	1,063.82	Industrial Scientific Corporation - Remit-To: Industrial Scientific Corp - Pittsburgh	
Supplier Payment	Check	26607	7/30/2025	4.20	L.N. Curtis & Sons	
Supplier Payment	Check	26608	7/30/2025	3,678.53	Lakeside Industries Inc - Remit-To: Lakeside - LB Seattle	
Supplier Payment	Check	26609	7/30/2025	1,899.22	Lakeyland Inc	
Supplier Payment	Check	26610	7/30/2025	2,497.96	Level 3 Financing, Inc	
Supplier Payment	Check	26611	7/30/2025	11,438.68	LSW Architects PC	
Supplier Payment	Check	26612	7/30/2025	644.00	MedTox Laboratories, Inc.	
Supplier Payment	Check	26613	7/30/2025	1,737.44	Motion Industries, Inc.	
Supplier Payment	Check	26614	7/30/2025	39,767.00	Newco Inc.	
Supplier Payment	Check	26615	7/30/2025	350,104.34	Northwest Construction General Contracting Inc	
Supplier Payment	Check	26616	7/30/2025	214.99	Phoenix Asphalt Maintenance Company, Inc.	
Supplier Payment	Check	26617	7/30/2025	495.00	Professional Translators and Multicultural Experts Inc	
Supplier Payment	Check	26618	7/30/2025	549.50	Proforce Marketing Inc	
Supplier Payment	Check	26619	7/30/2025	31,263.01	RH2 Engineering, Inc.	
Supplier Payment	Check	26620	7/30/2025	66,796.67	Southwest Washington Humane Society	
Supplier Payment	Check	26621	7/30/2025	180.32	The Columbian Publishing Co	
Supplier Payment	Check	26622	7/30/2025	16,538.65	Turner Electrical Services, LLC	
Supplier Payment	Check	26623	7/30/2025	326.40	W.B. Sprague Co. Inc.	
Supplier Payment	Check	26624	7/30/2025	10,064.71	Waste Connections of Washington - Remit-To: Waste Connections - Vancouver	
Supplier Payment	Check	26625	7/30/2025	6,897.50	WELL Cogir Tenant III LLC	
			Check	**1,335,853.44**		
Cash Advance Payment	Direct Deposit	EFT-00309039	7/31/2025	457.00	Bennie Romiti	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00309040	7/31/2025	126.00	Ty Stober	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00309041	7/31/2025	457.00	Tommy Razo	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00309042	7/31/2025	126.00	Diana Perez	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00309043	7/31/2025	430.00	Zachary Ripp	Travel Advance
Expense Payment	Direct Deposit	EFT-00309044	7/31/2025	30.89	Stacey Dalgaard	Employee Reimbursement
Cash Advance Payment	Direct Deposit	EFT-00309045	7/31/2025	387.00	Clayton Agbisit	Travel Advance
Expense Payment	Direct Deposit	EFT-00309046	7/31/2025	24.52	Amanda Hogan	Employee Reimbursement
			Direct Deposit	**2,038.41**		
Supplier Payment	EFT	EFT-00309047	7/31/2025	10,622.00	APE Studio, Inc	
Supplier Payment	EFT	EFT-00309048	7/31/2025	8,409.15	HDR Engineering, Inc	
Supplier Payment	EFT	EFT-00309049	7/31/2025	63,196.68	Operations Management International Inc	
Supplier Payment	EFT	EFT-00309050	7/31/2025	39,902.80	Pacific Talent Inc	

*Please contact Procurement Services if you would like to review the justification for EMERGENCY procurement.

INVOICE PAYMENTS REPORT

Category	Type	Transaction Reference	Date	Amount	Payment Payee	Memo
Supplier Payment	EFT	EFT-00309051	7/31/2025	8,021.84	Foundry Construction LLC	
Supplier Payment	EFT	EFT-00309052	7/31/2025	337.50	Avolve Software Corp	
Supplier Payment	EFT	EFT-00309053	7/31/2025	47,237.00	Share	
Supplier Payment	EFT	EFT-00309054	7/31/2025	5,443.04	Fehr & Peers	
Supplier Payment	EFT	EFT-00309055	7/31/2025	115,511.87	SDB Inc	
Supplier Payment	EFT	EFT-00309056	7/31/2025	1,271.98	Commonstreet Consulting, LLC	
Supplier Payment	EFT	EFT-00309057	7/31/2025	6,647.36	Del Sol Inc	
Supplier Payment	EFT	EFT-00309058	7/31/2025	31,207.36	Northwest Staffing Resources Inc - Remit-To: Northwest Staffing Resources	
Supplier Payment	EFT	EFT-00309059	7/31/2025	4,324.30	Gap Supply	
Supplier Payment	EFT	EFT-00309060	7/31/2025	12,467.50	Fosterful	
Supplier Payment	EFT	EFT-00309061	7/31/2025	23,632.39	YWCA Clark County	
Supplier Payment	EFT	EFT-00309062	7/31/2025	3,455.00	Atlas Technical Consultants LLC	
Supplier Payment	EFT	EFT-00309063	7/31/2025	84,135.78	Aramsco	
Supplier Payment	EFT	EFT-00309064	7/31/2025	765.00	Otak Inc	
Supplier Payment	EFT	EFT-00309065	7/31/2025	50,000.00	Proud Ground	
Supplier Payment	EFT	EFT-00309066	7/31/2025	13,239.39	Thrive2Survive	
Supplier Payment	EFT	EFT-00309067	7/31/2025	1,329,671.50	Nutter Corporation	
Supplier Payment	EFT	EFT-00309068	7/31/2025	8,158.96	PBS Engineering and Environmental Inc	
Supplier Payment	EFT	EFT-00309069	7/31/2025	3,914.40	Tierra Right of Way Services LTD	
Supplier Payment	EFT	EFT-00309070	7/31/2025	8,117.50	Coffman Engineers Inc	
Supplier Payment	EFT	EFT-00309071	7/31/2025	1,020.00	Universal Field Services Inc	
Supplier Payment	EFT	EFT-00309072	7/31/2025	30,475.75	Consor North America Inc - Remit-To: Consor North America Inc	
Supplier Payment	EFT	EFT-00309073	7/31/2025	9,250.00	Morgan Stanley Capital Managment LLC	
Supplier Payment	EFT	EFT-00309074	7/31/2025	5,802.18	Life-Assist Inc	
Supplier Payment	EFT	EFT-00309075	7/31/2025	6,800.00	JCI Jones Chemicals, Inc.	
Supplier Payment	EFT	EFT-00309076	7/31/2025	3,323.75	Brown and Caldwell - Remit-To: Brown & Caldwell - San Francisco	
Supplier Payment	EFT	EFT-00309077	7/31/2025	7,440.53	Tapani Inc	
Supplier Payment	EFT	EFT-00309078	7/31/2025	6,187.50	The Phia Group, LLC	
Supplier Payment	EFT	EFT-00309079	7/31/2025	22,787.20	MacKay Sposito Inc	
Supplier Payment	EFT	EFT-00309080	7/31/2025	109,490.26	Do Good Multnomah	
Supplier Payment	EFT	EFT-00309081	7/31/2025	6,010.00	Elite Truck School, Inc	
			EFT	**2,088,277.47**		
Supplier Payment	Manual Wire		7/28/2025	7,022.19	Washington Dental Service	
Supplier Payment	Manual Wire		7/28/2025	1,470,726.57	Internal Revenue Service	
Supplier Payment	Manual Wire		7/28/2025	189.00	Colorado Department of Revenue	
Supplier Payment	Manual Wire		7/28/2025	499,545.51	State of Washington Department of Revenue	
Supplier Payment	Manual Wire		7/28/2025	51,780.86	State of Washington Department of Revenue	
Supplier Payment	Manual Wire		7/29/2025	15,227.41	Bank Of America N.A. - Remit-To: Charlotte NC	
Supplier Payment	Manual Wire		7/29/2025	54,094.24	State of Oregon Department of Revenue	
Supplier Payment	Manual Wire		7/29/2025	123,189.09	State of Washington Department of Employment Security	
Supplier Payment	Manual Wire		7/30/2025	823,728.20	State of Washington Department of Retirement Systems (DRS)	
Supplier Payment	Manual Wire		7/30/2025	1,659.00	State of Washington Department of Licensing - Remit-To: DOL - Seattle Remit	

*Please contact Procurement Services if you would like to review the justification for EMERGENCY procurement.

INVOICE PAYMENTS REPORT

Category	Type	Transaction Reference	Date	Amount	Payment Payee	Memo
Supplier Payment	Manual Wire		7/30/2025	367,115.71	State of Washington Department of Employment Security	
Supplier Payment	Manual Wire		7/31/2025	1,086,531.85	State of Washington Department of Labor and Industries	
Supplier Payment	Manual Wire		7/31/2025	256,285.35	Blue Cross Blue Shield of Oregon	
Supplier Payment	Manual Wire		7/31/2025	22,344.70	Washington Dental Service	
Supplier Payment	Manual Wire		7/31/2025	3,640.03	Internal Revenue Service	
Supplier Payment	Manual Wire		8/1/2025	75,252.82	Liberty Mutual Group Inc.	
			Manual Wire	**4,858,332.53**		
			Checks	**1,335,853.44**		
			Direct Deposit	**2,038.41**		
			EFT	**2,088,277.47**		
			8/4/2025	7,186.43	City Payments	Posted 07-28-25 to 08-03-25
			Hansen Total	**7,186.43**		
			8/4/2025	2,302.22	Miscellanous	Parks Class Refunds FCC 07-28-25 to 08-03-25
			8/4/2025	3,845.00	Miscellanous	Parks Class Refunds MCC 07-28-25 to 08-03-25
			8/4/2025	219.25	Miscellanous	Parks Class Refunds Special Events 07-28-25 to 08-03-25
			VISA Total	**6,366.47**		
			Payroll Total	**122,475.16**		
			GRAND TOTAL	**8,420,529.91**		

*Please contact Procurement Services if you would like to review the justification for EMERGENCY procurement.

City of Vancouver
Payroll Council Report
July 28, 2025 - August 03, 2025

Check No.	Date	Explanation	Amount	
2919 - 2964	07/31/25	07 2025 Pension Payroll	$	55,226.61
308995 - 309038	07/31/25	07 2025 Pension Direct Deposits	$	67,248.55

$ 122,475.16

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-22 to R-50 at a 1.6 acre property at 7711 and 7809 NE 58th Street, tax lots 107971000 and 107982000; providing for severability; and establishing an effective date.

Staff Report: 165-25

To: Mayor and City Council
From: City Manager
Date: August 11, 2025

Subject

2025 Site Specific Rezone - 58th Street

Key Points

- Two private applications for residential zone changes to develop denser multi-family housing have been submitted in advance of the update of the Comprehensive Plan and zoning code is anticipated to be completed in late 2025 or early 2026.
- The 58th Street Zoning Amendment in the Walnut Grove neighborhood is from R-22 to R-50. The applicant recently indicated R-35 zoning would be acceptable as a second choice, which would require returning to the Planning Commission.

Strategic Plan Alignment

Safe and Prepared Community – a safe place to live, work, learn and play

Housing and Human Needs – meeting basic needs and partnering with organizations to support the community

Present Situation

The 58th Street Zoning Amendment would change a 1.6-acre site at 7711 and 7809 NE 58th Street, tax lots 107971000 and 107982000, from R-22 to R-50. A conceptual site plan envisions a 5-story apartment building of 77 market-rate units to be located generally towards the northeast corner of the site. The Planning Commission voted 4-3 against the proposal, based on concerns that the proposed R-50 zoning would allow overly tall and intense development compared to the existing area. Public hearing testimony was 8-2 against.

Currently, the site contains two single-family homes. To the north of the proposal site across NE 58th Street is Raymond Shaffer Park, zoned Park. West are single-family homesites zoned R-22. South and southeast is a City of Vancouver stormwater facility also zoned Park. Shaffer Park is undeveloped but is currently undergoing master planning, with construction anticipated in 2026, including frontage improvements and sidewalks on the north side of 58th Street. Park construction is not tied to the outcome of the rezone proposal. Future development of the rezone site under the proposed R-50 zone would produce approximately $344,960 in park impact fees to be spent in the park district, compared to $151,782 under the current R-22.

The rezone site and nearby properties are identified as appropriate for the new Medium Scale Neighborhood (MSN) designation in the Draft Environmental Impact Statement (DEIS) for the pending Comprehensive Plan and zoning code update. The MSN designation as drafted would allow multi-family housing and various commercial uses up to 75 feet in height. If the rezone is approved, the applicant would need to submit a development application prior to the update of the Comprehensive Plan and zoning code to develop under the requested zone. Otherwise, any new development will need to conform to the updated designations and associated regulations. More information about the potential future MSN designation is available on page 3 of the DEIS.

Advantage(s)

- The proposed 58th Street rezone to R-50 would maximize the number of new and smaller housing units to address housing shortages in the area and citywide, on a site also already zoned for multi-family development.
- It is also consistent with the future Medium Scale Neighborhood envisioned at the site and surrounding properties in the Draft Environmental Impact Statement (DEIS) for the update of the Comprehensive Plan and zoning code, although those new designations have not been adopted.
- R-50 zoning would maximize the number of future residents in immediate proximity of Shaffer Park.

Challenge(s)

- Future development at the 58th Street site under any zoning scenario would likely result in a taller buildings than those in the surrounding area. Five-story construction is likely under the proposed R-50 zone, 3-4 stories under the alternative R-35, and 2-3 stories under the existing R-22 designation.
- Future development is needed at the 58th Street rezone site and surrounding properties in order to provide frontage improvements and sidewalk construction.

Budget Impact

No significant direct implications anticipated. The rezone, if approved, will enable additional residential development and service demands over time, but the additional development will also generate additional impact fees.

Prior Council Review

June 16, 2025 - Workshop
August 4, 2025 - Consent

Action Requested

On Monday, August 11, 2025, upon second reading and a public hearing, finalize and approve the ordinance approving the 58th Street rezone to R-50.

Staff Contact

Bryan Snodgrass, Principal Planner, bryan.snodgrass@cityofvancouver.us

Attachments:

1. Presentation

2. Addendum Memo
3. Ordinance
4. 58th Street rezone testimony not previously included

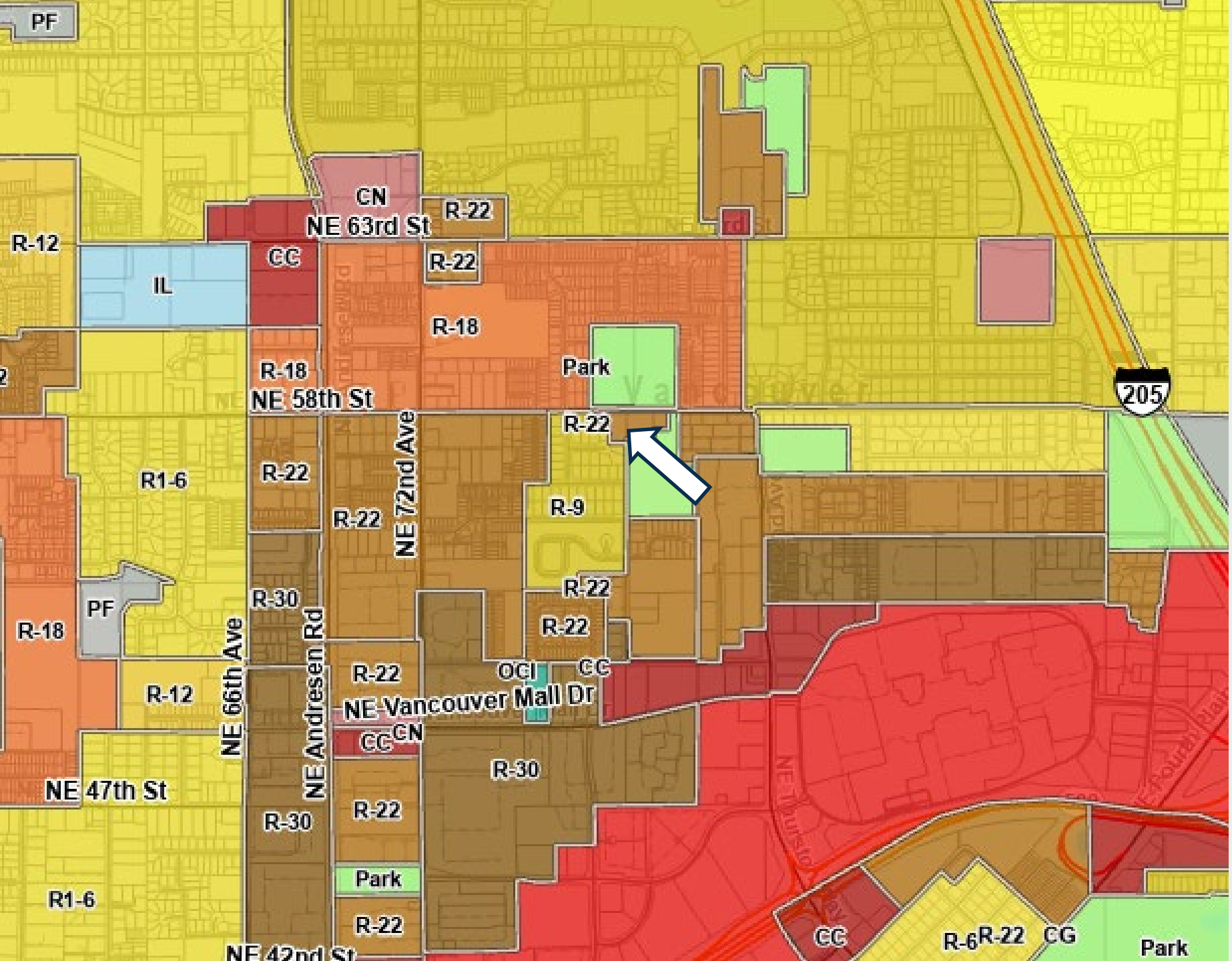


CITY OF Vancouver WASHINGTON

2025 zoning amendment in advance of Comprehensive Plan update – 58th Street, R-22 to R-50 City Council Public Hearing

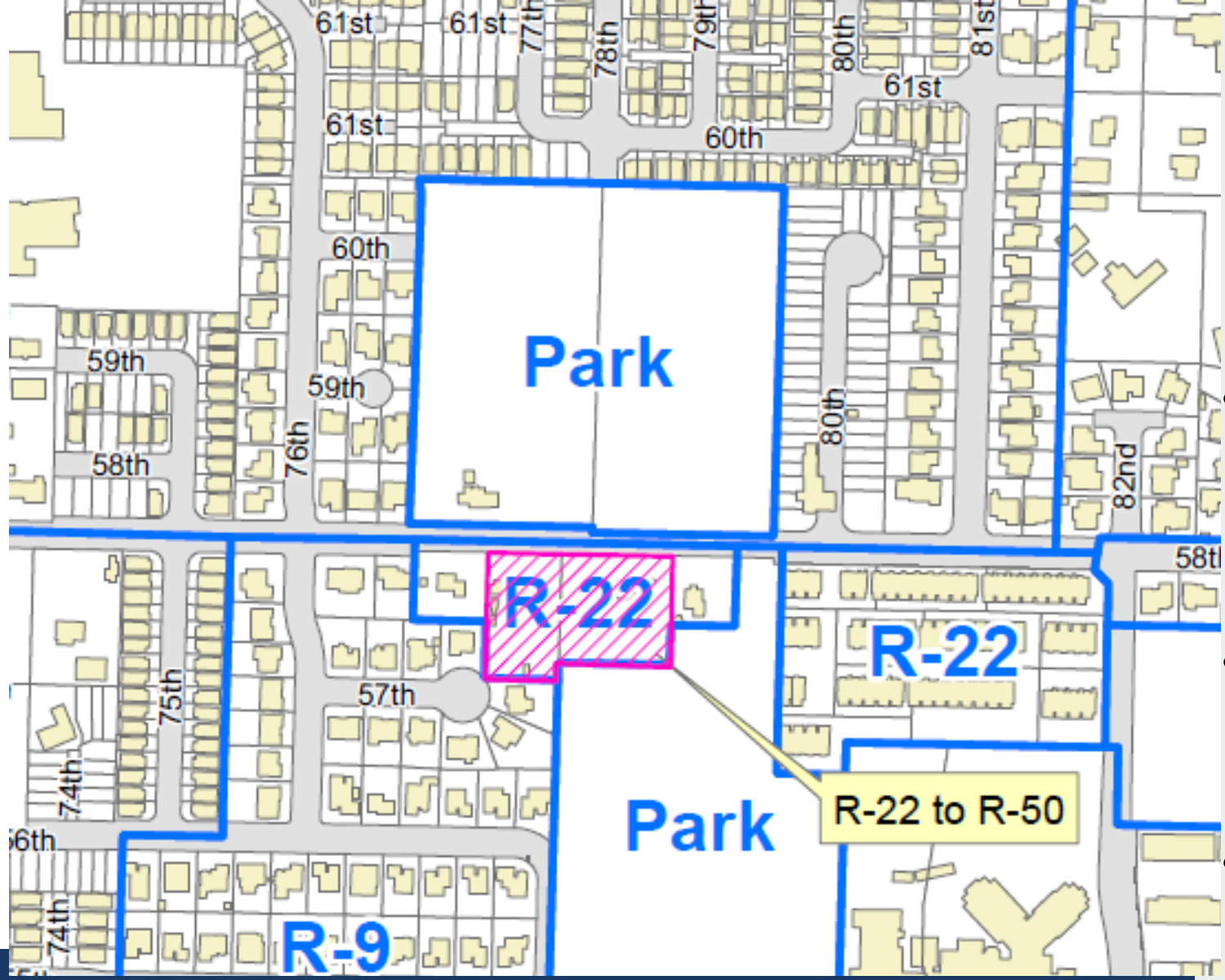
Bryan Snodgrass, Principal Planner, City of Vancouver Community Development Department, Comprehensive Planning Division

August 11, 2025



58th Street Zone Change – Regional Zoning

2025 Zone Changes- 58th Street Rezone



- Recommended against 4-3 by Planning Commission, based on concerns on scale of likely development
- Applicant indicates R-35 acceptable second choice
- Medium Scale Neighborhood envisioned in DEIS



58th Street Rezone– Conceptual Site Plan

- 77-unit, 5 story market rate apartment development envisioned if R-50 approved.
  - 33 units, 3 stories potential under R-22.
- No sidewalk currently at site and abutting properties. To be provided at Shaffer park through improvements in 2026, and at rezone site through required frontage improvements at time of development

Return to Council for questions, applicant and public testimony, and deliberations



bryan.snodgrass@cityofvancouver.us 360-487-7946

CITY OF Vancouver WASHINGTON

MEMORANDUM

DATE: August 6, 2025

TO: Vancouver City Council

FROM: Bryan Snodgrass, Principal Planner, Community Development Department

RE: 58th Street Rezone, R-22 to R-50 at 7711 and 7809 NE 58th Street – Follow up information based on City Council questions at August 4 First Reading.

CC: Lon Pluckhahn, City Manager

This memorandum is provided in response to City Council questions about parks and transportation infrastructure, and timing, at the August 4 ordinance First Reading of the rezone proposal. The Council public hearing is scheduled for August 11.

Infrastructure

Development of Shaffer Park is anticipated to begin in 2026 and conclude early 2027. The project includes street front and sidewalk improvements for the full park frontage along 58th Street. Also included is a wide loop path inside the park with pedestrian lighting connecting to the neighborhoods to the north at NE 78th Avenue and west at NE 60th Street, providing walking access to transit service and Walnut Grove Elementary School. The park improvement schedule is not tied to the rezone. Development of the rezone site will provide Park Impact Fees (under current PIF rates $344,960 under proposed development under R-50, $151,782 under R-22) that must be spent in the local Park District.

No major transportation improvements are currently planned in the nearby area. Nearby intersections, including the 58th Street intersections at 72nd Avenue and at Andreesen, are not projected to experience level of service or safety problems. Addressing the absence of streetfront improvements and sidewalks on the south side of 58th Street near the site will be dependent on new development. Frontage improvements including sidewalk construction will be required at the rezone site and abutting sites during the site plan review stage once development is proposed. Partial off-site frontage improvements can be required, as noted by the rezone applicant at the August 4 First Reading. In order to connect to existing

sidewalks further east and west, development at the rezone site would be required to construct 5-foot wide asphalt paths along the 58th Street frontage of the immediately abutting properties.

A crosswalk to Shaffer Park from the proposed development site to the north side of 58th Street would also be required at the time of development of the rezone site. Crosswalk specifications would be determined during site plan review. An RRFB crossing, so named because if features rectangular rapid flashing beacons, is likely.

At full build-out following area development, 58th Street frontage abutting the rezone site is anticipated to look generally as it currently does further to the east, as shown below, with sidewalk and a crosswalk:



Pending Comprehensive Plan and Zoning Code Update Implications

The updated plan and code is anticipated to be adopted in late 2025, or early 2026. No decisions have been finalized, but the Draft Environmental Impact Statement in both Alternatives 1 and 2 envisions the rezone site to be designated Medium Scale Neighborhood, which would allow a range of residential and supporting commercial uses, with a maximum height limit of 75 feet, and no maximum density. R-50 zoning does not allow free standing commercial uses, but otherwise aligns with this proposal, allowing buildings up to 70 feet in height.

Procedurally, if the R-50 rezone proposal is denied, the applicant may choose to either resubmit under R-35 zoning with the next available Planning Commission review date in September, or wait until new map designations and development standards are adopted by the City approximately six or more months from now. Development standards for the new zoning designations have not been finalized, but would need to apply citywide and would likely not be able to require all the provisions the applicant at this particular site has volunteered to do. These consist of placement of the building toward the northeast end of the site further from most abutting homes; retention of existing vegetation on the southern perimeter including a mature tree in the southwest corner that provides significant screening to the R-9 zoned properties southeast of the site; and retention of some existing vegetation on the western perimeter.

Long term development of the site appears reasonably likely under any multi-family designation, but has not occurred thus far under the existing R-22 designation. It is most likely to occur sooner under the proposed R-50, or the potential Medium Scale Neighborhood designation. Until development occurs, frontage improvements at the rezone site or abutting properties or a crosswalk are unlikely.

The proposal is consistent with significant community feedback during the Comprehensive Plan update process asking for more housing near parks and schools, which many consider essential services, and increases residential access to forthcoming park improvements that new residents can benefit from.

If the rezone to R-50 is approved, the applicant will need to submit a development pre-application prior to adoption of the new Comprehensive Plan and zoning code to vest to current code standards.

Expanding on discussion at the August 4 First Reading, the nearest transit service from the rezone site is on Andreesen Road approximately 2,100 feet from the site. The nearest existing commercial services are at Andreesen and 63rd Street approximately 2,500 feet from the site. Zoning under the new Comprehensive Plan in the general area will include expanded opportunities for locally serving commercial uses closer to where people live, although development capitalization of these opportunities is not yet known. Walnut Grove Elementary School is approximately 700 feet from the site, and Shaffer Park is directly across 58th Street.

ATTACHMENT A- ORDINANCE A FOR 58th STREET ZONING MAP CHANGE

08/04/25
08/11/25

ORDINANCE NO. M_____

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-22 to R-50 at a 1.6 acre property at 7711 and 7809 NE 58th Street, tax lots 107971000 and 107982000; providing for severability; and establishing an effective date.

WHEREAS, pursuant to the Growth Management Act the City Council has adopted a Comprehensive Plan for the City of Vancouver (Ordinance M-3994), and Title 20 zoning standards (last amended through Ordinance M-4034); and

WHEREAS, pursuant to VMC 20.285.020(2) and VMC 20.285.030(1), two proposed standalone zoning map amendments not requiring Comprehensive Plan changes were submitted by property owners, and reviewed by the Vancouver Planning Commission at a duly advertised work session on April 8, 2025, and a duly advertised public hearing on May 13, 2025, and at that hearing voted 4-3 to recommend denial of the zoning map amendment described herein for adoption to the City Council; and

WHEREAS, the City Council conducted a duly advertised workshop discussion on June 16, 2025, and a duly advertised first reading of the proposed ordinance and public hearing on August 4 and August 11, 2025, following which the Council disagrees with the Planning Commission recommendation, and finds that the proposed rezone is consistent with applicable VMC 20.285.060 criteria as found in the staff report for the May 13, 2025 Planning Commission public hearing and discussed at the August 11, 2025 City Council public hearing deliberations; and

WHEREAS, the cumulative environmental impacts of the proposed 2025 zoning map changes have been reviewed and determined to be nonsignificant pursuant to the State Environmental Policy Act. A Determinations of Non-significance (DNS) was issued on April 28, 2025 for the proposed map changes; and

WHEREAS, the City Council finds and concludes that the proposed changes are consistent with the policies and provisions of the Comprehensive Plan that encourage orderly development within the community and the Growth Management Act pursuant to the requirements of Chapter 36.70A. RCW; and

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF VANCOUVER:

Section 1. Findings and Conclusions. The findings and conclusions as set forth in the staff report for the May 13, 2025 Planning Commission public hearing, and City Council discussions at the August 11, 2025 public hearing, are hereby adopted as the City Council's findings of fact; and

Section 2. Zoning Code Map Amendment. The City of Vancouver Zoning Map established under VMC 20.130.020 is hereby amended to change properties at 7711 and 7809 NE 58th Street, tax lots 107971000 and 107982000, from R-22 to R-50; and

Section 3. Severability. If any clause, sentence, paragraph, section, or part of this ordinance or the application thereof to any person or circumstances shall be adjudged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered and shall not affect or invalidate the remainder of any

parts thereof to any other person or circumstances and to this end the provisions of each clause, sentence, paragraph, section or part of this law are hereby declared to be severable.

Section 4. Effective Date. This ordinance shall go into effect 30 days after adoption.

Section 5. Instruction to City Clerk. The City Clerk shall transmit a copy of the revised development code to the Washington Department of Commerce.

SIGNED this _____day of_____, 2025

_____
Anne McEnerny-Ogle, Mayor

Attest:

_____
Natasha Ramras, Chief Financial Officer

Approved as to form:

_____
Nena Cook, City Attorney

SUMMARY

ORDINANCE NO. M_____

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-22 to R-50 at a 1.6 acre property at 7711 and 7809 NE 58th Street, tax lots 107971000 and 107982000; providing for severability; and establishing an effective date.

The full text of this ordinance will be mailed upon request. Contact public records staff at (360) 487-8480, citypdr@cityofvancouver.us, or via Public Records Request -The City of Vancouver, WA.

-----Original Message-----
From: CHARLES BRASHER <brasherlavis@comcast.net>
Sent: Tuesday, May 13, 2025 2:12 PM
To: Snodgrass, Bryan <bryan.snodgrass@cityofvancouver.us>; Planning Commission <planningcommission@cityofvancouver.us>
Subject: Fwd: Proposed zoning change at two lots on NE 58th street - Written Testimony

[You don't often get email from brasherlavis@comcast.net. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

CAUTION: This email originated from outside of the City of Vancouver. Do not click links or open attachments unless you recognize the sender and know the content is safe.

> ---------- Original Message ----------
> From: Charles Brasher <brasherlavis@comcast.net>
> To: bryan.snodgrass@cityofvancouver.us, planningcommission@cityofvancouver.us
> Cc: Anastasiya Kozlovskyy <anak27@uw.edu>
> Date: 05/11/2025 12:16 PM PDT
> Subject: Proposed zoning change at two lots on NE 58th street - Written Testimony
>
>
> Sent from my iPad
> Above are pictures of the beautiful old trees that would be removed for the proposed development of the 1.6 acre site. My wife and I bought our house at 7709 NE 57th Circle in 1997 in the Robins Glen Development. At the time neither 58th street nor Thurston way went all the way through as they do now. Over the years we have seen many developments in the area. For the most part they have been well thought out and made sense for the area. Even the smaller homes on smaller lot sizes make sense because of the current housing concerns. But this new zoning change from R-22 to R-50 makes no sense at all and we are strongly against it. It will totally change the nature of our area and not for the better.
>
> Even though we live in the city and close to the mall, the area still has a nice mix of properties that make it a good neighborhood to live in. The zoning change is totally uncalled for, R-22 is fine for the 1.6 acre site (2 lots). The new Schaffer park sits right across the street from it and a Water Quality Storage and Treatment facility directly behind it. The proposed 77 unit apartment building will totally overload the small property it is located on: not enough parking on property site, 58th street is a narrow street designated for kids and school buses and the increased traffic poses a danger for them, water quality control and treatment facility will be greatly impacted by not only a large amount additional storm water from the large 77 unit apartment building but also by a additional large number of people using it as dog walking park directly behind the property, and the removal of the beautiful old trees pictured above in a designated “Tree City”.
>
> Charles Brasher & Betty Lavis
> 7709 NE 57th Circle
> Vancouver 98662
> (360) 601 3271







AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-18 to R-30 at a 6.2 acre property at 13401 and 13309 NE 59th Street, tax lots 107812000 & 107814000; providing for severability; and establishing an effective date.

Staff Report: 166-25

To: Mayor and City Council
From: City Manager
Date: August 11, 2025

Subject
2025 Site Specific Rezone - Bella Grove

Key Points

- Two Site Specific rezone applications have been submitted by property owners prior to the update of the Comprehensive Plan and zoning code anticipated in late 2025 or early 2026.
- The Bella Grove Zoning Amendment in the North Image Neighborhood is from R-18 to R-30.

Strategic Plan Alignment
Safe and Prepared Community – a safe place to live, work, learn and play

Housing and Human Needs – meeting basic needs and partnering with organizations to support the community

Present Situation
The Bella Grove Zoning Amendment would change a 6.2-acre site at 13401 and 13309 NE 59th Street, tax lots 107812000 & 107814000, from R-18 to R-30. A conceptual site plan envisions likely future development of up to 164 market-rate garden apartments, approximately 62 more units than can be developed under the current zone. The Planning Commission unanimously recommended approval of the rezone with no public hearing testimony offered.

Currently, the site contains single-family homes and outbuildings at the northern portion of the property. To the north of the proposal site across NE 59th Street is a mobile home park zoned R-9. East are three-story duplexes zoned R-18. South is the Image Elementary School campus zoned R-9. West is a mobile home park zoned R-18.

Advantage(s)
The proposed Bella Grove rezone to R-30 would allow more and denser-needed housing units to address housing shortages in the area and citywide, on a site already zoned for multi-family development.

Challenge(s)
The rezone, if approved, will enable additional residential development and service demands over time, but the additional development will also generate additional impact fees.

Budget Impact
No significant direct implications anticipated.

Prior Council Review
June 16, 2025 - Workshop
August 4, 2025 - Consent

Action Requested
On Monday, August 11, 2025, upon second reading and a public hearing, finalize and approve the ordinance approving the Bella Grove rezone to R-30.

Staff Contact
Bryan Snodgrass, Principal Planner, bryan.snodgrass@cityofvancouver.us

Attachments:
1. Presentation
2. Ordinance



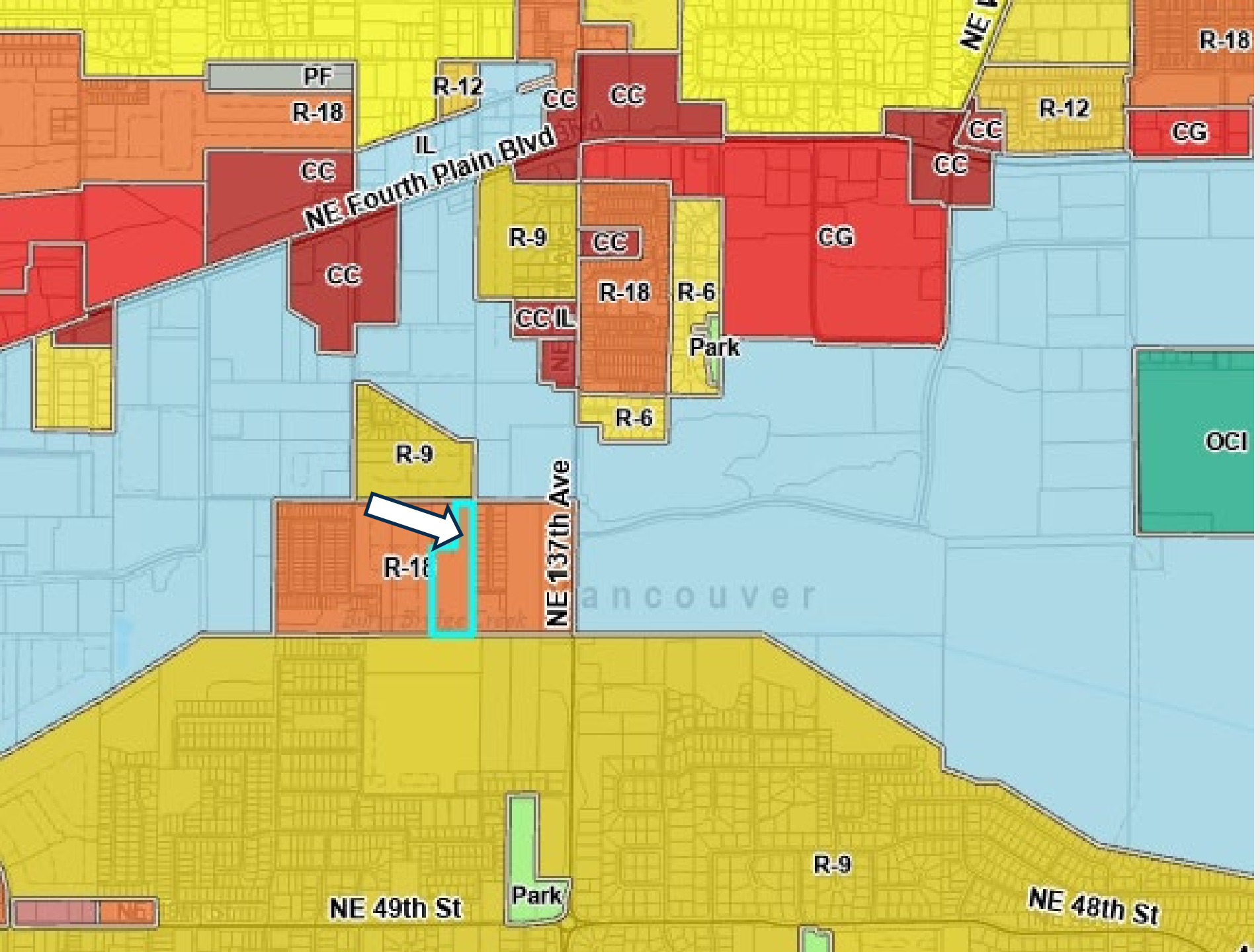
CITY OF Vancouver WASHINGTON

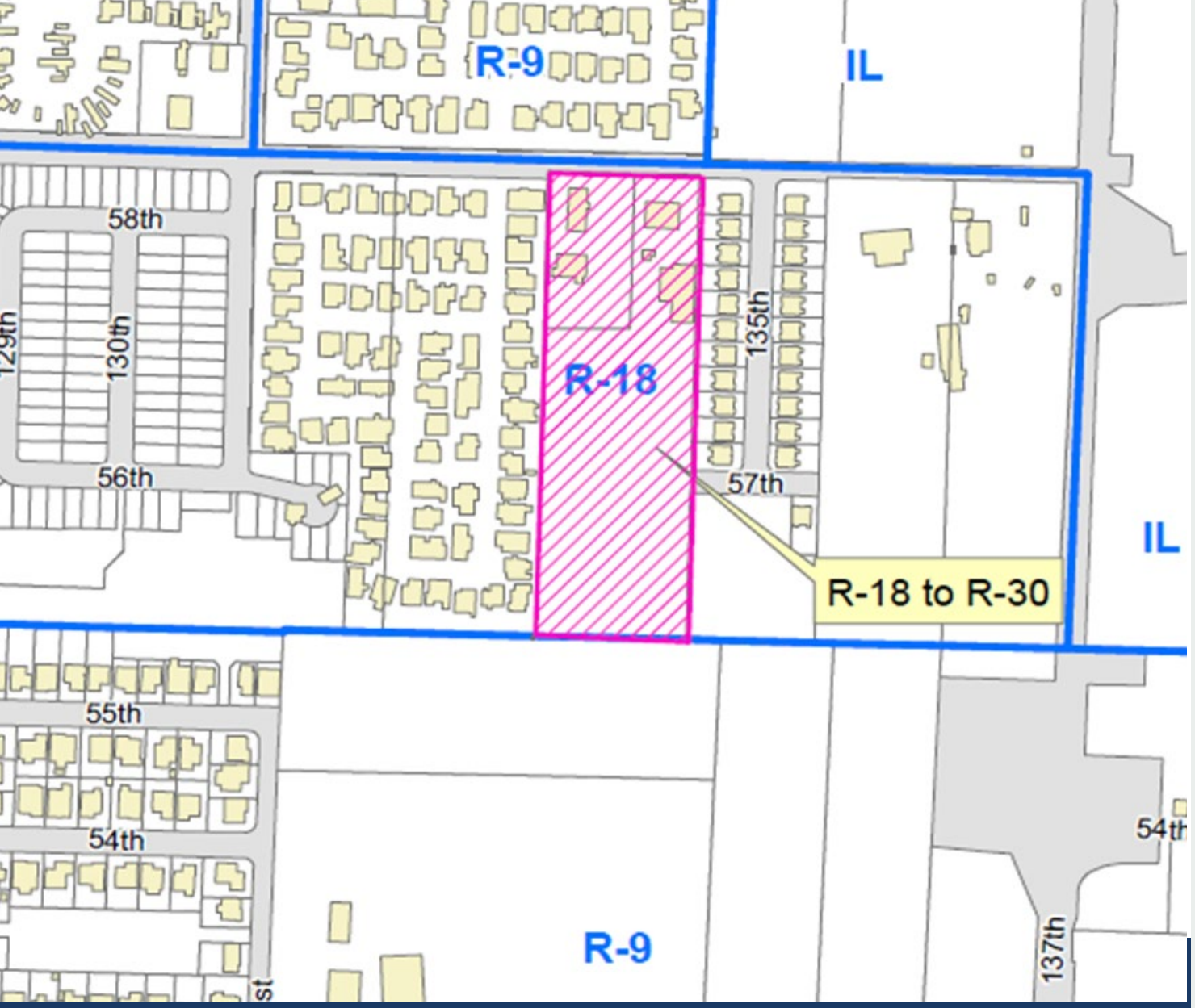
2025 zoning amendment in advance of Comprehensive Plan update – Bella Grove, R-18 to R-30
City Council Public Hearing

Bryan Snodgrass, Principal Planner, City of Vancouver Community Development Department, Comprehensive Planning Division

August 11, 2025

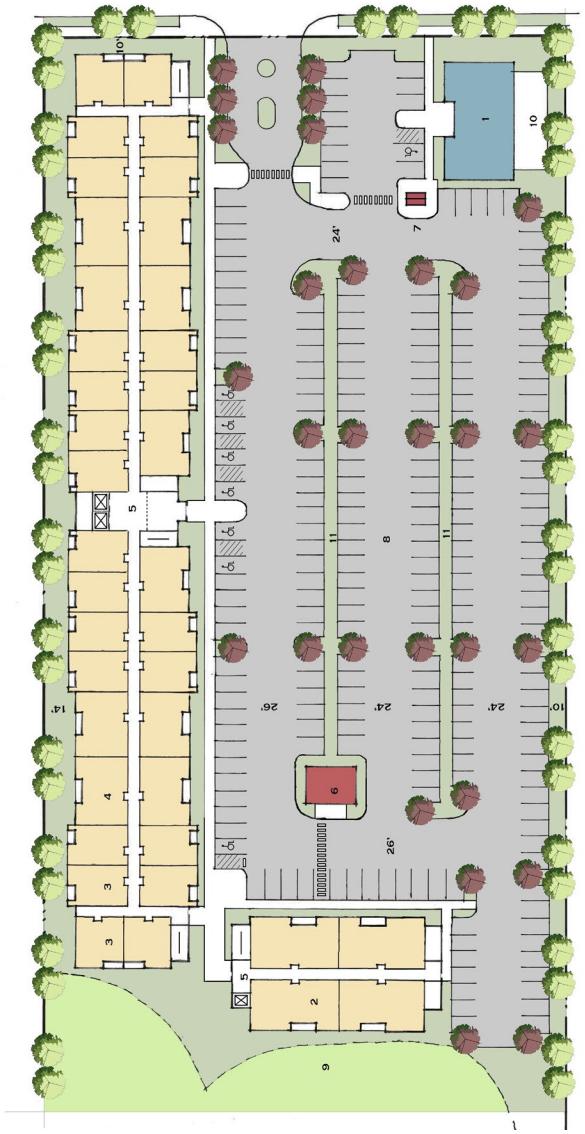
Bella Grove Zone Change – Regional Zoning





Bella Grove Zone Change – R-18 to R-30 east of 59th Street and 135th Avenue

- Mobile home parks north and west of site, duplexes to the east, Image Elementary campus to the south
- Site identified as Medium Scale Neighborhood designation in Possibility A and B for update
- Burnt Bridge Creek at bottom of site. Extensive hydric soils and modeled wetlands throughout.



Bella Grove Zone Change – Conceptual Site Plan

- Previous approval for 102 garden units on northern 2/3 of site under current R-18 zone
- If R-30 approved, application envisioned for 164-unit market rate apartments as shown

Return to Council for questions, applicant and public testimony, and deliberations



bryan.snodgrass@cityofvancouver.us 360-487-7946

ATTACHMENT A- ORDINANCE A FOR BELLA GROVE ZONING MAP CHANGE

08/04/25
08/11/25

ORDINANCE NO. M_____

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-18 to R-30 at a 6.2 acre property at 13401 and 13309 NE 59th Street, tax lots 107812000 & 107814000; providing for severability; and establishing an effective date.

WHEREAS, pursuant to the Growth Management Act the City Council has adopted a Comprehensive Plan for the City of Vancouver (Ordinance M-3994), and Title 20 zoning standards (last amended through Ordinance M-4034); and

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WHEREAS, the City Council conducted a duly advertised workshop discussion on June 16, 2025, and a duly advertised first reading of the proposed ordinance and public hearing on August 4 and August 11, 2025, following which the Council agrees with the Planning Commission recommendation; and

WHEREAS, the cumulative environmental impacts of the proposed 2025 zoning map changes have been reviewed and determined to be nonsignificant pursuant to the State Environmental Policy Act. A Determinations of Non-significance (DNS) was issued on April

28, 2025 for the proposed map changes; and

WHEREAS, the City Council finds and concludes that the proposed changes are consistent with the policies and provisions of the Comprehensive Plan that encourage orderly development within the community and the Growth Management Act pursuant to the requirements of Chapter 36.70A. RCW; and

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF VANCOUVER:

Section 1. Findings and Conclusions. The Planning Commission findings and conclusions as set forth in the staff report for the May 13, 2025 public hearing, and Commission discussions at those hearings, are hereby adopted as the City Council's findings of fact; and

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Section 4. Effective Date. This ordinance shall go into effect 30 days after adoption.

Section 5. Instruction to City Clerk. The City Clerk shall transmit a copy of the revised development code to the Washington Department of Commerce.

SIGNED this _____day of_____, 2025

_____
Anne McEnerny-Ogle, Mayor

Attest:

_____
Natasha Ramras, Chief Financial Officer

Approved as to form:

_____
Nena Cook, City Attorney

SUMMARY

ORDINANCE NO. M_____

AN ORDINANCE relating to Comprehensive Plan and Zoning for the City of Vancouver; amending the zoning map designation from R-18 to R-30 at a 6.2 acre property at 13401 and 13309 NE 59th Street, tax lots 107812000 & 107814000; providing for severability; and establishing an effective date.

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