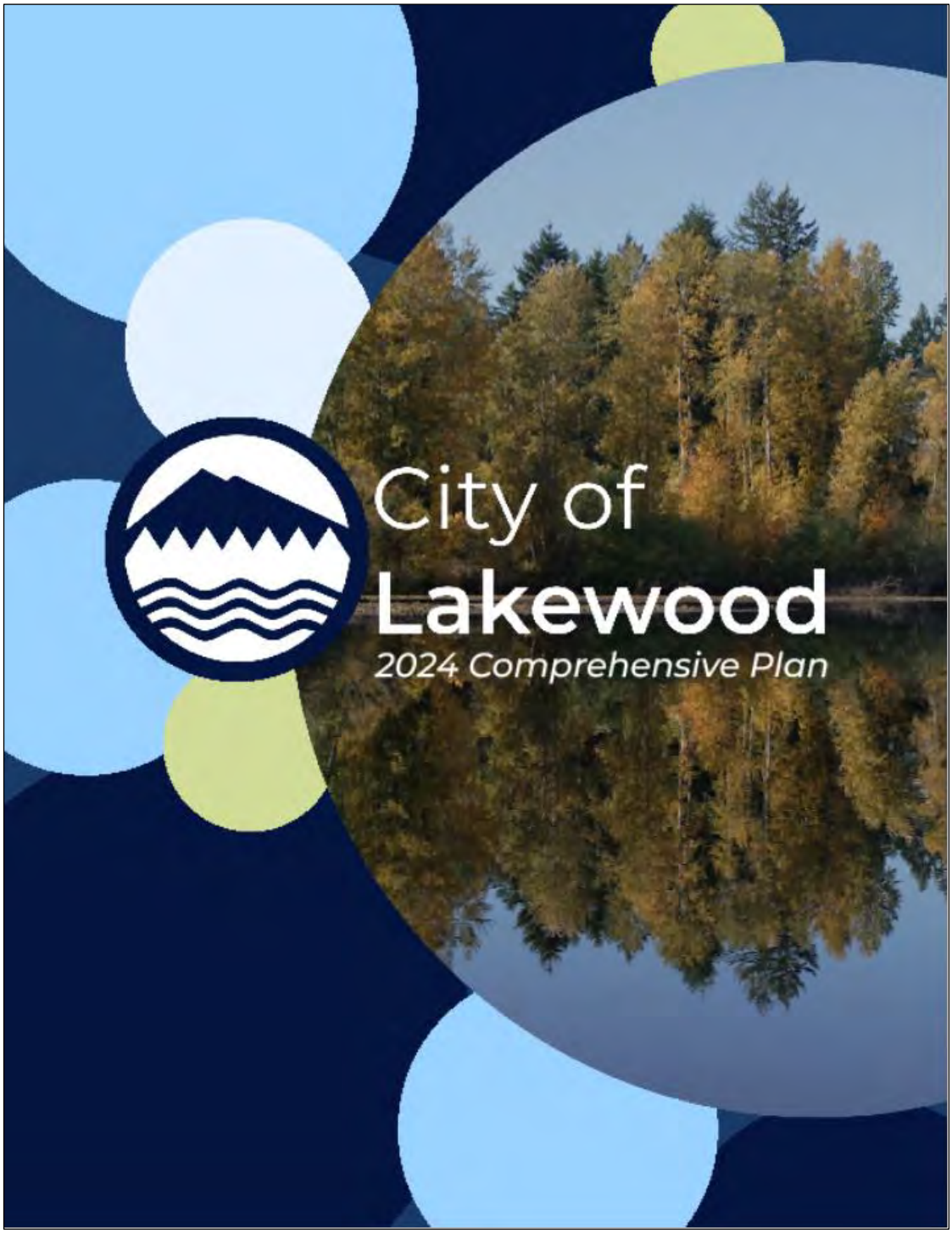
Draft Supplemental Environmental Impact Statement (DSEIS)

June 3, 2024



[This page intentionally blank]

June 3, 2024

Subject: City of Lakewood 2024 Comprehensive Plan Draft Supplemental Environmental Impact Statement (Draft SEIS or DSEIS)

Dear Reader:

The City of Lakewood Community Development (CED) Department has prepared the attached Draft SEIS to analyze the potential environmental impacts associated with adopting and implementing the City's 2024 Comprehensive Plan. The City prepared the 2024 Comprehensive Plan to satisfy requirements of Washington State's Growth Management Act (GMA). This Draft SEIS is intended to satisfy requirements of the State Environmental Policy Act (SEPA).

The GMA calls for communities to review and, if necessary, revise their comprehensive plans and regulations every ten (10) years to ensure they remain up-to-date (RCW 36.70A.130). The proposed adoption of the Lakewood Comprehensive Plan by the Lakewood City Council constitutes a non-project action requiring SEPA compliance.

Two alternatives are examined in this Draft SEIS:

- **No Action:** The No Action Alternative is required under the State Environmental Policy Act (SEPA). This alternative retains the current Comprehensive Plan and associated subarea plans and development regulations. The No Action Alternative has the capacity to meet total job and housing targets but does not provide sufficient capacity to meet housing targets by affordability bands. It is modeled with growth targets for the year 2035 and does not fully meet new GMA requirements for a periodic update.
- **Action Alternative:** The Action Alternative consists of the 2024 Periodic Update of the Comprehensive Plan, including all Elements, the 2024 Tillicum-Woodbrook Subarea Plan (TWSP), and implementing development regulations including amendments to such, particularly "middle housing" as defined in the GMA and critical areas regulations amendments. The Action Alternative as proposed meets citywide growth targets for jobs and housing by 2044, including housing targets by income band. It provides a full update of the Comprehensive Plan elements to meet periodic update requirements, it establishes policy and code amendments to achieve middle housing choices – townhouses, multiplexes, and other housing – in low density areas of the city. It updates critical area regulations to address best available science (BAS), including buffer standards and mitigation for streams, and protection of aquifer recharge areas, wetlands, and floodplains. It advances climate mitigation and adaptation begun with the 2021 Energy & Climate Change Element.

For each alternative, this Draft SEIS considers the potential environmental impacts and mitigation measures addressing: natural environment, land use patterns and policies, housing, transportation and parking, public services, and utilities.

The key issues facing decision makers are focused on the creation of a Comprehensive Plan that:

- Offers more affordable housing opportunities and places to retain and grow businesses;
- Promotes a healthy environment and avoids displacement of overburdened households and businesses;
- Fulfills Lakewood's vision and meets state and regional requirements;
- Identifies investments that improve mobility and resilience; and
- Guides development regulations that implement the Comprehensive Plan goals and land use plan, resulting in quality housing choices, and integrating the best available science to protect critical areas.

This Draft SEIS supplements the following previously issued SEPA documents:

- City of Lakewood, Comprehensive Plan, Final EIS, June 2000
- City of Lakewood, 2015 Comprehensive Plan Amendments and Update, Determination of Non-Significance and associated SEPA Checklist, July 30, 2015
- City of Lakewood, Downtown Lakewood Plan and Planned Action Final EIS, July 20, 2018, and associated Addenda, September 10, 2018 and September 26, 2018
- City of Lakewood, Lakewood Station District Subarea Plan, Form-Based Code, and Planned Action, Revised Determination of Non-Significance, November 12, 2020, March 30, 2021, and April 29, 2021
- Puget Sound Regional Council, VISION 2050 Final SEIS, March 2020

The City has identified and adopted these documents as being appropriate for this proposal after independent review, and they will accompany the proposal to the decision makers. This Draft SEIS builds on these documents and meets the City's environmental review needs for the current proposal.

The City of Lakewood is requesting comments from citizens, agencies, tribes, and all interested parties on the Draft SEIS from June 3, 2024 to July 3, 2024. Comments are due by **5:00 PM, July 3, 2024**. Please see the Fact Sheet for the methods to submit comments.

Should you have questions, please contact Tiffany Speir, Long Range & Strategic Planning Manager at 253.983.7702 tspeir@cityoflakewood.us. Thank you for your interest in the Lakewood 2024 Comprehensive Plan Periodic Update.

Sincerely,

Jeff Rimak, CED Director and SEPA Responsible Official
City of Lakewood

Fact Sheet

Project Title

City of Lakewood 2024 Comprehensive Plan Supplemental Environmental Impact Statement (Draft SEIS or DSEIS)

Proposed Action and Alternatives

The City of Lakewood Community Development Department (CED) has prepared this Supplemental Environmental Impact Statement (SEIS) to analyze the potential environmental impacts associated with adopting and implementing the City's 2024 Comprehensive Plan. The City prepared the 2024 Comprehensive Plan to satisfy requirements of Washington State's Growth Management Act (GMA). The SEIS is intended to satisfy requirements of the State Environmental Policy Act (SEPA).

Two alternatives are examined in this Draft SEIS:

- **No Action:** The No Action Alternative is required under the State Environmental Policy Act (SEPA). This alternative retains the current Comprehensive Plan and associated subarea plans and development regulations. The No Action Alternative has the capacity to meet total job and housing targets but does not provide sufficient capacity to meet housing targets by affordability bands. It is modeled at growth levels based on existing plans to the year 2035 and does not fully meet new GMA requirements for a periodic update.
- **Action Alternative:** The Action Alternative consists of the 2024 Periodic Update of the Comprehensive Plan, including all Elements, the 2024Tillicum-Woodbrook Subarea Plan (TWSP), and implementing development regulations including amendments to such, particularly "middle housing" as defined by the GMA and critical areas regulations amendments. The Action Alternative as proposed meets citywide growth targets for jobs and housing by 2044, including housing targets by income band. It provides a full update of the Comprehensive Plan elements to meet periodic update requirements, it establishes policy and code amendments to achieve middle housing choices – townhouses, multiplexes, and other housing – in historically single family areas of the city. It updates critical area regulations to address best available science (BAS) including buffer standards and mitigation for streams, and protection of aquifer recharge areas, wetlands, and floodplains. It advances climate mitigation and adaptation begun with the 2021 Energy & Climate Change Element.

Proponent and Lead Agency

City of Lakewood

Location

The Proposed Action affects the land contained within the existing Lakewood, WA city limits and proposed annexation areas. Lakewood is located between the cities of University Place and Tacoma on the north, Joint Base Lewis-McChord on the east and south, and the Town of Steilacoom on the west.

Tentative Date of Implementation

2024-2034

Responsible SEPA Official

Jeff Rimak, CED Director and SEPA Responsible Official
City of Lakewood
City Hall, 6000 Main St. SW
Lakewood, WA 98499
JRimack@cityoflakewood.us

Contact Person

Tiffany Speir, Esq., CPM®
Long Range & Strategic Planning Manager
City Hall, 6000 Main St. SW
Lakewood, WA 98499
253.983.7702
tspeir@cityoflakewood.us

Required Approvals

All Comprehensive Plan amendments and implementing regulations, including those completed as part of the Comprehensive Plan require a 60-day review by the State of Washington Department of Commerce and other state agencies.

The Puget Sound Regional Council (PSRC) will also conduct a comprehensive plan consistency review and transportation element and facilities planning certification review per VISION 2050.

Locally, the Lakewood Comprehensive Plan and all related regulatory updates will be considered by the Planning Commission and its recommendations forwarded to the City Council who will deliberate and take action for final approval.

Principal EIS Authors and Contributors

Under the direction of the City of Lakewood, the consultant team prepared the EIS as follows:

- BERK Consulting: prime consultant, land use patterns and policies, housing, climate change
- Transpo Group: Transportation and parking.
- FACET NW: Critical areas ordinance gap analysis and code proposal. (FACET NW was formerly known as DCG/Watershed.)

Draft EIS

Date of Issuance: June 3, 2024

Comment Period End: July 3, 2024

Draft SEIS 2024 Comment Period

Comment Period

The City of Lakewood is requesting comments from citizens, agencies, tribes, and all interested parties on the Draft SEIS June 3, 2024 to July 3, 2024. Comments are due by 5:00 PM, July 3, 2024.

All written comments should be directed to:

Tiffany Speir, Esq., CPM®
Long Range & Strategic Planning Manager
City Hall, 6000 Main St. SW
Lakewood, WA 98499
253.983.7702
tspeir@cityoflakewood.us

Submittal of comments by email is preferred. Please include in the subject line "Lakewood Draft SEIS Comments."

Public Comment Opportunities

Public Comment will be accepted through online opportunities that will include:

- https://lakewoodwaspeaks.org/ and https://cityoflakewood.us/24periodicreview/

Date of Final Action

December 2024

Prior Environmental Review and Adoption

This Draft SEIS supplements the following previously issued SEPA documents:

- City of Lakewood, Comprehensive Plan, Final EIS, June 2000
- City of Lakewood, 2015 Comprehensive Plan Amendments and Update, Determination of Non-Significance and associated SEPA Checklist, July 30, 2015
- City of Lakewood, Downtown Lakewood Plan and Planned Action Final EIS, July 20, 2018, and associated Addenda, September 10, 2018 and September 26, 2018
- City of Lakewood, Lakewood Station District Subarea Plan, Form-Based Code, and Planned Action, Revised Determination of Non-Significance, November 12, 2020, March 30, 2021, and April 29, 2021
- Puget Sound Regional Council, VISION 2050 Final SEIS, March 2020

The City has identified and adopted these documents as being appropriate for this proposal after independent review, and they will accompany the proposal to the decision makers. This SEIS builds on these documents and meets the City's environmental review needs for the current proposal.

Location of Background Data

You may review the City of Lakewood project website https://cityoflakewood.us/24periodicreview/ for more information. If you desire clarification or have questions, please see the contact person above.

Availability of Draft SEIS

The Draft SEIS is posted on the City's website at https://cityoflakewood.us/24periodicreview/.

This Draft SEIS is available for review in person at:

City Hall, 6000 Main St. SW

Lakewood, WA 98499

Copies for purchase made be made upon request at cost of material.

Distribution List

Federal and Tribal Agencies

- Commander, Joint Base Lewis-McChord HQ
- US Fish & Wildlife Office/ US Service
- Nisqually Indian Tribe
- The Puyallup Tribe

State and Regional Agencies

- Puget Sound Clean Air Agency
- Puget Sound Partnership
- Puget Sound Regional Council
- Washington Department of Agriculture
- Washington Department of Commerce
- Washington Department of Archaeology & Historic Preservation
- Washington Department of Corrections
- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- Washington Department of Health
- Washington Department of Natural Resources
- Washington Department of Social and Health Services
- Washington Department of Transportation
- Washington Recreation and Conservation Office

Adjacent Jurisdictions, Partnerships, Ports

- City of Bonney Lake
- City of DuPont
- City of Gig Harbor
- City of Lacey
- City of Olympia
- City of Puyallup
- City of Sumner

- City of Tacoma
- City of University Place
- Pierce County
- Pierce County Assessor-Treasurer
- Port of Olympia
- Port of Tacoma
- South Sound Military Communities Partnership (SSMCP)
- Tacoma-Pierce County Health Department
- Thurston County
- Town of Steilacoom

Services, Utilities, and Transit

- Clover Park School District
- Clover Park Technical College
- Lakeview Light & Power
- Lakewood Refuse Service
- Lakewood Water District
- Pierce College
- Pierce County Library District
- Pierce County Utilities
- Pierce Transit
- Puget Sound Energy
- Tacoma Power
- West Pierce Fire & Rescue

Community Organizations and Individuals

- Active Homeowner Ownership Associations
- American Lake Improvement Club
- Chambers-Clover Creek Watershed Council
- Clover Park Kiwanis
- Clover Park Rotary
- Emergency Food Network
- Habitat for Humanity
- Korean Women's Association
- Lake City Neighborhood Association

- Lake Steilacoom Improvement Club
- Lakeview Light & Power
- Lakewood Chamber of Commerce
- Lakewood Community Foundation
- Lakewood First Lions
- Lakewood Historical Society
- Lakewood Industrial Park
- Lakewood Knights Lions Club
- Lakewood Multicultural Coalition
- Lakewood Rotary
- Lakewood Towne Center
- Lakewood United
- Living Access Support Alliance (LASA)
- Master Builders Association Pierce County
- Multicultural Self-Sufficiency Movement
- North East Neighborhood Association
- North Lakewood Neighborhood Association
- Nourish Food Bank
- Partners for Parks
- Pierce County Business Accelerator Program for Lakewood businesses
- Rainbow Center
- Rebuilding Together South Sound
- Springbrook Connections
- Springbrook Neighborhood Association
- Tacoma Pierce County Association of Realtors
- Tacoma Public Utilities
- Tacoma-Pierce County Chamber of Commerce
- Tahoma Audubon Society
- Tillicum/Woodbrook Neighborhood Association

Media

- Tacoma News Tribune

Table of Contents

Exhibits

1 Summary

1.1 Overview

This Draft Supplemental Environmental Impact Statement (DSEIS) analyzes the potential environmental impacts associated with adopting and implementing the City of Lakewood's 2024 Comprehensive Plan. The City prepared the 2024 Comprehensive Plan to satisfy requirements of Washington State's Growth Management Act (GMA). This DSEIS is intended to satisfy requirements of the State Environmental Policy Act (SEPA).This document is organized as follows:

- Chapter 1 Summary
- Chapter 2 Alternatives
- Chapter 3 Environment, Impacts, and Mitigation Measures
- Chapter 4 Acronyms and References

1.2 Purpose

To evaluate Lakewood proposals, two Alternatives were examined in the DSEIS:

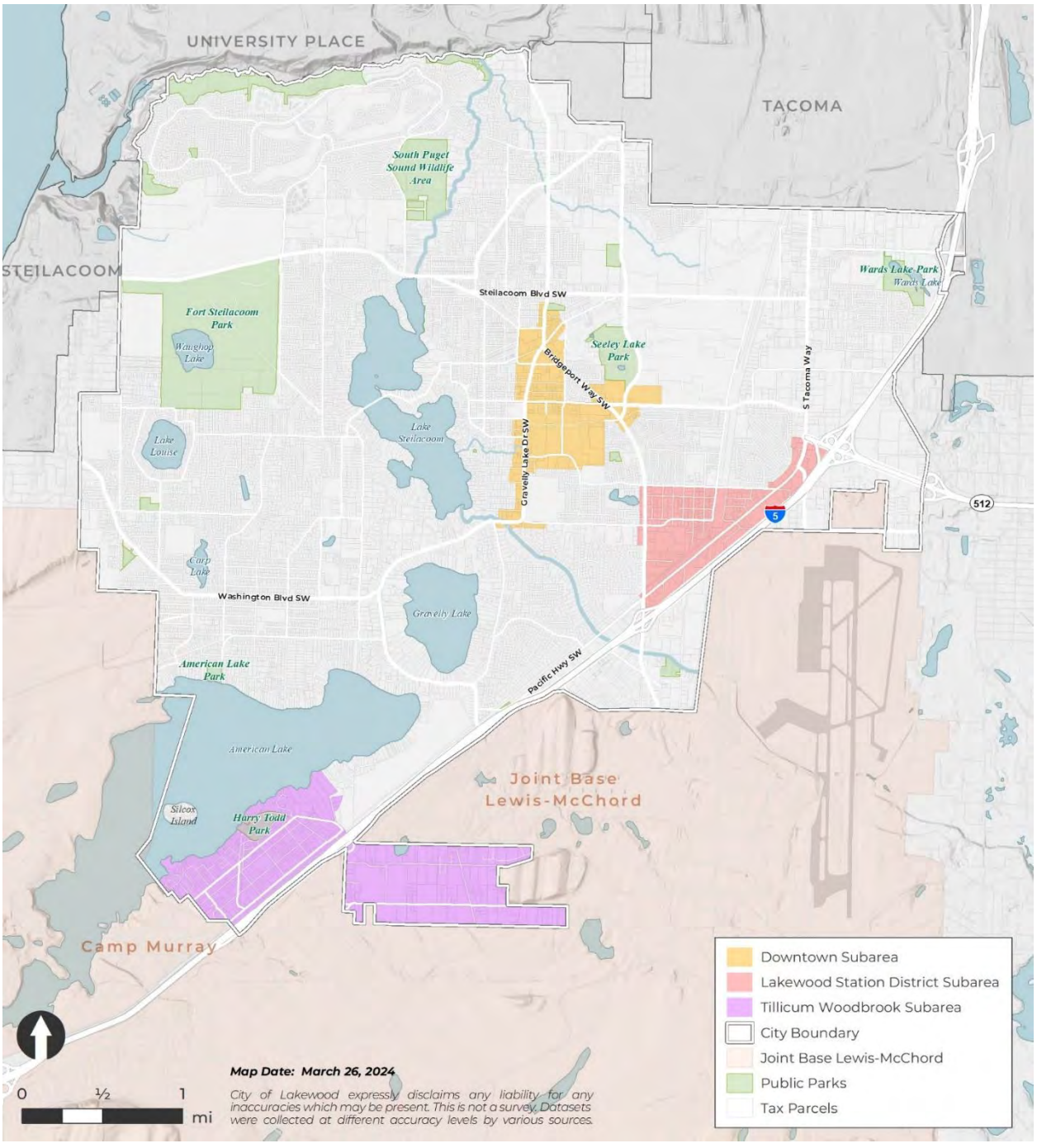
- **No Action:** The No Action Alternative is required under the State Environmental Policy Act (SEPA). This alternative retains the current Comprehensive Plan and associated subarea plans and development regulations. It provides capacity for about 10,242 dwelling units. The No Action Alternative meets the housing target of 9,378 dwellings, but it does not provide capacity for moderate density housing for households earning 80%-120% of the area median income. The No Action Alternative has capacity for 12,212 jobs, 2,834 above the 2020-2044 target of 9,378.
- **Action Alternative:** The Action Alternative consists of the 2024 Periodic Update of the Comprehensive Plan, including all Elements, the Tillicum Woodbrook Subarea Plan Update, and implementing development regulations including amendments to such, particularly middle housing and critical areas regulations amendments. The Action Alternative has capacity for 17,488 dwelling units, and can provide housing at all income levels for the 2020-2044 planning period. It has capacity for 15,238 jobs, which is 5,860 jobs above the 2020-2044 target.

This DSEIS compares the two alternatives for potential impacts to the environment including the following topics: Natural Environment, Land Use Patterns and Policies, Housing, Transportation and Parking, Public Services, and Utilities.

1.3 Study Area

The Lakewood city limits, equaling approximately 17.06 square miles (about 10,920 acres), is the primary study area. See Exhibit 1-1. This DSEIS considers abutting lands including potential annexation areas.

Exhibit 1-1. Lakewood Planning Area



Source: City of Lakewood, BERK 2024.

1.4 Public Comment Opportunities

The City has provided many ways to participate in the development of the proposal, and to comment on this DSEIS:

- City and 2024 Comprehensive Plan Periodic Review websites, social media, Connections newsletter, electronic newsletter, and four citywide direct mailings;
- 2023 Citizen Committee provided recommendations to update Housing Element and Energy & Climate Change Element;
- 2024 Comprehensive Plan Periodic Review Steering Committee;
- Tillicum-Woodbrook Subarea Plan (TWSP) Committee;
- Five Open Houses;
- 20+ Planning Commission meetings and 10+ City Council meetings.
- Scoping period in 2023 to allow opportunities to comment on the scope of the SEIS. See Appendix A for the Scoping Notice. No comments were received at that time.

With the issuance of this DSEIS the City has offered a 30-day comment period. See the Fact Sheet for information on how to provide public comments.

1.5 Objectives, Proposal, and Alternatives

1.5.1 Objectives

SEPA requires a statement of project objectives highlighting the purpose of a proposal. The primary objective and need for this proposal is to complete the 2024 periodic update of the Lakewood Comprehensive Plan to meet Growth Management Act requirements, multicounty planning policies (MPPs) and the regional growth strategy in VISION 2050, and countywide planning policies (CPPs) and 2044 growth targets in the Pierce County Countywide Planning Policies. The periodic update is also designed to meet a vision statement developed by the City Council in 2021. (See text box below.)

Vision Statement

Lakewood is a thriving, urban, South Puget Sound City, possessing the core values of family, community, education, economic prosperity, and the equitable delivery of municipal services. We will advance these values by recognizing our past, taking action in the present, and pursuing a dynamic future.

The City Council's vision for Lakewood at its 30-Year Anniversary is a community:

- Inspired by its own sense of history and progress;
- Known for its safe and attractive neighborhoods, vibrant downtown, active arts and cultural communities;
- Sustained by robust economic growth and job creation;
- Recognized for the excellence of its public and private schools, and its community and technical colleges;
- Characterized by the beauty of its lakes, parks and natural environment;
- Acknowledged for excellence in the delivery of municipal services;
- That actively cultivates, embraces, and continually strives to create a more inclusive community with the equitable delivery of City services; and
- Supportive of Joint Base Lewis McChord (JBLM), Camp Murray, service members and their families.

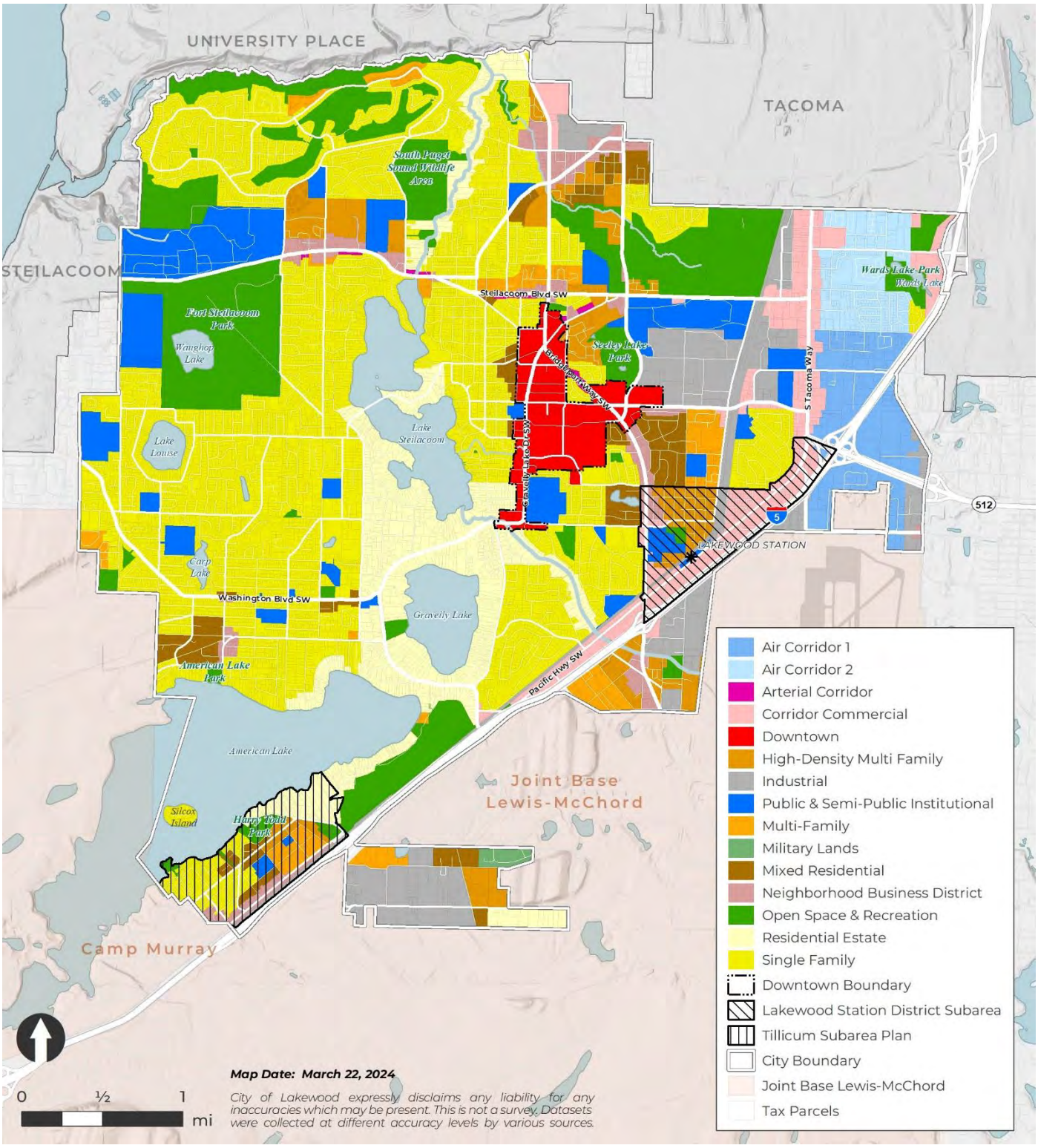
Lakewood City Council, Adopted June 21, 2021

1.5.2 No Action Alternative

If the City Council takes no action adopting the 2024 Lakewood Comprehensive Plan, the City's 2023 Comprehensive Plan as adopted would remain in effect until a new plan is adopted. The No Action Alternative as addressed in this DSEIS is therefore the 2023 Comprehensive Plan.

The City has maintained a Future Land Use Map that generally plans for single family uses to the west and north of Lakewood and multifamily, commercial, and industrial uses to the east. See Exhibit 1-2. The City implements its Future Land Use Map with detailed zoning, further described in Chapter 2.

Exhibit 1-2. Future Land Use Map, 2023.



Source: City of Lakewood, 2023.

The current Comprehensive Plan and implementing zoning provides capacity that meets the 2044 jobs target and its overall housing unit target but not the affordable housing targets required per HB 1220. See Exhibit 1-3 and Exhibit 1-4

Exhibit 1-3. Growth Targets and Capacity – No Action Alternative

	2020	2044	Growth 2020-2044	No Action Growth Capacity
Population	63,612	86,792	23,180	23,966*
Jobs	29,872	39,735	9,863	12,212
Housing	26,999	36,377	9,378	10,242
Emergency Housing	8	582	574	N/A

Note: *Housing capacity x 2.34 persons per household (US Census 2018-2022)
Sources: (Pierce County, 2022-2023); US Census Quick Facts, 2023

Exhibit 1-4. Affordable Housing Targets and Capacity by No Action Alternative

Income	Projected Housing Need	Zoning Categories Serving Needs	Aggregated Housing Needs	Total Capacity	Capacity Surplus/Deficit
0-30% Non-PSH	1,212	Low-Rise Multifamily + ADUs	5,963	8,136	2,173
0-30% PSH	1,637				
>30-50%	1,739				
>50-80%	1,375				
>80-100%	592	Moderate Density	1,128	776	(352)
>100-120%	536				
>120%	2,287	Low Density	2,287	1,330	(957)
Total	**9,378**		**9,378**	**10,242**	**864**

Sources: (Pierce County, 2022-2023), BERK 2024.
While the No Action Alternative capacity meets targets, the studied growth is reflective of the current assumptions in the Comprehensive Plan and transportation model as amended by the Downtown Plan and Station District Subarea Plan:

- 2017 Comprehensive Plan :
  - Households: 31,884
  - Jobs: 33,441

- Comprehensive Plan plus Downtown (2018) and Station Area (2021) Plans:
    - Households by 2035: 34,440
    - Jobs by 2035: 39,159

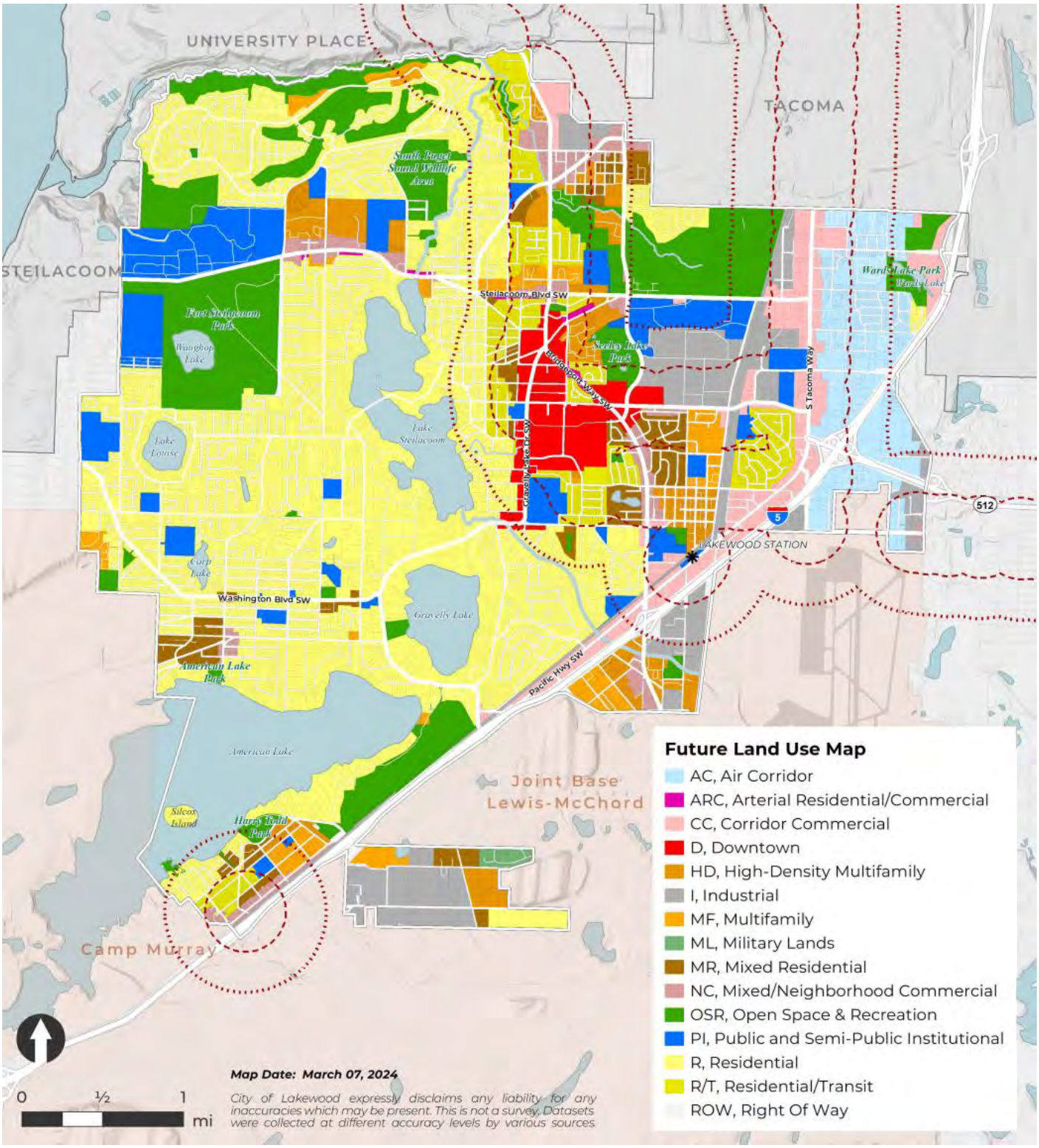
1.5.3 Action Alternative (Preferred)

The Preferred Alternative is the adoption of a significantly reorganized Lakewood Comprehensive Plan that reflects:

- Land development capacity consistent with Lakewood's 2044 growth targets:
    - 9,378 new housing units;
    - 23,180 in new population; and
    - 9,863 new jobs.
- Planning for sufficient housing land capacity for all economic segments of the population (moderate, low, very low and extremely low income, as well as emergency housing and permanent supportive housing);
- Making adequate provisions for housing for existing and projected needs for all economic segments of the community, including documenting programs and actions needed to achieve housing availability;
- Providing for moderate density housing options, including but not limited to duplexes, triplexes and townhomes;
- updated planning and zoning to allow the densification of housing in historically single family areas;
- Identifying racially disparate impacts, displacement and exclusion in housing policies and regulations, and beginning to undo those impacts; and
- Identifying areas at higher risk of displacement and establishing anti-displacement policies;
- updated energy and climate change related policies;
- coordinated planning with utility providers;
- planned civilian-military compatibility;
- expanded geographic boundaries for the 2024 Tillicum-Woodbrook Subarea Plan to include Woodbrook;
- consistency with the PSRC Centers Framework Policy as it applies to the Lakewood Regional Urban Growth Center; and
- optional elements (e.g., the Downtown, Station District, and Tillicum-Woodbrook Subarea Plans) and Background Reports in Appendices.

The Preferred Alternative proposes specific land uses and planning policies consistent with the GMA as well as related recent state legislation and regional policies focused on planning for housing affordable to all. See Exhibit 1-5 for transit proximate areas where parking standards may be reduced for middle housing as well as multifamily and housing for seniors, disabled, and income-restricted units.

Exhibit 1-5. Future Land Use Plan and Transit Proximity



Source: City of Lakewood, 2024.

Based on the proposed changes to the Future Land Use Plan and Zoning to allow more "middle housing" as defined in the GMA and accessory dwelling units (ADUs), there would be an increased capacity for housing. Also, the proposed changes would allow the City to meet its affordable housing targets for all economic segments. See Exhibit 1-6 and Exhibit 1-7.

Exhibit 1-6. Growth Targets and Capacity – Action Alternative

	2020	2044	Growth 2020-2044	Action Alternative Growth Capacity
Population	63,612	86,792	23,180	40,922*
Jobs	29,872	39,735	9,863	15,238
Housing	26,999	36,377	9,378	17,488
Emergency Housing	8	582	574	N/A**

Note: *Housing capacity x 2.34 persons per household (US Census 2018-2022)
** Capacity is not required if a jurisdiction allows emergency housing where hotels are allowed (met in Title 18.A in Lakewood's Municipal Code) or in a majority of zones within one-mile of transit per HB 1220 Sections 3 and 4, and if the jurisdiction has no regulations that limit the occupancy, spacing or intensity of emergency housing. However, local governments may set restrictions in relation to health, safety and fire codes, so long as the restrictions do not prevent the siting of a sufficient number of emergency housing units to meet the allocated need. Lakewood sets a 1,000 foot separation currently but proposed code changes would limit the spacing to 880 feet per RCWs 9.94A.030 and 9.94A.703, which create community protection zones of 880 feet from incompatible uses that have a clear connection to public safety. (See: https://deptofcommerce.app.box.com/s/1d9d5l7g509r389f0mjpowh8isjpirlh).
Sources: (Pierce County, 2022-2023); US Census Quick Facts, 2023

Exhibit 1-7. Affordable Housing Targets and Capacity by Action Alternative

Income	Projected Housing Need	Zoning Categories Serving Needs	Aggregated Housing Needs	Total Capacity	Capacity Surplus/Deficit
0-30% Non-PSH	1,212	Low-Rise Multifamily + ADUs	5,963	9,064	3,101
0-30% PSH	1,637				
>30-50%	1,739				
>50-80%	1,375				
>80-100%	592	Moderate Density	1,128	2,969	1,841
>100-120%	536				
>120%	2,287	Low Density	2,287	5,455	3,168
Total	**9,378**		**9,378**	**17,488**	**8,110**

Sources: BERK 2024.

While the Action Alternative has housing capacity above the 2044 targets, for the purposes of this DSEIS, the 2044 targets are used to evaluate the transportation and other needs since the targets encompass a 20-year period while capacity represents a reasonable build out under proposed regulations that may take longer than 20-years.

1.5.4 Comparison of Alternatives

This DSEIS evaluates the No Action and Action Alternatives, compared in Exhibit 1-8 below.

Exhibit 1-8. Comparison of Alternatives

Component	No Action Alternative	Action Alternative
Comprehensive Plan Elements	Current Plan is retained (2023).	Plan is updated to meet recent legislation (HB 1220, HB 1110, HB 1337).
General Concept	- Incorporates VISION 2040 Policies - Includes zoning requirements for special needs housing (PSH, RRH, TH, Emergency Shelters)[1] - Housing Element does not fully reflect HB 1220 zoning and policy requirements as summarized for Preferred Alternative - Does not reflect HB 1110 or HB 1337 requirements to allow middle housing and ADU housing in single family areas - Does not incorporate information from analysis of impacts to residential areas parking due to HB 1110 and HB 1337 densification requirements - Does not incorporate analysis of Regional Urban Growth Center per PSRC Centers Framework - Does not incorporate initial compliance policies with HB 1181 (2023 Climate Change & Resiliency Law)	Incorporates VISION 2050 Policies - Includes zoning requirements for special needs housing (PSH, RRH, TH, Emergency Shelters) - Housing Element fully reflects "HB 1220" (2021 law) zoning and policy requirements: - Planning for sufficient land capacity for housing needs, including all economic segments of the population (moderate, low, very low and extremely low income, as well as emergency housing and permanent supportive housing); - Providing for moderate density housing options within Urban Growth Areas (UGAs), including but not limited to duplexes, triplexes and townhomes; - Making adequate provisions for housing for existing and projected needs for all economic segments of the community, including documenting programs and actions needed to achieve housing availability; and - Identifying racially disparate impacts, displacement and exclusion in housing policies and regulations, and beginning to undo those impacts; and identifying areas at higher risk of displacement and establishing anti-displacement policies. - Reflects HB 1110 and HB 1337, 2023 laws requiring allowance of middle housing and ADU housing in single family areas - Incorporates information from analysis of impacts to residential areas parking due to HB 1110 and HB 1337 densification requirements

[1] PSH – Permanent Supportive Housing, RRH - Rapid Re-housing, TH – Transitional Housing

Component	No Action Alternative	Action Alternative
		- Incorporates analysis of Regional Urban Growth Center per PSRC Centers Framework - Incorporates initial compliance policies with HB 1181 (2023 Climate Change & Resiliency Law)
Key Features	- Maintains current residential zoning scheme and policies that pre-date HB 1220, HB 1110, and HB 1337 - Includes 2021 Energy & Climate Change Chapter that pre-dates HB 1181 - Includes 2011 Tillicum Neighborhood Plan and 2022 Addendum - Retains past data and analyses about the Regional Urban Growth Center that was drafted prior to the adoption of the PSRC 2018 Centers Framework - Retains transportation level of service (LOS) focused on road congestion - Maintains content organization used since first adopted Comprehensive Plan. Contains outdated and obsolete narrative and policy language. No clear references to original or more recent Background Reports.	- Updated residential zoning scheme and policies in response to HB 1220, HB 1110, and HB 1337 - Updated Energy & Climate Change Chapter including initial compliance with HB 1181 - 2024 Tillicum-Woodbrook Subarea Plan - Adds multimodal LOS and plans. - Verified data regarding Lakewood Regional Urban Growth Center in relation to pending PSRC Center Review - Reorganized Plan content to better reflect GMA organization and requirements. Streamlined Plan language (i.e., goals and policies), Optional Elements (e.g., subarea plans), expanded technical and detailed Appendices, and collection of Background Reports.
Future Land Use Map and Zoning	Current Future Land Use Plan and Zoning Map is retained.	Future Land Use Plan and Zoning Map and text are amended to allow for middle housing and ADUs. The CBD zone would be extended between the current boundary and the Clover Park High School. Consistency amendments are proposed to reconcile inconsistencies between use allowances for group homes in the Downtown/CBD and other Station District zones.
Other Development Regulations	No changes to critical areas regulations. No changes to parking regulations.	Update critical areas regulations to address gap analysis. Parking regulations would be modified to reduce parking in proximity to high frequency transit or major transit stops.
Growth Targets and Capacity	Meetings population, housing, and job targets on the whole. Does not meet housing targets by affordability band. Code allows emergency housing where hotels are allowed. Spacing requirements and other standards are applied.	Meets all growth targets including targets by affordability band. Code allows emergency housing where hotels are allowed. Spacing requirements and other standards are applied but adjusted based on health and safety standards per HB 1220, Sections 2 and 3.

Source: City of Lakewood, 2024; BERK Consulting, 2024.

1.6 SEPA Process

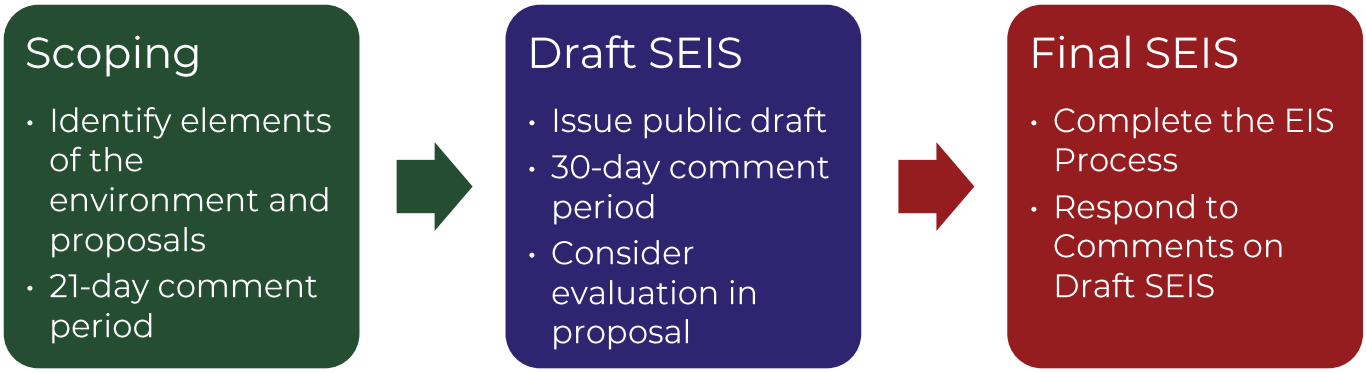
1.6.1 Overview

Under SEPA, an environmental impact statement (EIS) or Supplemental EIS (SEIS) is an informational document that provides the City, public, and other agencies with environmental information to be considered in the decision-making process. It also allows the public and government agencies to comment on proposals and alternatives. This DSEIS process has been integrated with the 2024 Comprehensive Plan periodic update planning process to inform the development of the City of Lakewood Comprehensive Plan growth concept, goals, and policies. See Exhibit 1-9.

The DSEIS points of public comment included:

- Scoping that took place in 2023 to identify the proposals and potential environmental topics; scoping is optional for a SEIS. See Appendix A.
- Since September 2022, public engagement and outreach has included:
    - Outreach to the public via City and 24CPPR websites, social media, the *Connections* newsletter, an electronic newsletter, and 4 citywide direct mailings;
    - 2023 Citizen Committee convened to provide recommendations to update Housing Element and Energy & Climate Change Element;
    - Convening of a 24CPPR Steering Committee and Tillicum-Woodbrook Subarea Plan (TWSP) Committee;
    - 5 Open Houses; and
    - 20+ Planning Commission meetings and 10+ City Council meetings
- This DSEIS offers analysis of the alternatives under review with the periodic update
- A Final SEIS (FSEIS) will complete the process and respond to comments on the DSEIS.

Exhibit 1-9. City of Lakewood Supplemental EIS Process



1.7 Key Issues and Options

The key issues facing decision makers include:

- Creating a growth concept carried forward in plans and regulations that:
  - Offers more affordable housing opportunities and places to retain and grow businesses.
  - Promotes a healthy environment and climate resilience strategies and avoids displacement of overburdened households and businesses.
- Approval of a Comprehensive Plan including a vision, goals, and policies that fulfills Lakewood's vision and meets state and regional requirements.
- Identifies transportation investments and public service and utility investments.
- Approval of development regulations that implement the Comprehensive Plan goals and land use plan, resulting in quality housing choices, and integrating the best available science to protect critical areas.
- Consider environmental information (impacts, alternatives, and mitigation) before committing to a particular course of action.

1.8 Summary of Impacts and Mitigation Measures

This section summarizes the results of the Alternatives' evaluation in Chapter 3. For details of the evaluation, please see Chapter 3.

1.8.1 Natural Environment

How did we analyze the Natural Environment?

Critical Areas

We reviewed prior SEPA documents and studies such as watershed and shoreline plans. We also conducted a desktop analysis of existing information sources on critical areas, including : wetlands; aquifer recharge areas; fish and wildlife habitat areas; flood-prone areas; geologically hazardous areas; and creeks, streams, lakes, and their shorelines. Using existing information, we identified the potential impacts that could occur from each alternative and impacts citywide and to the Tillicum-Woodbrook subarea. Impact analysis looked at exposure to hazards, direct impacts to critical areas, and indirect impacts to water quality and quantity. Mitigation measures were determined based on city, state, and federal regulations, codes, plans, and policies.

Climate Change

We conducted an analysis using existing information sources to support analysis of existing greenhouse gas (GHG) emissions sources and trends, as well as areas with increased climate vulnerability. Sources of

GHG emissions include building and transportation emissions and changes to the tree canopy. Climate vulnerability analyzed potential impacts to vulnerable populations, urban heat islands and its tree canopy, and the city's floodplain. We then evaluated and determine possible impacts that could occur from each alternative considering thresholds. Mitigation measures were determined based on city, regional, state, and federal codes, plans, and policies.

What impacts did we identify?

Critical Areas

Impacts could result from redevelopment and new development, depending on its location and proximity to the critical areas. These impacts could include increased flood hazard exposure, increased risk of erosion due to construction and development, potential groundwater contamination, stream or wetland buffer loss, potential impacts to critical fish and wildlife habitats, and possible changes to water quality and quantity of downstream water bodies in the Chambers-Clover Creek Watershed.

Impacts in the Tillicum-Woodbrook Subarea area are similar to citywide impacts.

Climate Change

Impacts could result from the increase in planned population growth. GHG emissions are likely to decline at a per capita level. In the centers, like Downtown and the Station District. Impacts include high or moderately high exposure to adverse air quality or noise.

What is different between the alternatives?

Critical Areas

The Action Alternative would allow for more growth in single family zones, which tend to have more tree canopy. The growth could impact existing vegetation, including trees. It would also implement enhanced critical area regulations. Regarding the Tillicum-Woodbrook Subarea, its Plan would encourage more housing growth and improvements related to civic and transportation access.

Climate Change

The No Action Alternative has a higher amount of overall vehicle miles traveled (VMT) in the city than the Action Alternative. However, the Action Alternative has a higher amount of VMT in the Downtown and Station District Subareas, due to the concentration of growth in these areas.

The No Action Alternative would require additional regulations to meet the City's Climate Element goals and policies that support regional GHG emission reduction goals. It would protect and enhance the city's tree canopy, but it does not implement improved critical area regulations reflecting best available science (BAS.) In comparison, the Action Alternative would result in higher density and a more compact urban form, resulting in greater per capita GHG emission reduction. It would include updated middle

housing regulations and critical areas regulations that provide additional habitat and stream protective measures, such as wider stream buffers and recognition of other habitats for protection.

The Action Alternative would adopt the 2024 Tillicum-Woodbrook Subarea Plan, includes policies and strategies that support a higher quality of life in the subarea despite exposure to air and noise pollution. These policies and strategies would apply improved critical area regulations, which aim to improve natural environment protection, reduce exposure to air pollution, and improve climate change resilience.

What are some solutions or mitigation for impacts?

Critical Areas

The City is adopting an updated Natural Environment Element, which will include updated goals and policies that intend to promote protection, conservation, and enhancement of fish and wildlife habitats, streams, and wetlands, as well as protection of groundwater quality and quantity. These updated goals and policies also intend to address protection from floodplain and geological hazards. Updated critical area regulations (in LMC Title 14 Environmental Protection) would strengthen aquifer protection, stream standards, and other habitat protection.

New development and future redevelopment would also be required to meet building, land use, and critical areas regulations and provide building designs that minimize risk to these critical areas. Development would need to comply with adopted stormwater manuals (LMC Chapter 12A.11) to decrease the potential for groundwater contamination, as well as habitat and wetland protections where appropriate.

Potential mitigation measures include a regulatory structure, like a conservation easement, to support stream daylighting; landscaping with native species; educational signage regarding aboveground stormwater facilities; evaluation and update of the City's stormwater regulations; and prepared housing plans for ADUs and small attached dwellings that have a minimized footprint that can help retain and protect tree canopy where feasible.

Climate Change

Future development under both alternatives would benefit from ongoing improvements in vehicle emissions, fuel economy, and regulatory improvements. The City has adopted regulations and commitments through the Energy and Climate Change Chapter in the Comprehensive Plan, is launching an urban forestry program to preserve significant trees and expand tree canopy throughout the city, and critical area and shoreline master program (SMP) regulations to promote conservation and protection of wetlands and riparian areas. The regional Puget Sound Clean Air Agency Board also has adopted regional GHG emission reduction. Furthermore, the Action Alternative would include updated critical area regulations to expand buffers and habitat protection.

To further mitigate the impact of GHG emissions, the City could explore its solar potential and provide incentives to increase its solar panel capacity on commercial and industrial buildings. It could also improve its carbon sequestration by increasing its urban tree canopy and protecting its wetlands. Other

methods include encouraging multimodal transportation that have reduced GHG emissions, promoting mixed-use development, integrating neighborhood commercial uses within residential neighborhoods, and prioritizing the use of green and sustainable development standards. On a regional level, the City could coordinate with regional transit efforts to expand public transit service throughout the city and region.

To further mitigate climate vulnerability impacts, the City could develop a Hazards Management Plan, develop and implement an urban heat resilience strategy, increase green infrastructure to cool stormwater runoff, and consider project-specific mitigation measures to limit emission exposures.

With mitigation, what is the ultimate outcome?

Critical Areas

Unregulated wildlife and native vegetation could be lost due to population growth and development. Redevelopment would require stormwater best management practices, resulting in an improvement to stormwater runoff and a benefit to the natural environment. No direct impacts to critical areas are assumed. The Action Alternative would improve the application of critical area regulations based on BAS with improved evaluations and standards for mitigation.

Climate Change

No significant unavoidable adverse impacts to air quality and GHG emissions are anticipated. Both alternatives would result in a mitigated less-than-significant impact. With mitigation implementation, as well as local, regional, and state climate actions, the alternatives may result in lower GHG emissions on a per capita basis compared to existing conditions. Neither alternative would prevent or deter state, regional, or local efforts to reduce GHG emissions. While each alternative sees increased growth and development, the development is channeled to targeted areas instead of the peripheral areas, which would offset the growth impacts.

1.8.2 Land Use Patterns and Policies

How did we analyze Land Use Patterns and Policies?

This DSEIS uses an inventory of existing land uses based on parcel land GIS data provided by the City. In addition, we anticipated the type and character of development that would be likely under the existing and proposed zoning. We analyzed potential impacts of the expected land use composition under each of the studied alternatives based on the following categories: changes in land use patterns and development intensities, differences in activity levels at boundaries of uses, and impacts to designated shorelines. These impacts were analyzed for the entire city as well as within the Tillicum-Woodbrook subarea boundary. Mitigation measures were determined based on city, state, and federal regulations, codes, plans, and policies.

What impacts did we identify?

Under both alternatives, additional growth and development is anticipated, leading to increases in land use intensity. Both alternatives allow for housing and job growth capacity that exceed the 2044 growth targets. The alternatives are largely consistent with GMA goals and VISION 2050 goals and multi-county planning policies. In both alternatives, housing would be emphasized in mixed use and multifamily zones, such as in the Downtown and Station District Subareas. Properties could redevelop and replace existing dwellings. It would be reasonable to amend the Downtown Planned Action Ordinance.

Both alternatives anticipate higher population and job numbers, creating more economic activity in the community. The increased activity levels would create increased demand for services and infrastructure.

Under the Action Alternative, the potential residential capacity in the TOC (Transit-Oriented Commercial) zone in the Station District Subarea is reduced due to non-residential uses currently in the "permit pipeline." By increasing the TOC zone density limit from 54 to 80 units per acre and other land use zone capacities, the City can provide capacity for housing in the Station District matching the Planned Action level of growth for 2035. The City may wish to apply similar form-based zone standards in the TOC zone that are in the Downtown Subarea code (LMC Title 18B).

No changes to the shoreline environment designations would be made. The City is reviewing if updates to the SMP are required in 2024 to be consistent with the required critical areas updates.

What is different between the alternatives?

The alternatives differ in consistency with goals and policies, as well as in the patterns and amount of growth, with the modeled growth for the Action Alternative set slightly higher than the No Action Alternative. The Action Alternative includes a residential pattern with more middle housing opportunities across the R1-R4 zones and in the "Transit" overlay. It would comply with the recent state legislation (HB 1337, HB 1110) that require development and design standards treat accessory dwelling units and other middle housing similar to single family dwellings. In comparison, the No Action Alternative allows fewer housing types in the Residential zones. Much of its growth would be focused on the Downtown and Station District Subareas.

The No Action Alternative is less consistent with goals and policies on providing for a range of affordable housing choices; the Action Alternative provides updated policies and zoning codes to increase housing types to meet targets for each affordability bands per the GMA. The Action Alternative provides updated Natural Environment policies and codes and reinforces climate mitigation and resilience and assumes some middle housing would occur in shoreline areas where housing types are allowed in the SMP. However, there will likely be lesser units developed in SMP areas due to the presence of critical areas or narrower roads where on-street parking is unavailable.

In the Tillicum-Woodbrook Subarea, the Action Alternative includes a cohesive plan for an expanded subarea that includes acreage on both sides of I-5 with the incorporation of the Woodbrook neighborhood. The TWSP emphasize increased investment in community needs and infrastructure, diversified housing options, improved multimodal connectivity, increased economic development opportunities, and protection of the natural environment. The No Action Alternative would retain the

Tillicum-Subarea Plan created in 2011 without recognizing the action items completed since 2011 or the implementation gaps identified in 2022 (e.g., additional housing types and investment in infrastructure, parks, and community facilities.)

What are some solutions or mitigation for impacts?

The City adopts regulations of land uses and development standards for consistent compatible development. In the Downtown and the Station District Subareas, hybrid form-based codes apply. In addition, the City intends to amend the Downtown Planned Action Ordinance (PAO) to add the parcels rezoned in 2023 to CBD on the southern border of the subarea. The inclusion of these properties makes for a logical subarea boundary line and cohesive land use pattern.

Under the Action Alternative, the Comprehensive Plan is updated for greater consistency with the 2044 job and housing growth targets, including the affordable housing targets now required under the GMA. It includes updated and new policies consistent with recent GMA updates as well as create a more streamlined and up to date document. Development regulation amendments would be adopted and implemented to meet recent legislative requirements for ADUs and middle housing in historically single family areas. In addition, critical area regulations would be amended to meet the latest State guidance and the urban conditions in the city.

With mitigation, what is the ultimate outcome?

While both alternatives plan for additional growth and development resulting in increased land use intensity, these are not considered significant or adverse impacts since the growth is focused within an urban area. Much of the job and housing growth is in the Downtown, a designated regional urban growth center, and the Station District, a mixed use and multifamily transit-oriented subarea. The Action Alternative's inclusion of middle housing in historically single family areas is accompanied by development and design standards similar to those governing single family development.

Future growth is likely to create temporary or localized land use compatibility issues as development occurs. The potential impacts related to these changes may differ in intensity and location under each alternatives; however, with existing and new development regulations, zoning requirements, and design guidelines, no significant adverse impacts are anticipated.

1.8.3 Housing

How did we analyze Housing?

The EIS evaluates changes to the capacity for new housing development that can accommodate Lakewood's housing targets by income level. It also evaluates housing diversity and supply, housing affordability, and potential increased risk for involuntary residential displacement, particularly for vulnerable populations. We used the PSRC Displacement Risk Index and compared it with the Commerce Displacement Risk Map to evaluate the level of displacement anticipated.

What impacts did we identify?

The City's housing capacity will increase under both alternatives, with most middle housing and ADU increases locating in western Lakewood and higher density growth planned in northeast and east Lakewood. Most zoning districts would stay the same under both alternatives. The density of land uses will be similar.

Displacement risk in Lakewood is rated moderate to high, depending on the tool used. High displacement risk is identified in areas along the north and east side of Lakewood where there is more multifamily and mixed use zoning, as well as in the Station District Subarea. The north and east side of American Lake are rated at higher risk as well.

The land use designations and zones in the Tillicum-Woodbrook Subarea would remain unchanged. The PSRC displacement map rates the subarea's displacement risk as moderate, while the Commerce displacement map rates the risk as high.

What is different between the alternatives?

While the No Action Alternative provides housing that meets the overall City targets for the year 2044, it does not meet housing needs at all income levels. In comparison, the Action Alternative meets housing capacity at all income levels, due to its added middle housing opportunities and reinforcement of growth in the City's Downtown and Station District Subareas.

Under the No Action Alternative, new development could replace existing housing in east/northeast Lakewood, leading to physical displacement. The Action Alternative would allow for moderate density housing integrated in historically single family areas, which may displace existing units, but could also add to existing properties without replacing the primary unit. The Action Alternative's "lower density zones" would allow for moderate density and be implemented through design and development regulations that treat middle housing and ADUs similar to single family housing. There would be reasonable transitions between areas of differing density.

. Under the No Action Alternative, Tillicum-Woodbrook Subarea single family and multifamily housing could be developed based on existing regulations. However, middle housing would not be allowed in the Residential zones on the north and east sides of the subarea. Under the Action Alternative, the Subarea Plan boundary would extend to include Woodbrook south of I-5 and match the TWSP Subarea Study Area. The TWSP's goals and policies would protect existing affordable housing and support adding additional affordable housing. It would also promote infill housing and ADUs through the extension of middle housing opportunities on the north and east sides of the subarea.

What are some solutions or mitigation for impacts?

The City's current development code includes housing allowances and standards for a full range of housing types. The City has also adopted and implemented a Housing Incentive Code, property tax exemptions for multifamily housing, a rental housing safety program (RHSP), and a housing services program to support maintenance and general home upgrades. The City also has a coordinates a

consolidated Housing and Community Development Plan with the City of Tacoma, which uses Community Development Block Grant and HOME funds to develop affordable housing.

The Action Alternative includes a new Housing Element with changes to the Future Land Use Map and Zoning Districts to incorporate middle housing. It also includes a new Tillicum-Woodbrook Subarea Plan with goals, policies, and actions regarding housing development and preservation.

Other mitigation measures include potential amendments to some zones to support the development of middle housing and ADUs. Some adjustments to the Arterial Residential Corridor (ARC) and the Low-Impact Mixed-Use Roads District within the Central Business District zone in the Downtown may be needed. Amendments to reconcile the Special Needs Housing Allowances for some types of group homes in the Downtown and Station District Subareas are needed (see Lakewood Municipal Code (LMC Titles 18B and 18C.)

With mitigation, what is the ultimate outcome?

Under both alternatives, housing growth is anticipated, which could result in impacts to current residents, including residential displacement in parts of the city. The No Action Alternative does not provide enough capacity to accommodate housing targets at all income bands, as is now required under the GMA.

1.8.4 Transportation and Parking

How did we analyze Transportation and Parking?

We gathered existing transportation conditions throughout the city and findings related to current transportation and circulation. Data was also gathered using GIS data layers. The DSEIS evaluates changes to land use patterns, activity levels, or development intensities and considers whether proposed land use changes would worsen transportation system performance. Impact analyses looked at travel forecasts, vehicle miles traveled (VMT), and level of service (LOS) analysis.

To analyze transportation impacts, we conducted a travel demand model (TDM) comparison between each alternative, which was derived from a previous model and recently adopted subarea plans. It forecasts travel demand based on the City's 2044 housing and job growth targets, with assumptions consistent with the Land Use Plan. Traffic volumes, roadway volume-to-capacity (v/c) ratios, and LOS were then calculated for mid-block arterial roadway segments throughout the City of Lakewood.

To analyze parking impacts, we applied a methodology for evaluating significant safety issues and applied that consistently to all roadway segments in the city. It assumes that significant safety issues could arise from increased on-street parking on roadways not originally designed for on-street parking. These roadways include narrow local roads without curbs, and safety issues include reduced sight distances, increased risk of dooring collisions with cyclists, and inadequate space for two-way travel and EMS access.

What impacts did we identify?

By 2044, traffic volumes would increase due to the land use growth in the city as well as the region. Regarding parking impacts, the Interlaken and Harts Idyllwild/Lake Holme developments have a high concentration of parcels with potentially significant on-street parking safety issues due to the narrow streets and automobile-focused street design that does not adequately accommodate higher residential densities or on-street parking.

The LOS results in the Tillicum-Woodbrook Subarea are similar under both alternatives with no exceedances of levels of service (LOS).

What is different between the alternatives?

The No Action Alternative has a slightly higher overall VMT, with lower performance at certain intersections. However, it would have lower impact in some locations along Pacific Highway SW and South Tacoma Way. It would retain current parking ratios and parking incentives. However, it would not allow middle housing at the same level as the Action Alternative; its parking impacts could therefore be lower.

The Action Alternative scenario concentrates job and housing growth within the Downtown and Station District Subareas, but also allows significant housing growth over time in the historically single family areas due to middle housing and ADUs. The intersections at Pacific Highway SW and South Tacoma Way would see greater volumes than under the No Action Alternative. The capacity of the Action Alternative to provide middle housing is greater than the No Action Alternative, which could increase parking impacts. Parking in areas with reduced road rights of way may limit the production of middle housing in some locations.

These land use changes are intended to increase density in areas of the city with greater access to transit and other active transportation modes such as walking and biking. The Action Alternative has a lower citywide VMT due to its concentrated growth in the Downtown and Station District Subareas and distribution of middle housing growth in historically single family areas.

Results for Tillicum-Woodbrook are similar to the citywide impacts; the Action Alternative would have slightly lower volumes of traffic than the No Action Alternative.

What are some solutions or mitigation for impacts?

The City is updating its land use plans and associated transportation policies to address multimodal transportation needs. It also adopted a Non-Motorized Transportation Plan (NMTP) in 2023, which includes funding needs and recommendations to implement non-motorized transportation improvements. The City currently manages transportation facilities, has a Commute Trip Reduction (CTR) program, and a Complete Street Policy. It also regulates parking in the Downtown and Station District Subareas.

The City and region focus on enhancing sustainable and efficient transportation options. In 2024, the Sound Transit Board of Directors approved funding a series of access improvements within the Station

District to encourage multimodal transportation and decrease the demand for single occupancy vehicle driving. The City could also consider adjusting the LOS threshold for deficient roadways segments, which would further emphasize the City's focus on improving transit access, walking, and biking within the Station District and surrounding area.

With mitigation, what is the ultimate outcome?

Transportation infrastructure is required to keep pace with development associated with expected demographic and economic growth. The City's focus on strengthening sustainable and efficient transportation options will help manage environmental impact and improve quality of life for the community. Mitigation measures through continual monitoring and capital investments at specific locations can help reduce transportation impacts.

The City plans to conduct ongoing monitoring related to middle housing development, limiting parking near transit per state requirements. Through code allowances, applicants can request changes in parking using project-level information. No significant unavoidable adverse impacts are anticipated.

1.8.5 Public Services

How did we analyze Public Services?

This section addresses potential impacts identified under both alternatives on: fire and emergency medical services (EMS); police; schools; and parks, recreation, and open space areas that serve Lakewood. These services are provided by the City of Lakewood for police and parks, by West Pierce Fire and Rescue (WPFR) for fire, and by the Clover Park School District (CPSD) for schools. We considered available capital and operational plans and data from service providers such as calls for service, response times, and usage. The methodology for impacts is based on analyzing data available in the Comprehensive Plan, functional plans, provider annual reports, budgets, and other data sources, as necessary. Impacts are quantified by population and employment-based summaries and projections.

Thresholds of significance include:

- Negative affected LOS for **police and/or fire and emergency medical services**;
- Increased demand for **special emergency services** beyond current operational capabilities of service providers;
- Increases in **students** and lack of facilities; and
- Reduced access to **park and open space facilities**.

What impacts did we identify?

Under both alternatives, increased population and employment growth in the city would generate additional demand for emergency services, parks, and schools. Additional firefighters, police officers,

park and recreation facilities, and classrooms or schools would be needed to maintain or meet current LOS over time.

Fire & EMS

Under both alternatives, growth and development in the Lakewood area would create more demand for fire and emergency medical services, placing increased pressure on WPFR to meet response times and maintain its WSRB rating of ISO Class 3 or better.

With targeted growth in the Downtown and Station District Subareas, the fire stations that serve these areas may see increased growth. WPFR would attempt to maintain response times consistent with or better than current performance levels as the demand for service increases. Over time, additional staffing, equipment, or facilities may be required in order to maintain or improve performance levels. Adopted LOS standards and effective LOS calculations for emergency services are citywide, so WPFR would continue to evaluate where demand is greatest and distribute resources accordingly.

Police

Both alternatives would increase the demand for police service. The population and job growth is anticipated to result in higher calls for service, increased staffing to respond to these calls, and increased need for infrastructure and equipment throughout the city. There may also be an increase of calls in the Downtown and Station District Subareas due to the anticipated population and employment concentration.

Road infrastructure that effectively facilitates the flow of traffic will impact response times, which may have a greater impact in the Tillicum-Woodbrook Subarea than other areas in the city, particularly given that the LPD headquarters is located outside of the subarea. A reduction in traffic flow standards could reduce the reliability of police response to the subarea during peak hours.

Schools

Added residential growth throughout the city would increase households and the number of students, requiring an increased need for teachers and classrooms. However, the anticipated moderate density and multifamily housing. may have a lower student-per-household ratio, resulting in a lower-than-anticipated need for teachers. The School District will need to study student growth to anticipate the appropriate distribution of its teachers.

Parks, Recreation and Open Space

Both alternatives will see increased use of parks and open space, resulting in an increased need for maintenance, amenities, and park acreage. Both alternatives plan for increased housing density in the Downtown and Station District Subareas but acknowledge lack parks located within a 10-minute walkshed. Therefore, existing parks like Ft. Steilacoom Park, may see increased usage.

What is different between the alternatives?

Fire & EMS

The Action Alternative has an increased amount of moderate housing and ADUs in historically single family areas, which have narrow streets that may make it more challenging for fire engines to respond to calls and increase response times in these areas.

Police

With the increase in moderate housing throughout the city, there may be an increase in calls to service for the police department, particularly in neighborhoods and areas that are historically single family. There may also be an increase of the proportion of calls in the Downtown and Station District Subareas due to the anticipated population and employment concentration.

Schools

With the increased moderate housing and ADUs in historically single family areas, the school district may see increased student demand throughout the city, although these housing types may have lower student-to-housing units ratio than single family units.

Parks, Recreation and Open Space

There will be an overall increase in park demand throughout the city with the increase in population. The City could prioritize areas that have a lack of park space within a 10-minute walk shed, have a low diversity of amenities, and/or have a low-quality park score. These areas of the city include the north-central area, the central-east area, the central-west area near Idlewild Elementary School.

What are some solutions or mitigation for impacts?

Fire & EMS

The areas where growth is being directed (Downtown, Station District, and infill residential areas) are all currently served by WPFR. Concentrated growth can help promote efficient and effective service delivery. The fire district can also leverage property tax levies and request facility bonds and updates to the maintenance and operations levies to support costs associated with growth.

Police

The Capital Facilities Plan Element is updated periodically and would help ensure that proposed growth could be served. The areas where growth is being directed (Downtown, Station District, and infill residential areas) are all currently served by the LPD. Further concentrated growth can help promote efficient and effective service delivery. The City could implement Crime Prevention through Environmental Design (CPTED) principles to allow for appropriate lighting, landscaping, and visibility.

Schools

The Comprehensive Plan includes policies encouraging City-school district coordination. The school district could explore participating in an impact fee program to support financing of its schools' construction, improvements, and maintenance. School districts that participate in this program would need to update their Capital Facilities Plans every two years to project future enrollment and assess facility need.

Parks, Recreation and Open Space

The Comprehensive Plan includes a Park, Recreation, and Open Space (PROS) Element. The City also requires private open space and recreation for new multifamily and commercial development as part of its Specific Uses and Design Standards. In addition, the Downtown Subarea Plan anticipates a 2- to 4-acre park and additional greenspace to create a linear park concept, which would increase pedestrian connections to parks.

Additional mitigation strategies include pursuing grant and bond financing for parks and trail projects, which would help add additional parks and improve the current parks' quality and diversity ratings. The City could adopt an LOS for urban parks. It could expand its existing partnerships with public and private entities with existing open space facilities, such as schools, to expand park opportunities. It could partner with the State of Washington to expand access to large tracts of land for park access.

With mitigation, what is the ultimate outcome?

While future population growth and demand will increase the need for public services under both alternatives, regular planning for future capital facility and staffing needs can minimize impacts and meet future demand. No significant unavoidable adverse impacts are expected.

1.8.6 Utilities

How did we analyze Utilities?

Utilities evaluated in this DSEIS include the public water system, sewer system, stormwater management system, and power system. These services are provided by: the Lakewood Water District (LWD); Pierce County Sewer Utility; the municipal stormwater utility; and Lakeview Light and Power, Tacoma Power, and Puget Sound Energy, respectively. The analyses started with a review of existing service provider plans and spatial data. Impacts were considered significant if the alternatives would result in an inconsistency with planned growth and capital plans in the utility system plans.

What impacts did we identify?

New growth and development under both alternatives would result in an increase in demand for utility services citywide. Both alternatives could have potentially significant adverse impacts to utilities if demand exceeds the utilities' ability to provide service at the desired LOS. However, the development

would be incremental, allowing the City and the utilities to accommodate growth and maintain utilities as it regularly updates its plans.

The impacts to utilities in the Tillicum-Woodbrook Subarea would be similar under both alternatives.

Water

Demand for water will increase under both alternatives. While the distribution of growth and the location of increased water demand will vary under the No Action Alternative versus Action Alternative, the net volume of the water increase will be proportional to the total increase in population citywide. While both alternatives would result in an increase in water demand, use of higher efficiency and low-flow fixtures could reduce per-capita demand. The LWD need to update its plans to address the City's 2044 growth targets, which are not included in the current Water System Plan that is updated every six years to address aging infrastructure, expansion to accommodate new development, and recommended improvements. These improvements and developer investment in higher efficiency water fixtures could decrease overall water demand to meet incremental increases in water demand.

Sewer

Sewer impacts are similar to water impacts. As growth occurs in the city, sewer usage will increase under both alternatives. While the distribution of growth and the location of increased sewer usage will vary between the two alternatives the net volume of the sewer increase will be proportional to the total increase in population.

Stormwater

Both alternatives would increase growth and could add impervious area, but would also be subject to landscaping, tree protection, and critical area protection regulations. Most employment growth and much housing growth would occur in the Downtown zone.

Power

Both alternatives would increase the annual loads on power. The three power providers have identified different growth rates ranging from 0.3-1.3%, all with planned capacity to meet the City's growth plan.

What is different between the alternatives?

Water

The LWD would need to update its plan to address new growth targets, as its current plan does not address the new target. The No Action Alternative has capacity to meet the 2044 growth target.

In comparison, the Action Alternative has a targeted growth pattern that exceeds the LWD's projections, with more growth distributed in historically single family residential neighborhoods and the centers. The

LWD has water capacity to address the target growth of the Action Alternative; but it may need to change the amount of wholesale or partner agreements to accommodate this increased demand.

Sewer

The No Action Alternative will see the volume of sewer usage increase in the Downtown and Station District Subareas and less in historically single family neighborhoods. In comparison, the Action Alternative would see increased volume of sewer usage in historically single family neighborhoods as well as in the Downtown and Station District Subareas. With most planned growth in multifamily and attached single-family dwellings, the LOS is lower per person than for those in single family.

The Pierce County Sewer Division is preparing a Unified Sewer Plan update by 2029, and the City is providing information regarding planned 2044 growth target patterns as the USP is drafted.

Stormwater

The No Action Alternative would apply most growth in the Downtown and Station District Subareas and would require stormwater standards of new development. The Action Alternative would apply much growth in the Downtown and Station District Subareas, but also in historically single family residential areas. Lakewood's stormwater standards would apply and require stormwater standards of new development.

Power

Anticipated growth under the No Action Alternative will result in increased power usage, with job growth more focused in the Downtown and Station District Subareas. LLP has planned capacity to meet the City's growth plan within its service area, including the complete electrification of the Pierce Transit bus and vanpool fleet, replacement of its substations, and the construction of a fifth substation to support Sound Transit electrification.

The development of the 2044 growth targets under the Action Alternative will result in increased power usage, with growth focused in the Downtown and Station District Subareas and historically single family neighborhoods. All power providers would see an increase in demand and would need to update plans and capacity in their service areas to meet the City's growth plan.

Tillicum-Woodbrook Subarea

Under the No Action Alternative, policies and investments would be based on the 2011 Tillicum Neighborhood Plan whereas under the Action Alternative, the 2024 TWSP policies and investments would reflect community input and create greater community connectivity and housing options. Utilities and investments would improve the quality of life for the community, such as stormwater improvements and American Lake water quality, and water system improvements for fire flow and other replacement needs.

What are some solutions or mitigation for impacts?

The Lakewood Municipal Code (LMC) includes standards for water, sewer, and stormwater infrastructure for water, sewer, and stormwater infrastructure for development. The LMC also requires application of the international energy code as required by the State of Washington.

The Action Alternative would update the Capital Facilities and Utilities Element policies and incorporate current utility provider plans.

Water and Sewer

Ongoing updates to the Comprehensive Water System Plan by the LWD and the Unified Sewer Plan by Pierce County would address the increases in density in the city and ensure these services are in place to meet the growing demand. In addition, new developments may reduce water demand by using new technologies that would reduce per-capita water use (and therefore wastewater service demand) by using newer, low- or no-flow plumbing fixtures and equipment.

Stormwater

Mitigation is through the City's current regulations and commitments. The City implements the Ecology Stormwater Manual, Stormwater Management Action Plan, and Engineering Standards addressing stormwater management and promoting low impact development. The Zoning Code sets forth impervious surface limits and standards for landscaping, tree protection, and critical area protection.

Power

Power service providers conduct integrated resource planning to address service demand and conservation. These plans are regularly updated to adopt to changing growth patterns and ensure adequate and reliable services.

Other mitigation measures the City could pursue include the implementation of sustainable requirements on new development, such as the construction and operation of LEED-compliant (or similar ranking system) buildings. These efforts could reduce the increase otherwise required for power systems. Another potential mitigation measure is the implementation of conservation efforts and renewable energy sources to conserve electricity in new developments, including energy efficient equipment (e.g., light bulbs, appliances, and heating and air conditioning). These efforts could help reduce energy consumption by both residential and non-residential development.

With mitigation, what is the ultimate outcome?

Additional population, employment, and industrial/commercial growth throughout the City's service area would result in increased demands on water services, sanitary sewer facilities, stormwater, and power. The growth planned for the city would be incremental. Advance planning for sewer/water system and capital facility improvements should minimize the possibility of unavoidable impacts, ensuring the utilities can accommodate growth. No significant unavoidable adverse impacts are expected for utilities.

1.9 Summary Alternative Comparison

Exhibit 1-10 includes a summary of Section 1.8, reviewing the anticipated impacts common to all alternatives and by each alternative.

Exhibit 1-10. Summary of Comparison of Alternatives

Element	Impacts Common to All Alternatives	Impacts of the No Action Alternative	Impacts of the Preferred Action Alternative
Natural Environment			
Critical Areas	Increased redevelopment and new development could result in potential increased flood hazard exposure, increased risk of erosion, potential groundwater contamination, stream or water buffer loss, potential impacts to critical and wildlife habitats, and possible changes to water quality and quantity of downstream water bodies	Similar to Impacts Common to All Alternatives	Similar to Impacts Common to All Alternatives More growth in the single-family zones could result in increased impacts to existing vegetation, such as the tree canopy. Implementation of enhanced critical area regulations.
Climate Change Mitigation and Adaptation	Overall increases in GHG emissions due to growth but decline in GHG emissions per capita. Increased climate vulnerability in the Downtown and Station District Subareas, with high or moderately high exposure to adverse air quality or noise and higher exposure to urban heat islands.	Higher amount of overall vehicle miles traveled (VMT) compared to the Action Alternative. It would need to meet additional regulations to meet the City's Climate Element goals and policies that support GHG emission reduction goals.	Higher amount of VMT in the Downtown and Station District Subareas due to increased growth in these areas. Greater GHG emission reduction per capita Implementation of updated middle housing regulations and critical area regulations to improve climate change resilience.

Element	Impacts Common to All Alternatives	Impacts of the No Action Alternative	Impacts of the Preferred Action Alternative
Land Use Patterns and Policies			
Current Land Use	Increases in land use intensity due to additional growth and development. Housing emphasized in the Downtown and Station District Subareas. Higher activity levels by population and jobs, leading to increased demand for services and infrastructure. Consistent with GMA goals, VISION 2050 goals, and multi-county planning policies.	Similar to Impacts Common to All Alternatives. Maintains the current land use patterns and development intensities. Lower total growth targets than the Action Alternative.	Reduced residential capacity in the TOC zone but increased density in the Station District, up to 80 units per acre. Greater range of housing types in the Downtown and Station District Subareas and residential areas with more moderate density. Greater density along transit corridors and in the Downtown and Station District Subareas. Creation of "lower density zones" instead of single-family zones to allow for gentle and moderate density with ADUs, townhouses, and small attached apartments. Reasonable transitions between areas of differing density with similar design and development regulations.
Housing			
Housing	Increased housing capacity, with most higher density growth planned in northeast and east Lakewood. Moderate to high displacement risk, particularly along the north and east side of Lakewood where there is more multifamily and mixed use zoning.	Housing meets overall City targets for 2044 but does not meet housing needs at all income levels. Does not alter the Future Land Use Map or Zoning Districts or regulations. New development could replace existing housing in the east and northeast parts of the city. Increased single family and multifamily housing in Tillicum-Woodbrook Subarea.	Meets housing needs at all income levels. Potential displacement with moderate density housing integrated in historically single family areas. Extension of the Tillicum-Woodbrook Subarea boundary, with development of infill housing and protection of affordable housing.

Element	Impacts Common to All Alternatives	Impacts of the No Action Alternative	Impacts of the Preferred Action Alternative
Transportation and Parking			
Transportation	Increased overall transportation volumes and total VMT due to local and regional growth.	Higher overall VMT and higher traffic volumes per capita.	Increased access to transit and other active transportation modes Lower citywide VMT
Parking	High concentration of parcels in the Interlaken and Harts Idyllwild/Lake Holme developments with potentially significant on-street parking safety issues due to narrow streets.	Potentially lower parking impacts. Retention of current parking ratios and parking incentives.	Increased parking impacts due to increased capacity for middle housing in lower-density neighborhoods. Parking in areas with reduced road rights of way may limit middle housing production.
Public Services			
Fire	Increase in calls to services throughout the city, particularly in the Downtown and Station District Subareas. Increased demand for facilities, staffing, and equipment.	Same as Impacts Common to All Alternatives.	Same as No Action Alternative. Increased calls to service in historically single family areas due to an increase in moderate density housing infill. Increase in response times due to narrower streets in these low-density neighborhoods. The City is considering focusing most middle housing in proximity to transit. Off street parking is likely to remain on the narrower streets to keep access for emergency vehicles.
Police	Increased calls to services, including in more populated districts such as Downtown and Station District. Increased demand for facilities, staffing, and equipment.	Same as Impacts Common to All Alternatives.	Same as Impacts Common to All Alternatives. Increased calls to service in historically single family areas due to an increase in moderate density housing infill. Increase in response times due to narrower streets in these low-density neighborhoods.

Element	Impacts Common to All Alternatives	Impacts of the No Action Alternative	Impacts of the Preferred Action Alternative
Schools	Potential increase in student growth, resulting in increased demand for teachers, facilities, and equipment.	Same as Impacts Common to All Alternatives.	Same as Impacts Common to All Alternatives.
Parks, Recreation, and Open Space	Increased usage of current parks, resulting in increased demand for park acquisition and investment in quality and amenity factors in parks. Increased need for parks in the Downtown and Station District Subareas.	Same as Impacts Common to All Alternatives.	Same as Impacts Common to All Alternatives. Increased need for parks in low-density residential areas.
Utilities			
Water	LWD has planned for about 7,882 more population between 2019-2039. This would be net 5,380 people 2020-2039. This is 23% of the 2044 growth target. The current plan does not address the new target. However, the District has additional water rights.	The No Action Alternative has capacity to meet the 2044 growth target for population. LWD needs to update its plans to address 2044 growth targets. Most growth is in the Downtown and Station District Subareas, and less in historically single family neighborhoods.	The Action Alternative has much greater capacity for growth that would occur beyond the 20-year target. In the 20-year period, the target growth would exceed LWD projections. There would be more growth distributed in historically single family neighborhoods as well as in the Downtown and Station District Subareas.
Sewer	The Pierce County Sewer Division is preparing a sewer plan update after the Comprehensive Plan periodic update. The current 2010 sewer plan assumes net 8,388 people, 2020-2044. This is a lower population than the 2044 population.	Similar to Water above.	Similar to Water above.

Element	Impacts Common to All Alternatives	Impacts of the No Action Alternative	Impacts of the Preferred Action Alternative
Stormwater	All alternatives will add growth in a largely urban area. New development and infrastructure projects may add new impervious surfaces and improve stormwater management of existing impervious areas.	The No Action Alternative would apply most growth in the Downtown and Station District Subareas and would require stormwater standards of new development.	The Action Alternative would apply most growth in the Downtown and Station District Subareas but also result in growth in historically single family residential areas, which may increase impervious areas. Lakewood's stormwater standards would apply.
Power	All alternatives would allow for growth and an increase in demand for power. The power providers would all work toward new state requirements under the Clean Energy Transformation Act.	The No Action Alternative would focus growth in the Downtown and Station District Subareas; greater power demand is expected in Lakeview Light and Power's service area in these subareas.	The Action Alternative would focus growth in the Downtown and Station District Subareas as well as in historically single family areas, and all power providers would see an increase in demand.

2 Alternatives

2.1 Introduction

This chapter describes the proposal to update Lakewood's Comprehensive Plan and studied alternatives.

The Washington Growth Management Act (GMA) and the Washington State Environmental Policy Act (SEPA) direct how Lakewood must develop its Comprehensive Plan and conduct its environmental review.

Under the GMA, jurisdictions are required to protect critical environmental areas and conserve natural resource lands, such as farms and forests, as well as plan for land use and population and job growth. 2024 required Plan elements include:

- Land Use;
- Housing;
- Capital Facilities;
- Utilities;
- Transportation;
- Economic Development;
- Park and Recreation (once state funding is available); and
- Climate Change & Resiliency

The GMA also allows optional Plan elements; Lakewood has adopted four such elements over time, including the:

- 2011 Tillicum Neighborhood Plan;
- 2018 Downtown Subarea Plan;
- 2021 Station District Subarea Plan; and
- 2021 Energy & Climate Change Element

The 2011 Tillicum Neighborhood Plan and the 2021 Energy & Climate Change Element are being renamed and updated in the proposed Comprehensive Plan.

The GMA calls for communities to review and, if necessary, revise their comprehensive plans and regulations every ten (10) years to ensure they remain up-to-date. The GMA is located at Chapter RCW 36.70A.

SEPA is intended to ensure that environmental values are considered during decision-making by state and local agencies. The environmental review process in SEPA is designed to work with other

regulations to provide a comprehensive review of a proposal. Most regulations focus on particular aspects of a proposal, while SEPA requires the identification and evaluation of probable impacts for all elements of the environment.

Combining the review processes of SEPA and the GMA reduces duplication and delay by combining study needs, combining comment periods and public notices, and allowing agencies, applicants, and the public to consider all aspects of a proposal at the same time. This Draft Supplemental Environmental Impact Statement (DSEIS) is required by the State Environmental Policy Act (SEPA) (RCW 43.21C.030 (2)(c)). The adoption of the Lakewood Comprehensive Plan by the Lakewood City Council constitutes the action requiring SEPA compliance. SEPA is located at Chapter RCW 43.21C. SEPA rules can be found at WAC Chapter 197-11; SEPA procedures are located at WAC Chapter 173-802.

Within this planning framework, this DSEIS studies two alternatives – the current plan and the action alternative that responds to GMA legislation:

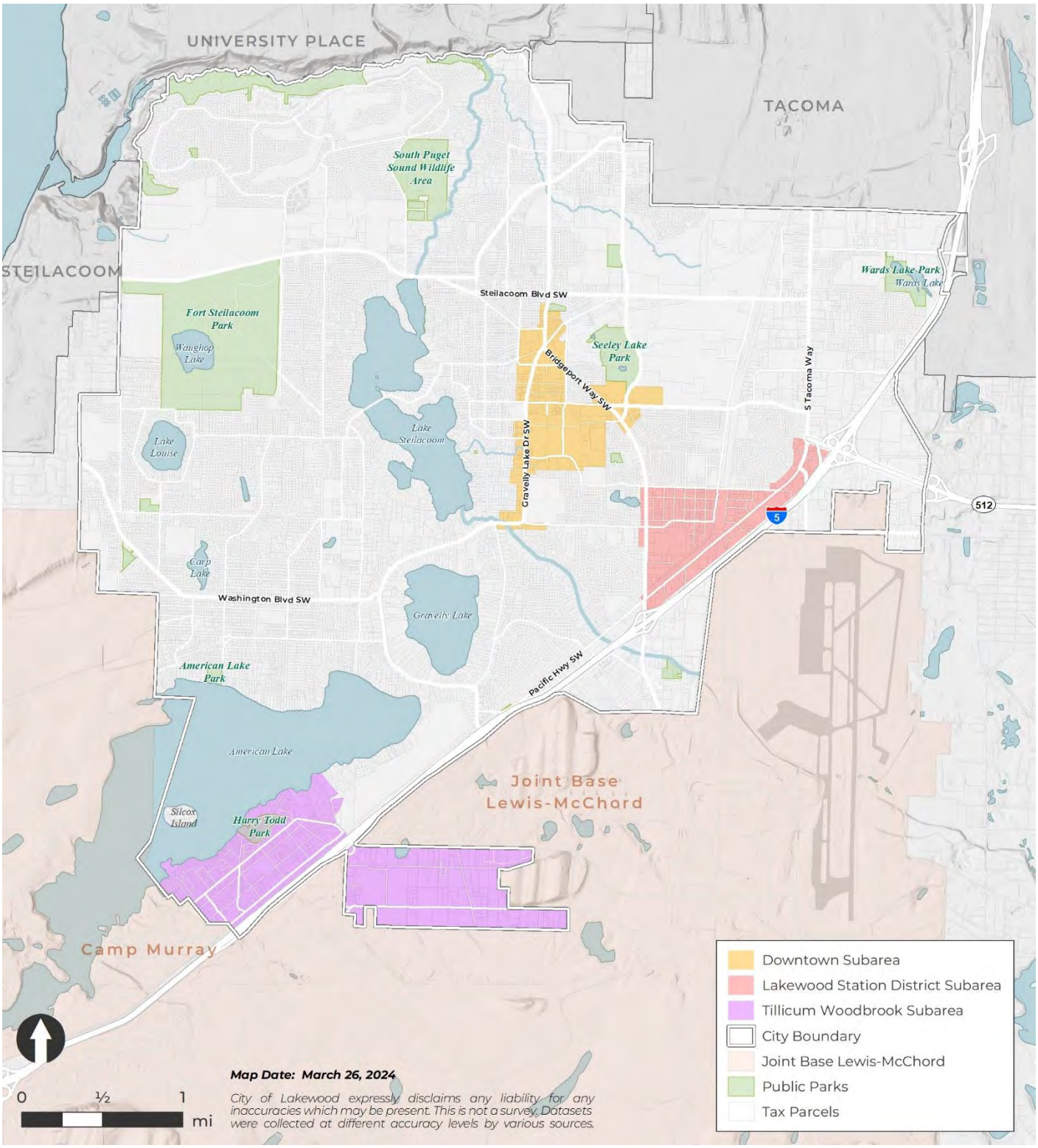
- **No Action:** The No Action Alternative is required under SEPA. This alternative retains the current Comprehensive Plan and associated subarea plans and development regulations. It provides capacity for about 10,242 dwelling units. The No Action Alternative meets the housing target of 9,378 dwellings, but it does not provide capacity for moderate density housing for households earning 80%-120% of the area median income. The No Action Alternative has capacity for 12,212 jobs, 2,834 above the 2020-2044 target of 9,378.
- **Action Alternative:** The Action Alternative consists of the 2024 Periodic Update of the Comprehensive Plan, including all Elements, the Tillicum Woodbrook Subarea Plan Update, and implementing development regulations including amendments to such, particularly middle housing and critical areas regulations amendments. The Action Alternative has capacity for 17,488 dwelling units, and can provide housing at all income levels for the 2020-2044 planning period. It has capacity for 15,238 jobs, which is 5,860 jobs above the 2020-2044 target.

2.1.1 Study Area

The Lakewood city limits, equaling approximately 17.06 square miles (about 10,920 acres), is the primary study area. See Exhibit 2-1. Particular subareas identified in the DSEIS include:

- **Tillicum-Woodbrook Subarea:** The Tillicum-Woodbrook Subarea Plan (TWSP) boundary is approximately 710 acres. Located in southeast Lakewood, the area is bounded by I-5 and the former Burlington Northern Santa Fe (BNSF) (now owned by Sound Transit) railroad to the southeast, Camp Murray to the southwest, the American Lake shoreline to the northwest, and private gated communities to the northeast.
- **Downtown:** The Downtown Plan was approved in 2018 to celebrate and invest in Downtown as the heart of Lakewood with places for shopping, gathering and celebrating, recreating, and living. The Downtown Subarea Plan includes the Towne Center, Colonial, and East Commercial Districts. The study area is over 300 acres.
- **Lakewood Station District:** The district is over 340 acres, and is the subject of a 2021 subarea plan that promotes a multi-modal commuter hub and amenity-rich, transit-oriented development node surrounding the Lakewood Station.

Exhibit 2-1. Lakewood Planning Area



Source: City of Lakewood, BERK 2024.

2.1.2 Objectives of the Proposal

SEPA requires a statement of project objectives highlighting the purpose of a proposal. The primary objective and need for this proposal is to complete the 2024 periodic update of the Lakewood Comprehensive Plan to meet Growth Management Act requirements, multicounty planning policies (MPPs) and the regional growth strategy in VISION 2050, and countywide planning policies (CPPs) and 2044 growth targets in the Pierce County Countywide Planning Policies. The periodic update is also designed to meet a vision statement developed by the City Council in 2021. (See text box below.)

Vision Statement

Lakewood is a thriving, urban, South Puget Sound City, possessing the core values of family, community, education, economic prosperity, and the equitable delivery of municipal services. We will advance these values by recognizing our past, taking action in the present, and pursuing a dynamic future.

The City Council's vision for Lakewood at its 30-Year Anniversary is a community:

- Inspired by its own sense of history and progress;
- Known for its safe and attractive neighborhoods, vibrant downtown, active arts and cultural communities;
- Sustained by robust economic growth and job creation;
- Recognized for the excellence of its public and private schools, and its community and technical colleges;
- Characterized by the beauty of its lakes, parks and natural environment;
- Acknowledged for excellence in the delivery of municipal services;
- That actively cultivates, embraces, and continually strives to create a more inclusive community with the equitable delivery of City services; and
- Supportive of Joint Base Lewis McChord (JBLM), Camp Murray, service members and their families.

Lakewood City Council, Adopted June 21, 2021

2.2 Public Outreach

The City of Lakewood conducted engagement with members of the public through:

- City and 2024 Comprehensive Plan Periodic Review websites, social media, Connections newsletter, electronic newsletter, and four citywide direct mailings;
- 2023 Citizen Committee provided recommendations to update Housing Element and Energy & Climate Change Element;
- 2024 Comprehensive Plan Periodic Review Steering Committee;
- Tillicum-Woodbrook Subarea Plan (TWSP) Committee;

- Five Open Houses; and,
- 20+ Planning Commission meetings and 10+ City Council meetings.

All meeting recordings and materials are available at https://cityoflakewood.us/24periodicreview/.

In addition, the City conducted a scoping period in 2023 to allow opportunities to comment on the scope of the SEIS. See Appendix A for the Scoping Notice. No comments were received at that time.

With the issuance of this DSEIS the City has offered a 30-day comment period. See the Fact Sheet for information on how to provide public comments.

2.3 Legal Framework

The **Growth Management Act (GMA)** was enacted in 1990 and amended substantially in 1991 and most years thereafter. The act is meant to guide faster growing counties and their cities to prepare Comprehensive Plans centered around a land use plan designed to meet growth targets for a 20-year period. The 20-year plan also addresses goals and policies regarding land use, housing, economic development, capital facilities, utilities, parks and recreation, and transportation. A new required element addresses climate change fully due by 2029 for central Puget Sound counties.

The GMA goals include the following 15 goals which guide the preparation of the comprehensive plan and implementing development regulations such as zoning and critical areas protection:

> *(1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.*
>
> *(2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.*
>
> *(3) Transportation. Encourage efficient multimodal transportation systems that will reduce greenhouse gas emissions and per capita vehicle miles traveled, and are based on regional priorities and coordinated with county and city comprehensive plans.*
>
> *(4) Housing. Plan for and accommodate housing affordable to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.*
>
> *(5) Economic development. Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.*
>
> *(6) Property rights. Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.*

(7) Permits. Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.

(8) Natural resource industries. Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forestlands and productive agricultural lands, and discourage incompatible uses.

(9) Open space and recreation. Retain open space and green space, enhance recreational opportunities, enhance fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.

(10) Environment. Protect and enhance the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

(11) Citizen participation and coordination. Encourage the involvement of citizens in the planning process, including the participation of vulnerable populations and overburdened communities, and ensure coordination between communities and jurisdictions to reconcile conflicts.

(12) Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

(13) Historic preservation. Identify and encourage the preservation of lands, sites, and structures, that have historical or archaeological significance.

(14) Climate change and resiliency. Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies under RCW 36.70A.210 and chapter 47.80 RCW adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.

(15) Shorelines of the state. For shorelines of the state, the goals and policies of the shoreline management act as set forth in RCW 90.58.020 shall be considered an element of the county's or city's comprehensive plan.

The most significant recent legislation addresses housing and climate change.

HB 1220 requires counties and cities to plan for projected housing needs by income band and removal of regulatory barriers. Each county and city must address policies, programs and zoning that may have a racially disparate or exclusionary effect and address patterns of disinvestment. Local governments must also identify displacement risk and establish policies to prevent displacement or reduce the hardships caused by displacement. HB 1220 requires accommodation of emergency shelters and permanent supportive targets and removal of regulatory barriers.

- This SEIS summarizes the City of Lakewood's evaluation of Racially Disparate Impacts and Affordable Housing Targets. It compares the No Action and Action Alternatives for their ability to remove barriers to housing affordable to all incomes.

HB 1110 increases middle housing in areas traditionally dedicated to single-family detached housing. Requires cities to: allow at least six of nine middle housing types in predominantly single-family zones; allow only administrative design review of objective standards; require between two and six middle housing units on each lot depending on city and county population thresholds; provide process and criteria for extensions of implementation; and the bill directs Commerce to provide technical assistance including rulemaking and certification authority. It also amends RCW 43.21C to exempt certain actions from environmental review. Permit review procures are to be similar to single-family detached residences. Parking standards vary based on unit numbers, proximity to transit, and lot sizes.

- This SEIS considers how Lakewood can accommodate middle housing with more units in proximity to transit, and less units per lot elsewhere. Middle housing would not be allowed on lots designated with critical areas or buffers per HB 1110. This SEIS provides an empirical evaluation of access and parking developed by Transpo and BERK. It considers existing street conditions in different parts of the city and where off-street parking requirements may be retained to address multimodal safety concerns.

HB 1337 requires the adoption or amendment of municipal zoning regulations to allow for at least two accessory dwelling units (ADUs) on all lots located in all zoning districts within an urban growth area that allows for single family homes. It also limits parking requirements based on distance from transit and lot size and removes barriers to separate sale and ownership of ADUs.

- Lakewood currently allows one ADU on each property accessory to any type of housing unit in all single family and multifamily residential districts and the Transit Oriented Commercial district. This SEIS identifies the proposed amendments to address HB 1337 with the Action Alternative.

HB 1181. This law requires counties and cities update their transportation, land use, parks, utilities, and capital facilities elements, as well as add a climate element that is comprised of a greenhouse gas emissions reduction sub-element (if within 11 more populous counties) and a resilience sub-element (all jurisdictions). The greenhouse gas emissions sub-element must include goals and policies to reduce emissions and vehicle miles traveled. The resilience sub-element must include goals and polices to improve climate preparedness, response and recovery efforts. Climate elements must maximize economic, environmental, and social co-benefits and prioritize environmental justice in order to avoid worsening environmental health disparities.

- The City has used two Commerce grants to conduct public engagement and develop goals and policies in an Energy and Climate Change Element adopted in 2023. The City has until 2029 to fully implement HB 1181.

2.4 EIS Alternatives

2.4.1 No Action Alternative

If the City Council takes no action adopting the 2024 Lakewood Comprehensive Plan, the City's 2023 Comprehensive Plan as adopted would remain in effect until a new plan is adopted. The No Action Alternative as addressed in this DSEIS is therefore the 2023 Comprehensive Plan. Features and land capacity are described below.

Current Comprehensive Plan

The No Action Alternative continues use of the current Comprehensive Plan last amended August 2023 and which had a horizon year of 2030/2035. Plan chapters include:

- **Introduction:** Describes the purpose and contents of the Comprehensive Plan, visioning, and plan themes including controlling sprawl, creating place, and protecting the environment.
- **Official Land Use Maps:** Describes Lakewood's land use designations, population densities and housing types, subarea planning boundaries, and the urban growth area abutting city limits.
- **Land Use:** Describes growth targets, and goals and policies for housing, commerce, neighborhood business and commercial corridors, industrial uses, JBLM and military planning, public and institutional lands, critical areas and shorelines, noise, and nonconforming uses. The element also addresses Downtown, Station District, and Tillicum subareas.
- **Economic Development:** Describes strategies, goals, and policies to transform Lakewood from a largely bedroom-community of the City of Tacoma and Joint Base Lewis-McChord (JBLM) into a diversified, full-service, and self-contained city.
- **Transportation:** Addresses goals and policies regarding streets and all modes of transportation, and provides a technical appendix.
- **Utilities:** Provides goals and policies addressing stormwater, sanitary sewer, water, electricity, communications, solid waste, and natural gas.
- **Public Services:** Address goals and policies for police, fire and emergency services, schools, and libraries.
- **Capital Facilities and Improvements:** The Capital Facilities Element contains the 20 year goals and policies for capital facilities and essential public facilities. A 6- year Plan/Program supports the Element in a separate document, and provides inventories of existing and proposed capital facilities, identifies both regular and special maintenance requirements, forecasts future needs for facilities for six years, identifies deficiencies in capital facilities and the actions necessary to address such deficiencies, and contains a six-year financing plan and budget.
- **Energy and Climate Change:** This recently adopted element describes potential climate change impacts, energy use and greenhouse gas emissions; describes potential climate change impacts, energy use and greenhouse gas emissions; defines goals for energy and climate change; identifies policies and implementing tasks to address energy and climate change needs; and provides a summary table identifying lead responsibilities for each implementing task.

- **Implementation:** Describes implementation strategies for each element.

Future Land Use Map and Zoning

Land Use Designations are used in conjunction with the Comprehensive Plan's written goals and policies, which reflect how the community wishes to implement its vision for the City, its goals and objectives for land use, and other related elements of the Plan. See Exhibit 2-2.

Descriptions of the City's land use zones and the allowed uses within each zone are included in Lakewood Municipal Code (LMC) Section 18A.10.120, LMC Title 18B (for the Downtown Subarea), and LMC Title 18C (for the Station District Subarea), all of which are available online at https://lakewood.municipal.codes/.

Exhibit 2-2. Land Use Designations and Zoning

Land Use Designation	Land Use Zoning District
Air Corridor 1 (AC1) Air Corridor 2 (AC2)	Clear Zone (CZ) Air Corridor 1 (AC1) Air Corridor 2 (AC2)
Arterial Corridor (ARC)	Arterial Residential/Commercial (ARC)
Corridor Commercial (CC)	Transit-Oriented Commercial (TOC) (within Lakewood Station District) Commercial 1 (C1) Commercial 2 (C2) Commercial 3 (C3)
Downtown	Central Business District (CBD)
High-Density Multifamily (HD)	Multifamily 2 (MF2) Multifamily 3 (MF3)
Industrial (I)	Industrial Business Park (IBP) Industrial 1 (I1) Industrial 2 (I2) Industrial 2 (I2)
Public and Semi-Public Institutional (PI)	Public Institutional (PI)
Multifamily (MF)	Multifamily 1 (MF1)
Military Lands (ML)	Military Lands (ML)
Mixed Residential (MR)	Mixed Residential 1 (MR1) Mixed Residential 2 (MR2)
Neighborhood Business District (NBD)	Neighborhood Commercial 1 (NC1) Neighborhood Commercial 2 (NC2)
Open Space and Recreation (OSR)	Open Space and Recreation 1 (OSR1) Open Space and Recreation 2 (OSR2)

Land Use Designation	Land Use Zoning District
Residential Estate (RE)	Residential 1 (R1) Residential 2 (R2)
Single-Family (SF)	Residential 3 (R3) Residential 4 (R4)

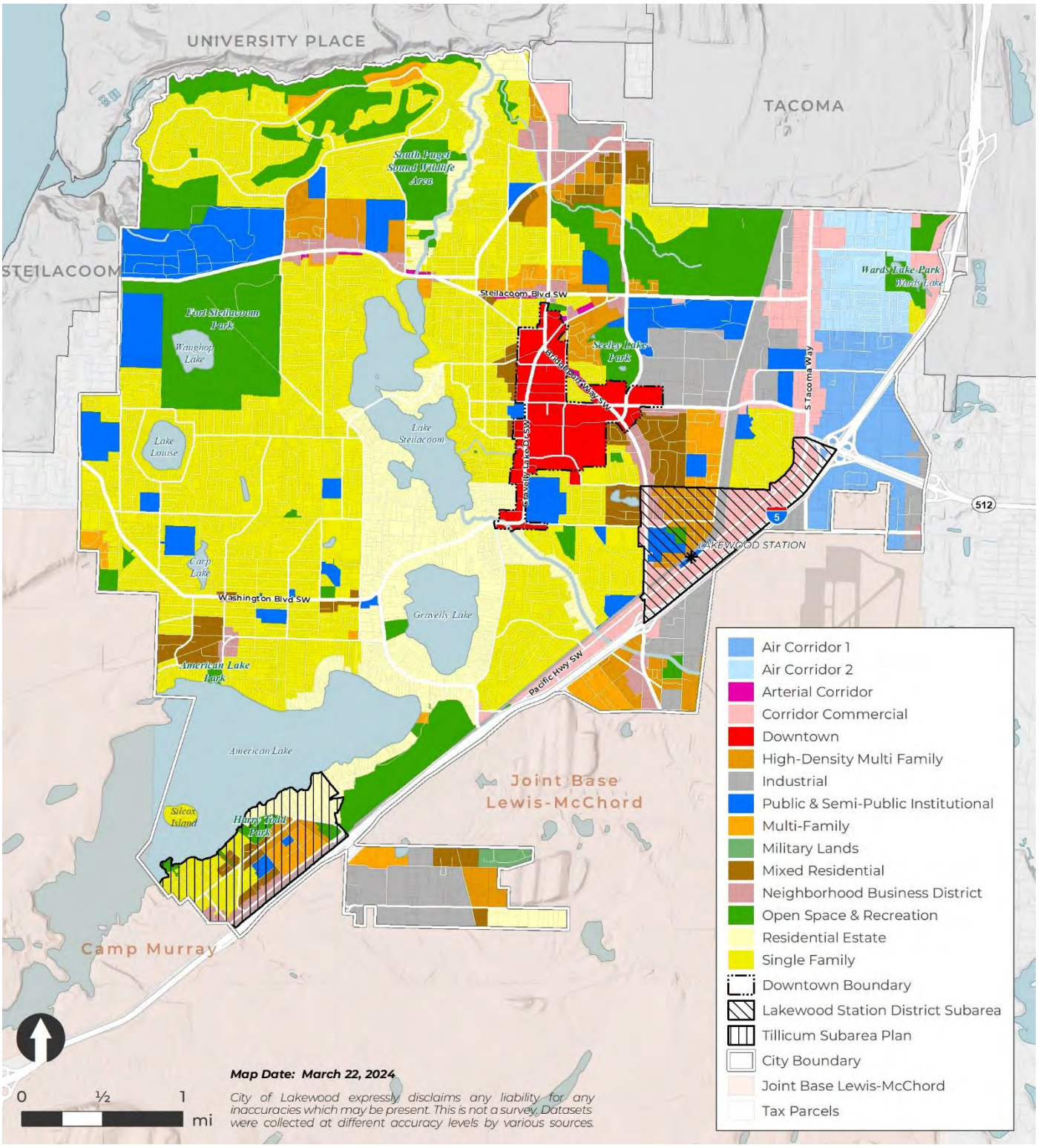
Source: City of Lakewood, BERK 2024.

The City has maintained a Future Land Use Map that identifies commercial and industrial uses to the east, multifamily uses to the north, east, and south, and single family uses largely to the west and north of Lakewood. See Exhibit 2-3. A Zoning Map implements the Future Land Use Map. See Exhibit 2-4.

Other Development Regulations

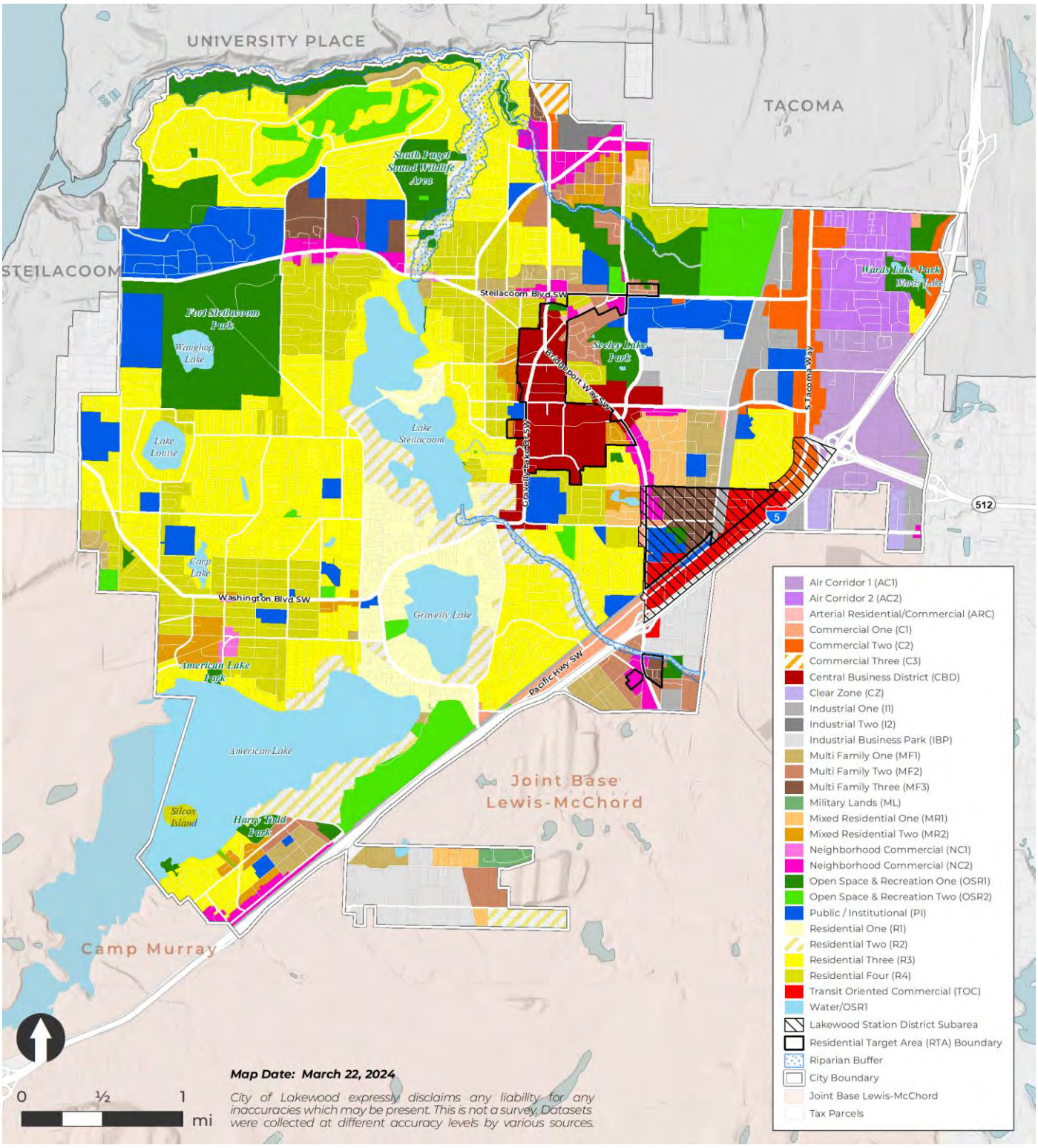
GMA requires that a city or county review its critical areas regulations and other development standards and update them. Additionally, HB 1220 requires identification and removal of barriers to affordable housing. No other development regulations would be amended under the No Action Alternative.

Exhibit 2-3. Future Land Use Map, 2023.



Source: City of Lakewood, 2023.

Exhibit 2-4. Zoning Map, 2023



Source: City of Lakewood, 2023.

Growth Targets and Capacity

The current Comprehensive Plan and implementing zoning provides capacity that meets the 2044 jobs target and its overall housing target but not the affordable housing targets required per HB 1220. See Exhibit 2-5 and Exhibit 2-6. See also Appendix B.

Exhibit 2-5. Growth Targets and Capacity – No Action Alternative

	2020	2044	Growth 2020-2044	No Action Growth Capacity
Population	63,612	86,792	23,180	23,966*
Jobs	29,872	39,735	9,863	12,212
Housing	26,999	36,377	9,378	10,242
Emergency Housing	8	582	574	N/A

Note: *Housing capacity x 2.34 persons per household (US Census 2018-2022)
Sources: (Pierce County, 2022-2023); US Census Quick Facts, 2023

Exhibit 2-6. Affordable Housing Targets and Capacity by No Action Alternative

Income	Projected Housing Need	Zoning Categories Serving Needs	Aggregated Housing Needs	Total Capacity	Capacity Surplus/Deficit
0-30% Non-PSH	1,212	Low-Rise Multifamily + ADUs	5,963	8,136	2,173
0-30% PSH	1,637				
>30-50%	1,739				
>50-80%	1,375				
>80-100%	592	Moderate Density	1,128	776	(352)
>100-120%	536				
>120%	2,287	Low Density	2,287	1,330	(957)
Total	**9,378**		**9,378**	**10,242**	**864**

Sources: (Pierce County, 2022-2023), BERK 2024.

Based on the results of the No Action Alternative affordable housing targets as well as the need to respond to HB 1110 and HB 1337, the Action Alternative provides more capacity and housing types in the moderate density and low density zoning categories.

While the No Action Alternative capacity meets targets, the studied growth is reflective of the current assumptions in the Comprehensive Plan and transportation model as amended by the Downtown Plan and Station District Subarea Plan:

- 2017 Comprehensive Plan
    - Households: 31,884
    - Jobs: 33,441
- Comprehensive Plan plus Downtown (2018) and Station Area (2021) Plans:
    - Households by 2035: 34,440
    - Jobs by 2035: 39,159

2.4.2 Action Alternative (Preferred)

Comprehensive Plan Periodic Update

Summary: The Action Alternative would fulfill new GMA requirements for the periodic update and recent state legislation. In addition, the Comprehensive Plan would meet the Puget Sound Regional Council's VISION 2050 multicounty planning policies (MPPs) and growth strategy, and Pierce County Countywide Planning Policies (CPPs.) That includes new Housing Element requirements, middle housing and accessory dwelling unit (ADU) legislation, and regional policies regarding housing, equity, climate, employment, and transportation as well as environmental justice and airport land use compatible land uses. All elements would be updated. Given the focus on housing legislation, the Land Use and Housing Elements would receive the most intensive updates. Additionally, the Tillicum-Woodbrook Subarea Plan would be updated and expanded and referenced in a specific Subarea Plan Element, along with the Downtown Subarea Plan and Lakewood Station District Subarea Plan.

Key Concepts: The Preferred Alternative is the adoption of a significantly reorganized Lakewood Comprehensive Plan that reflects:

- Land development capacity consistent with Lakewood's 2044 growth targets:
    - 9,378 new housing units;
    - 23,180 in new population; and
    - 9,863 new jobs.
- Planning for sufficient housing land capacity for all economic segments of the population (moderate, low, very low and extremely low income, as well as emergency housing and permanent supportive housing);
- Making adequate provisions for housing for existing and projected needs for all economic segments of the community, including documenting programs and actions needed to achieve housing availability;

- Providing for moderate density housing options, including but not limited to duplexes, triplexes and townhomes;
- updated planning and zoning to allow the densification of housing in historically single family areas;
- Identifying racially disparate impacts, displacement and exclusion in housing policies and regulations, and beginning to undo those impacts; and
- Identifying areas at higher risk of displacement and establishing anti-displacement policies;
- updated energy and climate change related policies;
- coordinated planning with utility providers;
- planned civilian-military compatibility;
- expanded geographic boundaries for the 2024 Tillicum-Woodbrook Subarea Plan to include Woodbrook;
- consistency with the PSRC Centers Framework Policy as it applies to the Lakewood Regional Urban Growth Center; and
- optional elements (e.g., the Downtown, Station District, and Tillicum-Woodbrook Subarea Plans) and Background Reports in Appendices.

Element Reorganization – Periodic Review

1	Introduction
2	Land Use and Maps
3	Capital Facilities & Essential Public Facilities
4	Economic Development
5	Energy and Climate Change
6	Housing
7	Military Compatibility
8	Natural Environment
9	Parks, Recreation, and Open Space
10	Public Services
11	Subarea Plans
12	Transportation
13	Urban Design and Community Character
14	Utilities
15	Implementation

Land Use Plan and Zoning

The Preferred Alternative proposes specific land uses and planning policies consistent with the GMA as well as related recent state legislation and regional policies focused on planning for housing affordable to all. The Preferred Alternative is consistent with the Central Puget Sound multicounty planning policies (MPPs) and Regional Growth Strategy, as adopted in the Puget Sound Regional Council's (PSRC's)

VISION 2050, and the PSRC-adopted Regional Transportation Plan. The Plan is also consistent with the Pierce County Countywide Planning Policies (CPPs.)

A major consideration in the update is the densification of housing in historically single-family areas per state legislation (HB 1110 and 1337) and the needs to address housing ownership and rental housing opportunities for all incomes (HB 1220). See Exhibit 2-7.

Exhibit 2-7. Housing Types Allowed in Historically Single-Family Areas

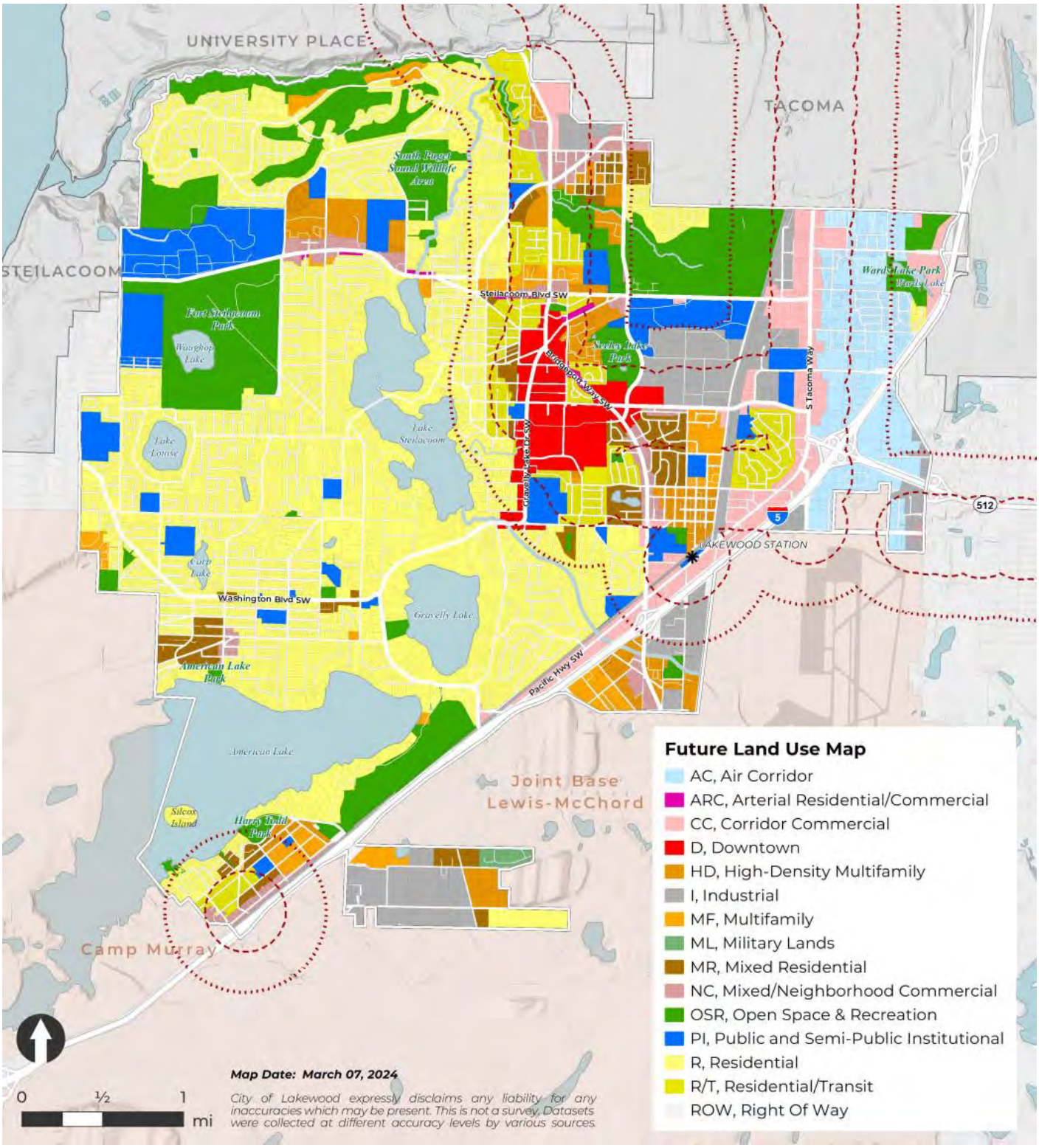
Housing Unit Types	Variations of Unit Types	Minimum units per lot?
Middle Housing "Buildings that contain two or more attached, stacked, or clustered homes including duplexes, triplexes, fourplexes, fiveplexes, sixplexes, townhouses, stacked flats, courtyard apartments, and cottage housing" in single family areas.	Middle Housing Basic Rule	2 units/lot in SF areas (R1-R4 zones unless density already higher than 2 units per lot.)
	Middle Housing w/in ¼ Mile from Major Transit Stop	4 units/lot in SF areas
	Middle Housing if 1+ unit affordable	4 units/lot wherever base rule applies in SF areas
	Middle Housing in non-sewered areas	2 units/lot in SF areas until demonstrated that a sewer system will serve the development at the time of construction.
Accessory Dwelling Units (ADUs) 2 attached accessory dwelling units (ADUs) such as unit in a basement, attic, or garage. 1 attached ADU and 1 detached ADU, or 2 detached ADUs that may be comprised of either 1 or 2 detached structures. A conversion of an existing structure, such as a detached garage.	At least 2 ADUs on all lots that meet the minimum lot size in each zone that allows for single-family homes. (R1-R4, MR1, MR2, and ARC zones) City may limit to 2 ADUs, in addition to the principal unit, on a residential lot of 2,000 square feet or less.	
	ADUs located in non-sewered areas, not connected to public sewer, or in areas of 1 dua or less that are wetlands, fish and wildlife habitats, flood plains, or geologically hazardous areas may be prohibited.	

Source: Summary of HB 1110 and 1337.

The City of Lakewood will be adopting new zoning regulations regarding how many units can be built on a single residential lot in 2024 in its R1, R2, R3, R4, and ARC zones. The new rules will go into effect early 2025. Lakewood must allow at least 2 middle housing units per lot in single family areas, and 4 middle housing units per lot in single family areas within 1/4 mile of major transit stops. Lakewood must also allow up to 2 ADUs in single family areas.

The City is anticipating a new land use designation Residential/Transit and underlying zones also would be R2/Transit, R3/Transit, and R4/Transit. See Exhibit 2-8.

Exhibit 2-8. Future Land Use Plan and Transit Proximity



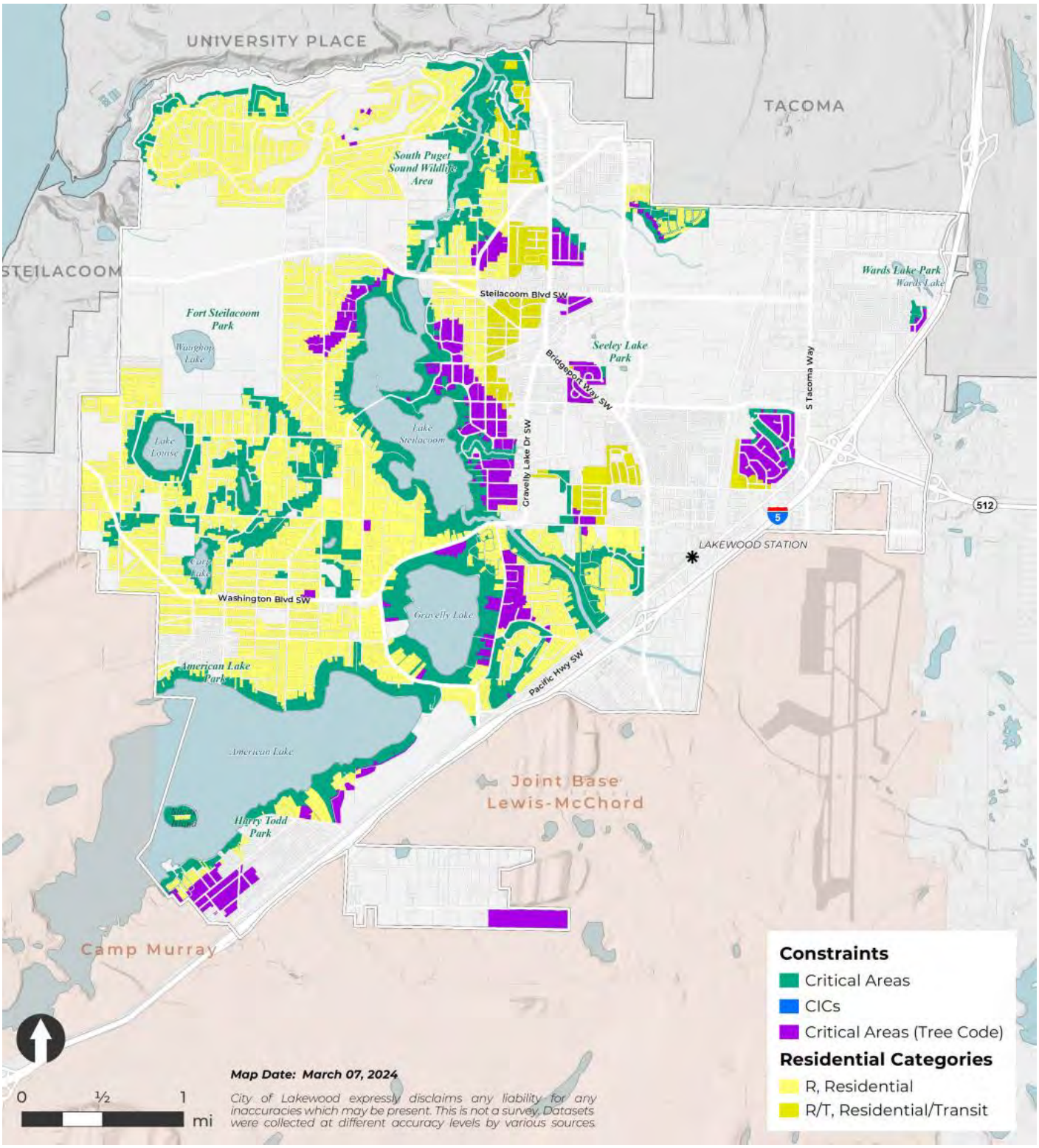
Source: City of Lakewood, 2024.

In the areas eligible for middle housing, the City must allow six of the nine identified types of middle housing: duplexes, triplexes, fourplexes, fiveplexes, sixplexes, townhouses, stacked flats, courtyard apartments, and cottage housing.

The City may allow 25% of eligible single-family lots to be excused from middle housing allowances such as lots designated with critical areas or buffers, and any areas subject to sea level rise/flooding, wildfires, or geological hazards. See Exhibit 2-9. The lots that may be excluded from middle housing may not be those with covenants that excluded racial minorities from owning properties.

The City is adjusting its development regulations including adjusting uses like middle housing, and density standards to help meet housing targets at all affordability levels. For example, the City may adjust the maximum density of the TOC (Transit-Oriented Commercial) zone from 54 units per acre up to 80 units per acre.

Exhibit 2-9. Lots with Critical Areas



CIC = Common Interest Communities, RCW 64.90.010(10)
Source: City of Lakewood, 2024.

Subarea Plan Updates and Evaluation

Consistency amendments would be needed regarding some of the zones inside the Downtown and Station District to address middle housing, ADUs and emergency and permanent supportive housing:

Downtown

- Emergency and permanent supportive housing is allowed in Downtown in LMC 18A.40.120, Special Needs Housing. While Group Homes 4 and 5 are prohibited in the Downtown regulations but LMC 18A.40.120 indicates Group Home 5 (for secure community transition facilities) is allowed by Conditional Use Permit in the CBD zone. This difference should be addressed in housekeeping code amendments.
- The CBD zone does not allow single-family dwellings, and middle housing or ADUs are not required in HB 1110. However, per the Downtown Plan and implementing regulations, the Low-Impact Mixed-Use Roads District allows duplex and triplex homes. The City could review and amend regulations regarding the as needed in the Low-Impact Mixed-Use Roads District to address middle housing and ADUs.
- The Downtown subarea boundary and CBD zone abuts a row of single family lots and the Clover Park High School. A rezone was completed in 2023 to extend the CBD zone to abut the high school. This would allow for a variety of housing types in that area. The City will amend the Downtown Planned Action Ordinance to add the parcels as they are in the City's multifamily tax exemption area, and property owners intend to develop housing similar to that identified for the Downtown Plan. The inclusion of the properties make for a logical boundary and cohesive land use pattern.

Lakewood Station District

- LMC 18A.40.120, Special Needs Housing: Group homes types 4 and 5 are prohibited in LMC 18C.200.220 in the C1 zone but are allowed by Conditional Use Permit in LMC 18A.40.120. Amendments to reconcile the conflict should be addressed.
- The City could consider adding allowances for ADUs in zones in the Station District that allow duplex, triplex, or townhome units.

Tillicum-Woodbrook Subarea Plan

The Tillicum Neighborhood Plan (TNP) was originally adopted in 2011. In 2022, the City of Lakewood produced a status report of the Tillicum Neighborhood Plan's implementation and adopted an Addendum to the TNP explaining progress to date to make the Plan's vision a reality. While much has been accomplished to realize the visions and priorities discussed in the original Tillicum Neighborhood Plan, many of the plan's Action Items are not yet complete.

In 2011, the Tillicum Neighborhood was identified as an activity node and focal point for businesses, Maple Street as a safe connector street, installation of pedestrian infrastructure, mixed uses, gateway to the American Lake waterfront, and market rate and affordable housing.

In September 2022, the City announced that the Tillicum Neighborhood Plan would be replaced with a Tillicum-Woodbrook Subarea Plan (TWSP) as part of the 2024 Comprehensive Plan Periodic Review (24CPPR) process. While the 2011 Plan boundaries were reserved to the Tillicum neighborhood north of I-5, the 2024 update incorporated the Woodbrook area south of I-5 due to the historical community connection between the two areas. Goals, policies, and actions are being developed based on the engagement efforts with the communities and evaluation of existing conditions.

Six goals of the proposed subarea plans and actions are shared below.

- Goal #1: Celebrate the Tillicum-Woodbrook Community Center, Tillicum Elementary School, Harry Todd Park, and Pierce County Library branch as the heart of the Tillicum-Woodbrook Subarea.
- Goal #2: Increase visibility of Tillicum's and Woodbrook's diverse community by investing in leadership development and the neighborhood's ability to advocate for community needs.
- Goal #3: Diversify Tillicum's and Woodbrook's housing options to support current residents in Lakewood.
- Goal #4: Connect Tillicum and Woodbrook to Lakewood and Pierce County through a multi-modal transportation network to increase access to employment and social activities.
- Goal #5: Increase economic development opportunities within Tillicum and Woodbrook.
- Goal #6: Protect Tillicum and Woodbrook's natural environment and increase adaptability and resiliency for Tillicum and Woodbrook as communities significantly impacted by air quality and climate change.

Housing and Job Capacity

Based on the proposed changes to the Future Land Use Plan and Zoning to allow more "middle housing" as defined in the GMA and accessory dwelling units (ADUs), there would be an increased capacity for housing. Also, the proposed changes would allow the City to meet its affordable housing targets for all economic segments. See Exhibit 2-10 and Exhibit 2-11.

Exhibit 2-10. Growth Targets and Capacity – Action Alternative

	2020	2044	Growth 2020-2044	Action Alternative Growth Capacity
Population	63,612	86,792	23,180	40,922*
Jobs	29,872	39,735	9,863	15,238
Housing	26,999	36,377	9,378	17,488
Emergency Housing	8	582	574	N/A**

Note: *Housing capacity x 2.34 persons per household (US Census 2018-2022)
** Capacity is not required if a jurisdiction allows emergency housing where hotels are allowed (met in Title 18.A in Lakewood's Municipal Code) or in a majority of zones within one-mile of transit per HB 1220 Sections 3 and 4, and if the jurisdiction has no regulations that limit the occupancy, spacing or intensity of emergency housing. However, local governments may set restrictions in relation to health, safety and fire codes, so long as the restrictions do not prevent the siting of a sufficient number of emergency housing units to meet the allocated need. Lakewood sets a 1,000 foot separation currently but proposed code changes would limit the spacing to 880 feet per RCWs 9.94A.030 and 9.94A.703, which create community protection zones of 880 feet from incompatible uses that have a clear connection to public safety. (See: https://deptofcommerce.app.box.com/s/1d9d5l7g509r389f0mjpowh8isjpirlh).
Sources: (Pierce County, 2022-2023); US Census Quick Facts, 2023

Exhibit 2-11. Affordable Housing Targets and Capacity by Action Alternative

Income	Projected Housing Need	Zoning Categories Serving Needs	Aggregated Housing Needs	Total Capacity	Capacity Surplus/Deficit
0-30% Non-PSH	1,212	Low-Rise Multifamily + ADUs	5,963	9,064	3,101
0-30% PSH	1,637				
>30-50%	1,739				
>50-80%	1,375				
>80-100%	592	Moderate Density	1,128	2,969	1,841
>100-120%	536				
>120%	2,287	Low Density	2,287	5,455	3,168
Total	**9,378**		**9,378**	**17,488**	**8,110**

Sources: BERK 2024.

While the Action Alternative has housing capacity above the 2044 targets, for the purposes of this DSEIS, the 2044 **targets are used to evaluate the transportation and other needs since the targets encompass a 20-year period** while capacity represents a reasonable build out under proposed regulations that may take a longer time than 20-years.

The regulations are permissive towards more housing types, but property owners would determine their interest in providing such units on their properties:

- Homeowners who wish to build ADUs or middle housing units on their own property will have more opportunities to do so.
- Homeowners who do not want to build more units on their property are not required to build units.

Other Development Regulations

Critical Areas Regulations

An ongoing requirement of the GMA is for local jurisdictions to periodically review and evaluate their adopted critical areas policies and regulations. The City commissioned a gap analysis of critical area regulations that are contained in Title 14. The City proposes targeted amendments to address the gaps as part of the Periodic Update. See Exhibit 2-12.

Exhibit 2-12. Critical Areas Ordinance Gap Analysis

Provisions	Summary of Changes
General Provisions	Code sections 14.142.010 through 14.142.200 contain general provisions that are applicable to all types of critical areas. While overall the general provisions contained in these sections are strong, some refinements could be made to further align these sections with the GMA and BAS.
Geologically Hazardous Areas	Geologically hazardous areas addressed in the Code include erosion and landslide hazard areas and seismic hazard areas. The Code does not designate mine, volcanic or tsunami hazard areas as geologically hazardous areas. Definitions and classification criteria and mapping are recommended for update.
Critical Aquifer Recharge Areas	The current regulations appear generally consistent with the CARA guidance provided by the Department of Ecology. The following subsections are suggestions for improving the level of aquifer protection and general clarification of regulations to implement the plan including adding maps and creating an inventory of potential contaminant sources.

Provisions	Summary of Changes
Fish and Wildlife Habitat Areas	The City's habitat conservation areas regulations require some modifications to align with BAS and to clarify applicability and facilitate ease of use. Update identification and mapping of fish and wildlife habitat conservation areas. Updating buffer standards.
Flood Hazard Areas	Existing regulations could be enhanced by providing specific critical area special study and/or habitat assessment requirements

Source: DCG/Watershed, 2023.

Parking Regulations

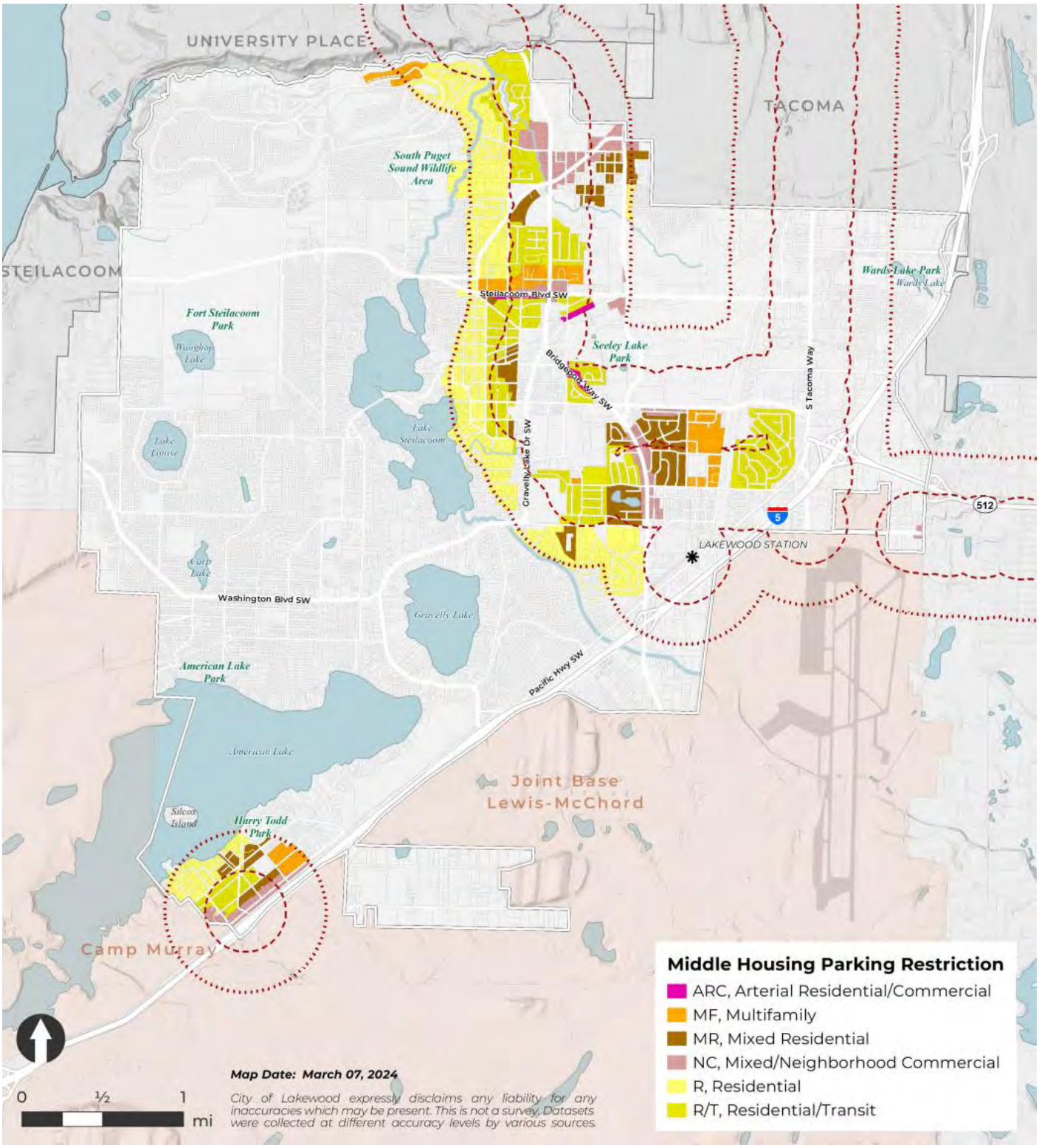
Except on streets where multimodal safety is a concern, the Action Alternative would amend parking as follows:

- No off-street parking is required for accessory dwelling units, multifamily housing or housing for seniors or persons with disabilities within ½ mile walking distance of a major transit stop. See Exhibit 2-13.
- No more than 0.5 parking space is required for duplex middle housing, or zero if in a half mile of frequent transit service.
- No more than two off-street parking space is required for middle housing of three to six units.

This SEIS provides an empirical evaluation of access and parking developed by Transpo and BERK. It considers existing street conditions in different parts of the city and where off-street parking requirements may be retained to address multimodal safety concerns.

For middle housing types, housing units that are within one-half (1/2) mile of a major transit stop, defined as a stop for commuter rail or bus rapid transit, are not required to provide on-site parking if adequate provision of on-street parking facilities is available as determined by the Director.

Exhibit 2-13. Applicable Parking Reductions in Half Mile of Transit



Source: City of Lakewood, 2024.

2.4.3 Comparison of Alternatives

This SEIS evaluates the No Action and Action Alternatives, compared in Exhibit 2-14 below.

Exhibit 2-14. Comparison of Alternatives

Component	No Action Alternative	Action Alternative
Comprehensive Plan Elements	Current Plan is retained (2023).	Plan is updated to meet recent legislation (HB 1220, HB 1110, HB 1337).
General Concept	- Incorporates VISION 2040 Policies - Includes zoning requirements for special needs housing (PSH, RRH, TH, Emergency Shelters) - Housing Element does not fully reflect HB 1220 zoning and policy requirements as summarized for Preferred Alternative - Does not reflect HB 1110 or HB 1337 requirements to allow middle housing and ADU housing in single family areas - Does not incorporate information from analysis of impacts to residential areas parking due to HB 1110 and HB 1337 densification requirements - Does not incorporate analysis of Regional Urban Growth Center per PSRC Centers Framework - Does not incorporate initial compliance policies with HB 1181 (2023 Climate Change & Resiliency Law)	Incorporates VISION 2050 Policies - Includes zoning requirements for special needs housing (PSH, RRH, TH, Emergency Shelters) - Housing Element fully reflects “HB 1220” (2021 law) zoning and policy requirements: - Planning for sufficient land capacity for housing needs, including all economic segments of the population (moderate, low, very low and extremely low income, as well as emergency housing and permanent supportive housing); - Providing for moderate density housing options within Urban Growth Areas (UGAs), including but not limited to duplexes, triplexes and townhomes; - Making adequate provisions for housing for existing and projected needs for all economic segments of the community, including documenting programs and actions needed to achieve housing availability; and - Identifying racially disparate impacts, displacement and exclusion in housing policies and regulations, and beginning to undo those impacts; and identifying areas at higher risk of displacement and establishing anti-displacement policies.

Component	No Action Alternative	Action Alternative
		- Reflects HB 1110 and HB 1337, 2023 laws requiring allowance of middle housing and ADU housing in single family areas - Incorporates information from analysis of impacts to residential areas parking due to HB 1110 and HB 1337 densification requirements - Incorporates analysis of Regional Urban Growth Center per PSRC Centers Framework - Incorporates initial compliance policies with HB 1181 (2023 Climate Change & Resiliency Law)
Key Features	- Maintains current residential zoning scheme and policies that pre-date HB 1220, HB 1110, and HB 1337 - Includes 2021 Energy & Climate Change Chapter that pre-dates HB 1181 - Includes 2011 Tillicum Neighborhood Plan and 2022 Addendum - Retains past data and analyses about the Regional Urban Growth Center that was drafted prior to the adoption of the PSRC 2018 Centers Framework - Retains transportation level of service (LOS) focused on road congestion - Maintains content organization used since first adopted Comprehensive Plan. Contains outdated and obsolete narrative and policy language. No clear references to original or more recent Background Reports.	- Updated residential zoning scheme and policies in response to HB 1220, HB 1110, and HB 1337 - Updated Energy & Climate Change Chapter including initial compliance with HB 1181 - 2024 Tillicum-Woodbrook Subarea Plan - Adds multimodal LOS and plans. - Verified data regarding Lakewood Regional Urban Growth Center in relation to pending PSRC Center Review - Reorganized Plan content to better reflect GMA organization and requirements. Streamlined Plan language (i.e., goals and policies), Optional Elements (e.g., subarea plans), expanded technical and detailed Appendices, and collection of Background Reports.

Component	No Action Alternative	Action Alternative
Future Land Use Map and Zoning	Current Future Land Use Plan and Zoning Map is retained.	Future Land Use Plan and Zoning Map and text are amended to allow for middle housing and ADUs. The CBD zone would be extended between the current boundary and the Clover Park High School. Consistency amendments are proposed to reconcile inconsistencies between use allowances for group homes in the Downtown/CBD and other Station District zones.
Other Development Regulations	No changes to critical areas regulations. No changes to parking regulations.	Update critical areas regulations to address gap analysis. Parking regulations would be modified to reduce parking in proximity to high frequency transit or major transit stops.
Growth Targets and Capacity	Meetings population, housing, and job targets on the whole. Does not meet housing targets by affordability band. Code allows emergency housing where hotels are allowed. Spacing requirements and other standards are applied.	Meets all growth targets including targets by affordability band. Code allows emergency housing where hotels are allowed. Spacing requirements and other standards are applied but adjusted based on health and safety standards per HB 1220, Sections 2 and 3.

Source: City of Lakewood, 2024; BERK Consulting, 2024.

2.4.4 Future Alternatives

As a result of this DSEIS and public engagement, the City may adjust the Action Alternative. A revised action alternative may be considered that is similar to or in the range of the studied alternatives. The Final SEIS will respond to public comments and identify and evaluate changes to the Action Alternative.

2.5 SEPA Process

2.5.1 Non-project EIS

The purpose of this DSEIS is to assist the public and local government decision makers in considering future growth and land use patterns as well as goals, policies, and development regulations as part of

the Lakewood Comprehensive Plan Periodic Update. These broad decisions will provide direction and support for more specific actions by the City, such as capital improvements.

This DSEIS provides a qualitative and quantitative analysis of environmental impacts as appropriate to the general nature of a comprehensive plan update. The adoption of comprehensive plans or other long-range planning approvals is classified by SEPA as a non-project (i.e., programmatic) action. A non-project action is defined as an action that is broader than a single site-specific project and involves decisions on policies, plans, and programs. The DSEIS discusses impacts and alternatives appropriate to the scope of the non-project proposal and to the level of planning for the proposal (Washington Administrative Code [WAC] 197-11-442).

2.5.2 Integrated SEPA/GMA Process

Preparation of this DSEIS took place concurrently with development of the 2024 Comprehensive Plan, as is consistent with the purpose of SEPA/GMA integration (see Washington Administrative Code (WAC) 197-11-210 through 197-11-235.) The concurrent development was intended to ensure that environmental analyses under SEPA would be an integral part of the planning and decision-making process under GMA. As a result, many goals, policies, and other provisions serve as SEPA mitigation measures in this SEIS, and where the SEIS has found potential mitigation measures they are likewise opportunities to address policy and code updates.

One of the purposes of SEPA is to incorporate public input into environmental review. This objective was accomplished through a public scoping period that took place during February and March, 2023. The scoping allowed agencies, affected tribes, and members of the public to comment on the scope of analysis. This DSEIS was released in June 2024 for review and comment by agencies, affected tribes, and members of the public. Comments on the DSEIS will be published along with the response to each in the Final SEIS (FSEIS).

2.5.3 Prior SEPA Documents

SEPA allows use of prior environmental documents (WAC 197-11-600). The City may rely on part or all prior documents and update past information through an addendum (if minor differences from prior EIS) or through a SEIS (address new alternatives and new information). The City determined that a SEIS was appropriate. Scoping is not required for a SEIS. However, this DSEIS is subject to a 30-day comment period.

This DSEIS supplements the following previously issued SEPA documents:

- City of Lakewood, Comprehensive Plan, Final EIS, June 2000
- City of Lakewood, 2015 Comprehensive Plan Amendments and Update, Determination of Non-Significance and associated SEPA Checklist, July 30, 2015
- City of Lakewood, Downtown Lakewood Plan and Planned Action Final EIS, July 20, 2018, and associated Addenda, September 10, 2018 and September 26, 2018
- City of Lakewood, Lakewood Station District Subarea Plan, Form-Based Code, and Planned Action, Revised Determination of Non-Significance, November 12, 2020, March 30, 2021, and April 29, 2021

- Puget Sound Regional Council, VISION 2050 Final SEIS, March 2020

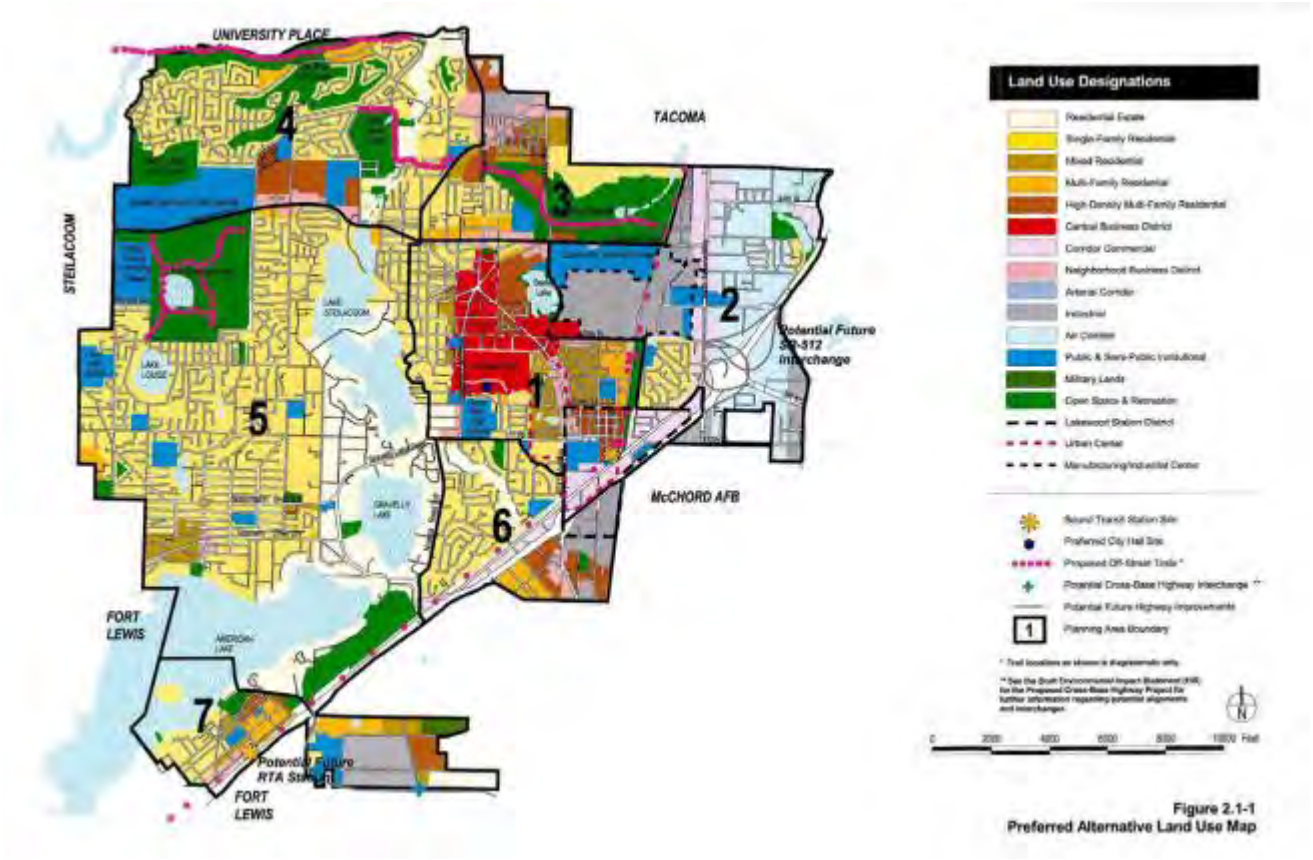
The City has identified and adopted these documents as being appropriate for this proposal after independent review, and they will accompany the proposal to the decision makers. This DSEIS builds on these documents and meets the City's environmental review needs for the current proposal.

The 2000 EIS set forth much of the current Future Land Use Plan in Lakewood. See Exhibit 2-15.

The Year 2000 EIS planned for growth greater than that achieved as of 2020, though less than that planned for Year 2044. This DSEIS for the 2024 Comprehensive Plan Periodic Update extends the environmental analysis to 2044.

- 1997: 55,466
- 2000: 58,293
- Projected 20-Year population in Year 2000 EIS: net 17,500 from 1997 = 72,966
- Year 2020 Population US Census: 63,612.
- Year 2044 Population: 86,792

Exhibit 2-15. Year 2000 Lakewood Comprehensive Plan EIS, Preferred Land Use Plan



Note: Year 2000 Preferred Alternative provides development capacity for an estimated 17,500 new residents and 12,275 new jobs by the year 2017.

2.6 Benefits and Disadvantages of Delaying the Proposed Action

Delay of the proposal would retain current policies, zoning, and parking standards. Retention of the No Action Alternative would result in slightly lower transportation congestion.

Delaying the Proposed Action would also delay the improved housing variety and affordable housing under the Action Alternative. It would delay the slightly higher transportation congestion compared to the 2015 Comprehensive Plan and No Action transportation evaluation conducted in 2018 with the Downtown Planned Action. Delay of the Action Alternative would also delay the improved critical areas regulations and associated improved conservation of critical areas.

3 Environment, Impacts & Mitigation Measures

3.1 Natural Environment

3.1.1 Critical Areas

Affected Environment

Under the GMA, Lakewood is required to review its critical area regulations when adopting its comprehensive plan. The primary purpose of this subsection is to evaluate consistency between existing goals and objectives governing critical areas and each of the two alternatives under consideration. An additional function is to compare the impact of each alternative on resource lands.

Critical areas in the City of Lakewood include wetlands, aquifer recharge areas, fish and wildlife habitat, flood hazard areas, geologically hazardous areas. Creeks, streams, and lakes are part of fish and wildlife habitat. Chambers Creek and the many lakes in Lakewood are shorelines of the state.

- Wetlands are areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. They include swamps, marshes, bogs, and similar areas.
- Aquifer recharge areas are areas where the prevailing geologic conditions allow infiltration rates which create a high potential for contamination of groundwater resources or contribute significantly to the replenishment of groundwater with potential to be used for potable water.
- Fish and wildlife habitat areas are habitats considered to be critically important to the maintenance of fish, wildlife, and plant species, including: areas with which endangered, threatened, and sensitive species have a primary association; habitats and species of local importance lakes, ponds, stream, rivers, state natural area preserves and natural resource conservation areas. Priority Oregon White Oak Woodland are a habitat and species of local importance (LMC 14A.154.020.B.1).
- Flood hazard areas are lands located in floodplains which are subject to a one percent or greater chance of flooding in any given year.

- Geologically hazardous areas are areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, may pose a risk to the siting commercial, residential, or industrial development consistent with public health or safety concerns.

Each of these is described in the Lakewood Municipal Code Title 14. Wetlands, flood-prone areas, lakes, shorelines, and streams are illustrated in exhibits associated with each critical area below.

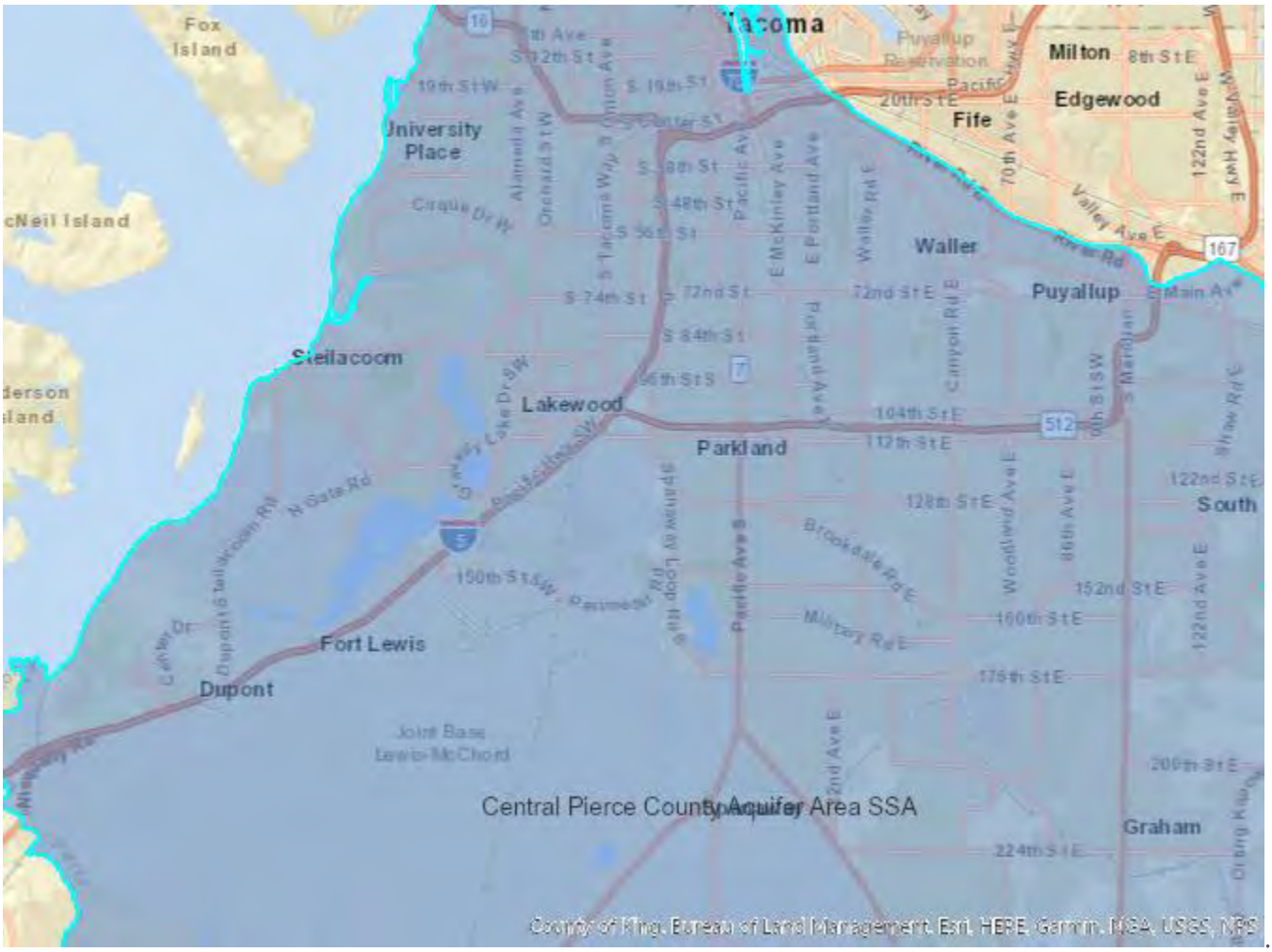
Wetlands

Lakewood has over 155 acres of wetlands in addition to seven lakes totaling nearly two miles of water area. (City of Lakewood, 2023). The largest non-lacustrine wetland is the 140-acre Flett Creek floodplain in northeast Lakewood, extending into Tacoma. The second largest wetland is the 38.7-acre Crawford Marsh comprising much of Seeley Lake Park. Both contain peatbogs and waterfowl and animal habitat. Other wetlands are scattered throughout Lakewood on both public and private property along stream corridors and in isolated depressions. (US Fish and Wildlife Service, Accessed 2024)

Aquifer Recharge Areas

Lakewood and much of the county is in the Central Pierce County Sole Source Aquifer. See Exhibit 3-1.

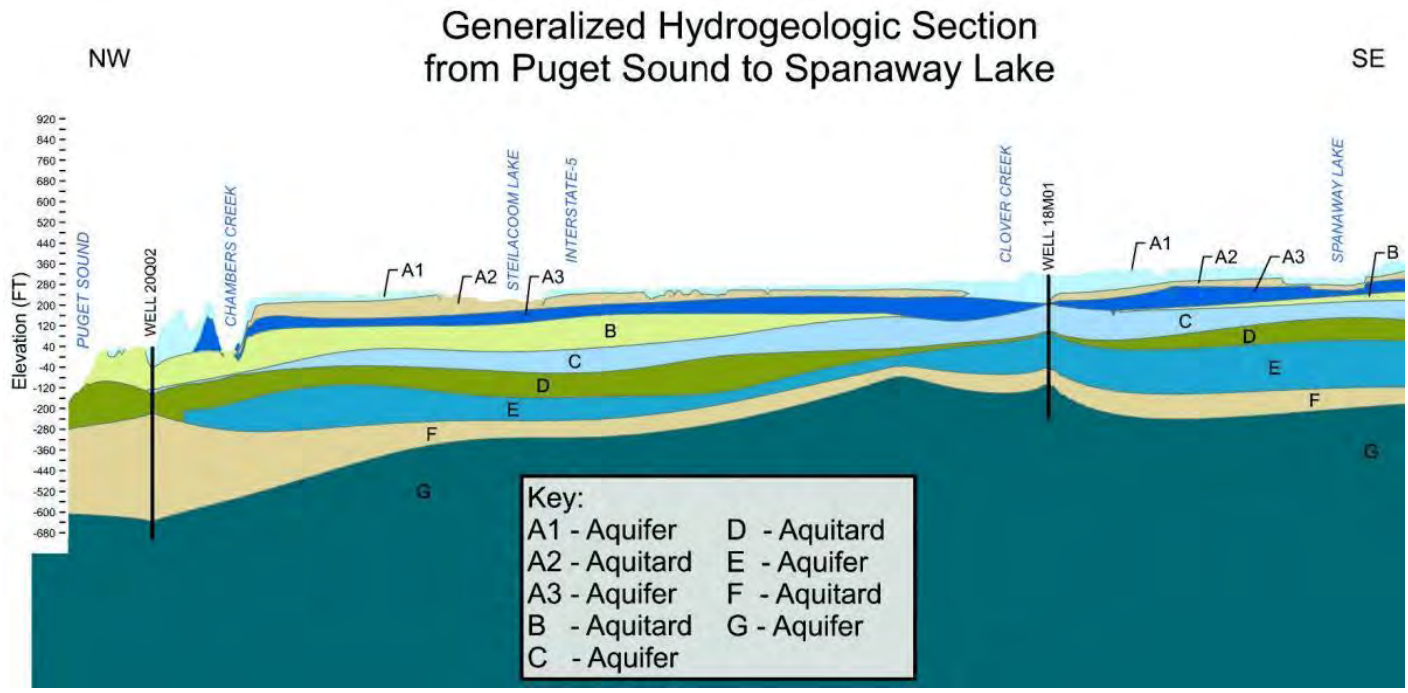
Exhibit 3-1. Central Pierce County Sole Source Aquifer Area Lakewood Vicinity



Source: US EPA, 2024.

The Lakewood Water District's (LWD's) sole source of water is from underground aquifers, water-bearing strata of permeable rock, sand, or gravel. Most of Lakewood is built above a series of four underground aquifer systems that supply the LWD with well water, serving Lakewood with water for domestic and industrial uses. See Exhibit 3-2.

Exhibit 3-2. Aquifers from Puget Sound to Spanaway Lake



Source: (Lakewood Water District, 2024)

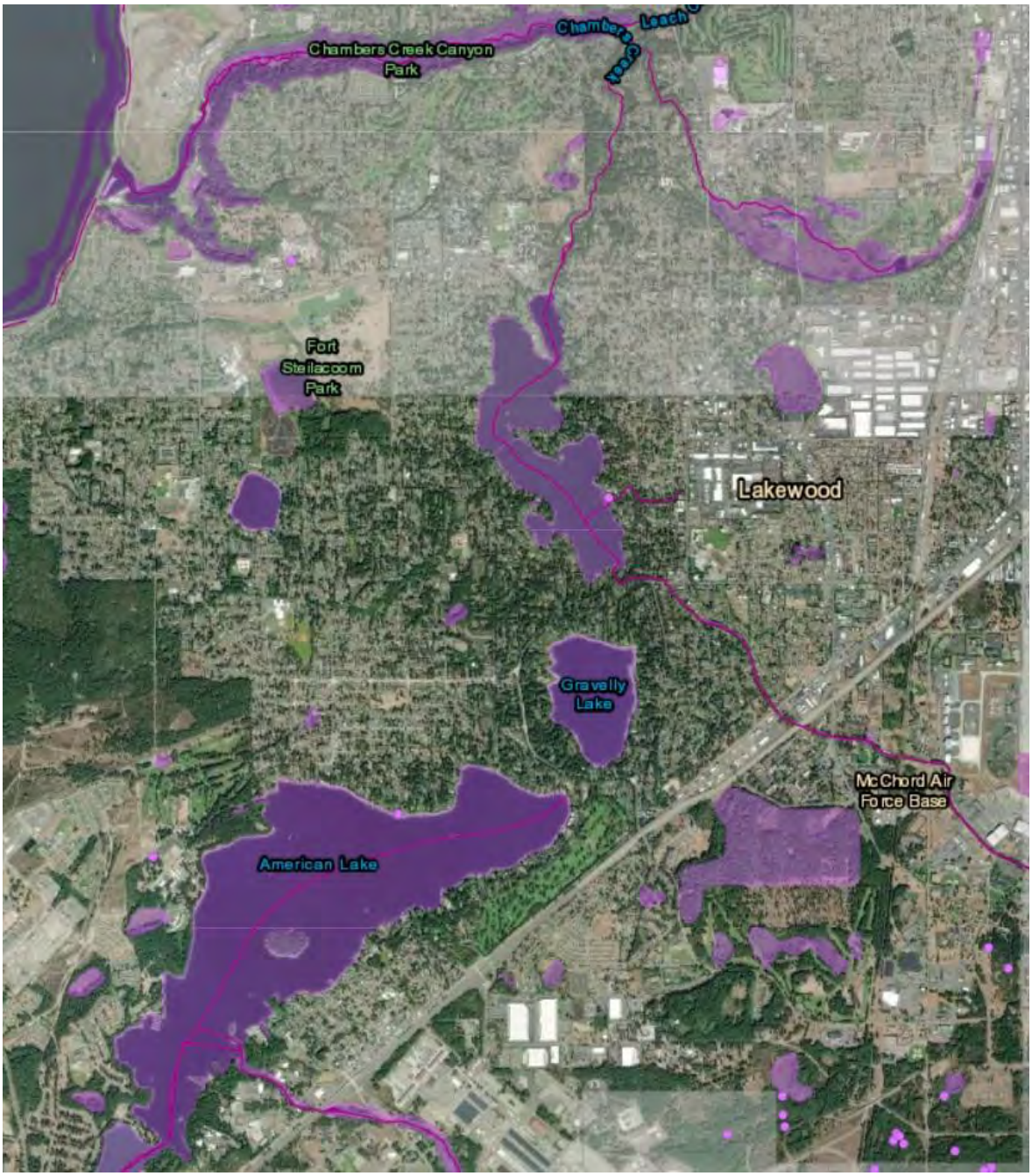
The District's 30 active wells provide a maximum production capacity of approximately 30 million gallons per day (mgd), with a total water-right capacity to pump up to over 60+ mgd. Recharge (replenishing) of the aquifers comes from local rainfall in the Clover/Chambers drainage basin.

The District adheres to a wellhead protection program. The Wellhead Protection Plan identifies Aquifer A as the shallowest aquifer with the most direct hydrologic relation to the surface. In addition, it is composed of highly permeable glacial deposits resulting in hydrologic conductivity values averaging approximately 1,650 feet per day (Economic and Engineering Services, Inc. and Robinson & Noble, Inc. 1997). Because of these factors, Aquifer A is the shallowest and most vulnerable of Lakewood's aquifer systems. This aquifer is generally located along the I-5 corridor in eastern Lakewood with water contribution flowing west from McChord AFB and Spanaway. American Lake is believed to have a direct hydrologic connection to the aquifer. This shallow aquifer also includes a smaller area in western Lakewood that includes Waughop Lake and Lake Louise, both of which are believed to contribute directly to three wells south of Fort Steilacoom Park.

Fish and Wildlife Habitat

In the present era, most of Lakewood is composed of suburban and urban development, with remnant areas of native vegetation found in a patchy mosaic throughout the city. Significant remaining intact stands of native vegetation include the Flett wetlands, the Chambers Creek canyon, and Seeley Lake Park. The mapped priority habitats and species reflect these major areas of habitat. See Exhibit 3-3.

Exhibit 3-3. Priority Habitats and Species in Lakewood Vicinity



Source: WDFW, 2024

Wildlife habitat has been greatly reduced as a consequence of development, with little suitable habitat for large mammals remaining. Information provided by the Washington Department of Fish and Wildlife (WDFW) regarding lands meeting the criteria as priority wildlife habitats indicates a number of those habitats are present in the city, including wetlands, riparian zones, and other biodiversity areas. The remaining habitat can support a variety of smaller mammals, reptiles, amphibians, and birds. Standing

water in the form of lakes accounts for 1,098 acres, or 9% of Lakewood's surface area. These lakes support a variety of water and shorebirds, as well as aquatic fauna.

The Clover Creek watershed is the principal watershed in the city. Clover Creek empties into Lake Steilacoom. The lake then flows into Chambers Creek, which empties into Puget Sound immediately west of the city limits. Chambers Creek forms the boundary between the cities of Lakewood and University Place. Major tributaries of Chambers Creek include Leach Creek and Flett Creek. Chambers Creek has been dammed to form Steilacoom Lake. Two streams flow into Steilacoom Lake, Clover Creek and Ponce de Leon Creek. Chambers Creek, Leach Creek, Flett Creek, and Clover Creek are all identified by the WDFW as having anadromous fish runs. In addition, there is a critical spawning habitat identified near the mouth of Chambers Creek.

Because of the presence of endangered salmonids in the watershed, land use activity must conform to ESA regulations for Lakewood to receive protection under Section 4(d) of the ESA. These are identified in the National Marine Fisheries Service 4(d) rules, which identify the elements that must be present in an approved stormwater management plan. The Chambers/Clover Creek watershed forms Water Resource Inventory Area (WRIA) 12, as defined by the Washington Department of Ecology. The Chambers/Clover Creek Watershed Action Plan is the watershed-wide document under development to manage non-point source pollution within WRIA 12. This Action Plan contains a number of recommendations with regards to habitat, water quality, and related issues of importance to salmon recovery efforts, and has been approved by Lakewood as well as most other jurisdictions within WRIA 12.

Although Lakewood is generally a disturbed landscape, some federal or state plant and animal species of concern are known to occur. Lakewood's critical areas regulations (LMC 14.154.020) identify Critical Fish and Wildlife Habitat Areas as including federal and state listed species and their associated habitats. The Lakewood Shoreline Restoration Plan (AHBL, Otak, Herrera, 2019) has identified the following listed species:

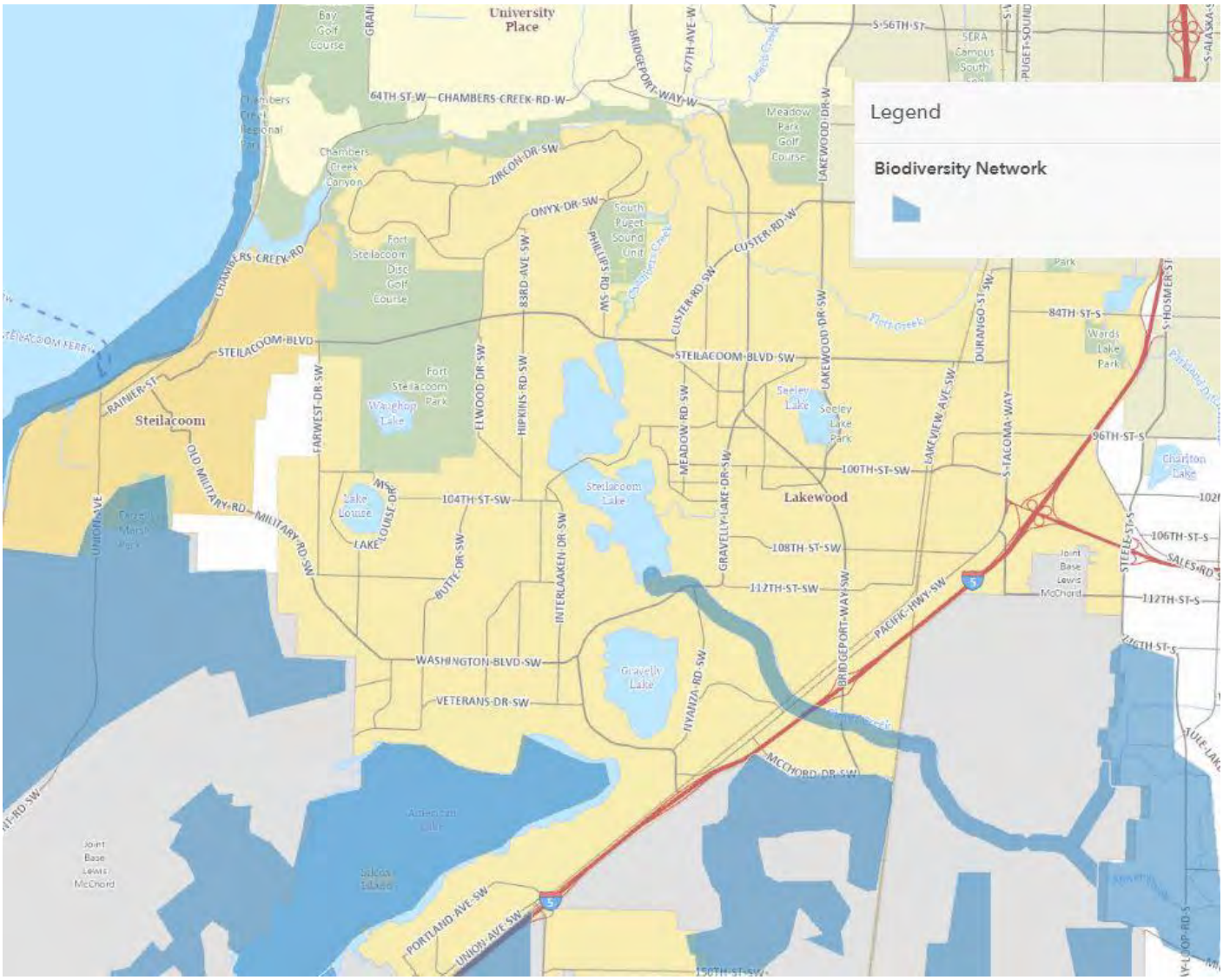
> *Steelhead of the Puget Sound Distinct Population Segment (DPS) (U.S. Federal Register, 11 May 2007) is the only federally listed salmonid species that occurs in the City of Lakewood. Steelhead presence is documented in Chambers Creek and their presence is assumed in Lake Steilacoom and Clover Creek Page 6 (StreamNet 2010). Additionally, Puget Sound-Strait of Georgia coho salmon (a PHS Species) also occur in the basin and are listed as a Species of Concern (U.S. Federal Register, 15 April 2004), indicating that they are under less active consideration for formal listing. Coho spawn in Chambers and Clover Creeks and their presence is documented in Lake Steilacoom (StreamNet 2010). Critical habitat for Puget Sound steelhead within the City of Lakewood was finalized in 2016 (Federal Register 2016). The Chambers Bay estuary fish ladder traps are used at certain times to capture upstream adult migrants, mainly Chinook, as part of a segregated hatchery and estuary fishery program. The fish ladders are left open during the remainder of the year to allow passage of other diadromous species (e.g., chum, coho, steelhead and cutthroat trout). Chinook salmon are usually not released upstream, but spawn are taken to Garrison Springs Hatchery for rearing. The Garrison Springs Hatchery is located in the City of Lakewood near Chambers Creek. (AHBL, Otak, Herrera, 2019)*

The Lakewood Municipal Code (LMC 14.154.020) also lists the following as habitats and species of local importance as part of critical fish and wildlife habitat areas:

- Priority Oregon white oak woodlands.
- Prairies.
- Old growth forests.
- Caves.
- Cliffs.
- Snag-rich areas.
- Rivers and streams with critical fisheries.
- Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat.
- Waters of the state, including all water bodies classified by the Washington Department of Natural Resources (DNR) water typing classification system as detailed in WAC 222-16-030, together with associated riparian areas.
- Lakes, ponds, streams, and rivers planted with game fish by a governmental entity or tribal entity.
- State natural area preserves and natural resource conservation areas.

Some lakes and streams noted as habitats of local importance have been mapped as biodiversity corridors by the state WDFW and Pierce County. See Exhibit 3-4.

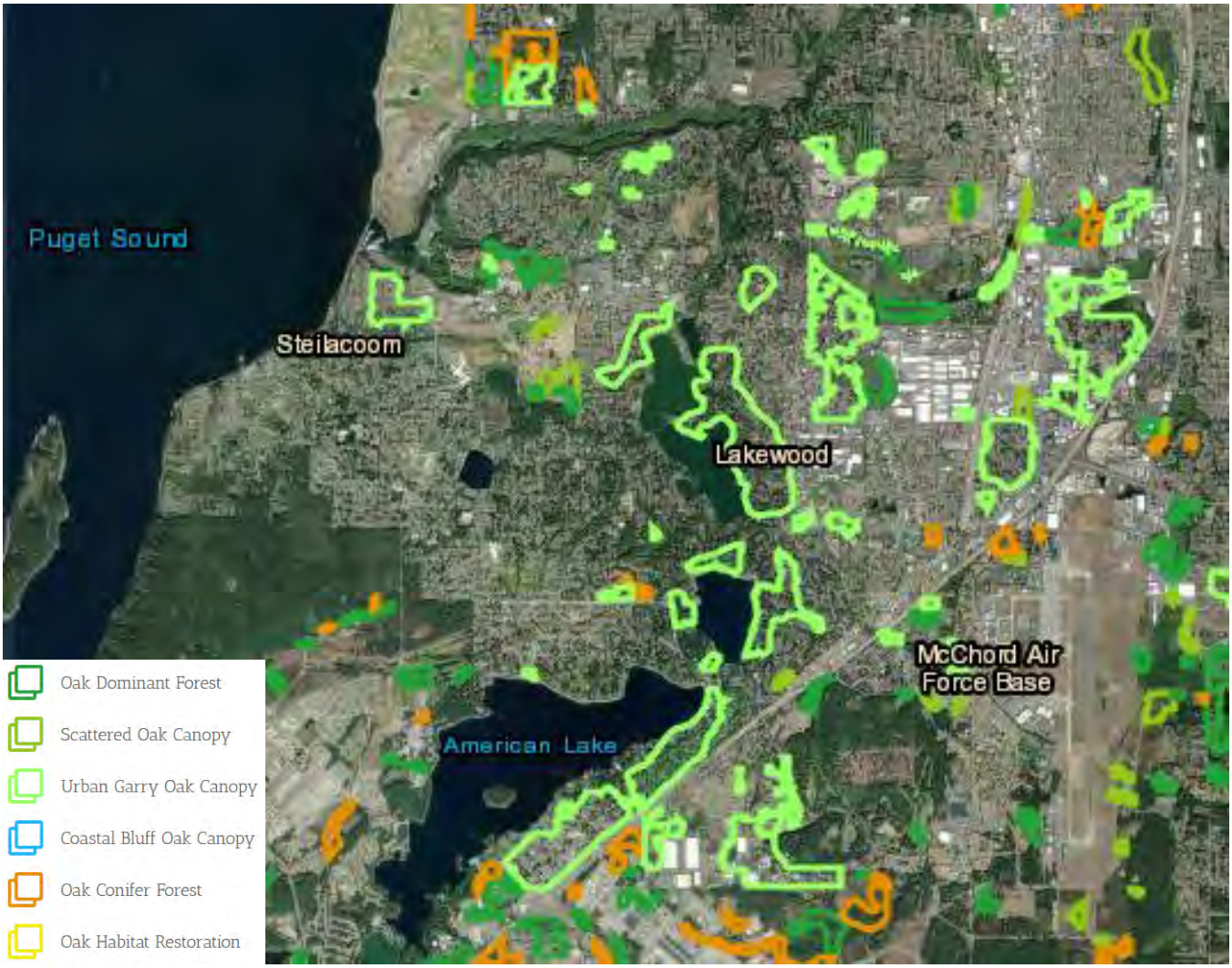
Exhibit 3-4. Biodiversity Areas Lakewood Vicinity



Source: Pierce County GIS, 2017

Regulated by the City's critical area regulations and tree preservation regulations (LMC 18A.70 Article III), Oregon white oak woodlands, are found in portions of the city in parks and private lands. See Exhibit 3-5.

Exhibit 3-5. Oregon White Oak Woodlands

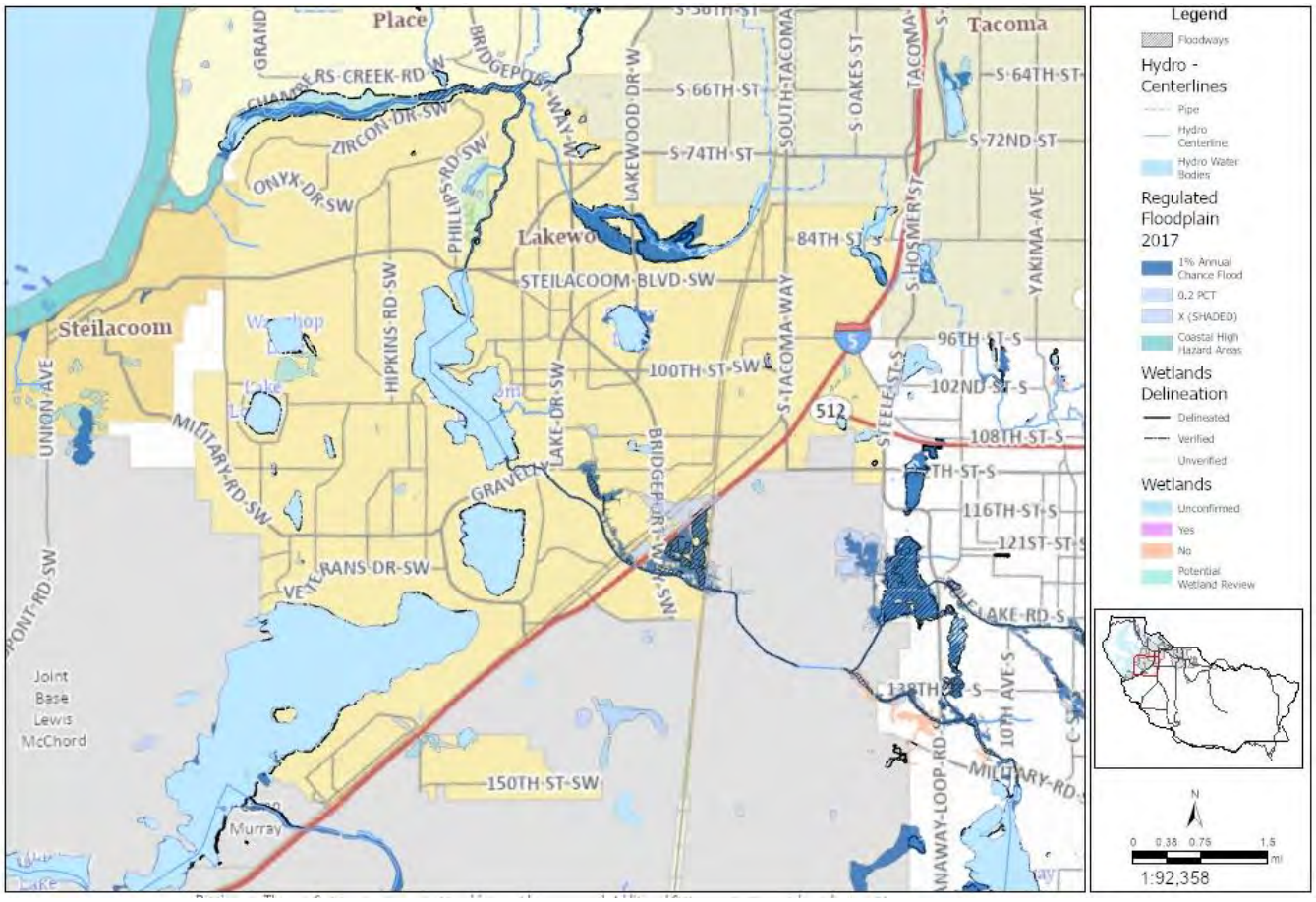


Source: Department of Natural Resources, 2017-2022; Sound Oaks Initiative, 2024

Flood-Prone Areas

Flooding is the most common natural hazard in Lakewood due to the area's hydrologic conditions, topography, and development patterns. Portions of northeast and east Lakewood, especially in the Clover and Flett Creek drainage area, are susceptible to flooding. Other areas prone to flooding include wetlands and adjacent low-lying upland areas. See Exhibit 3-6 for a citywide view of floodplains and wetlands.

Exhibit 3-6. Lakewood Floodplains and Wetlands



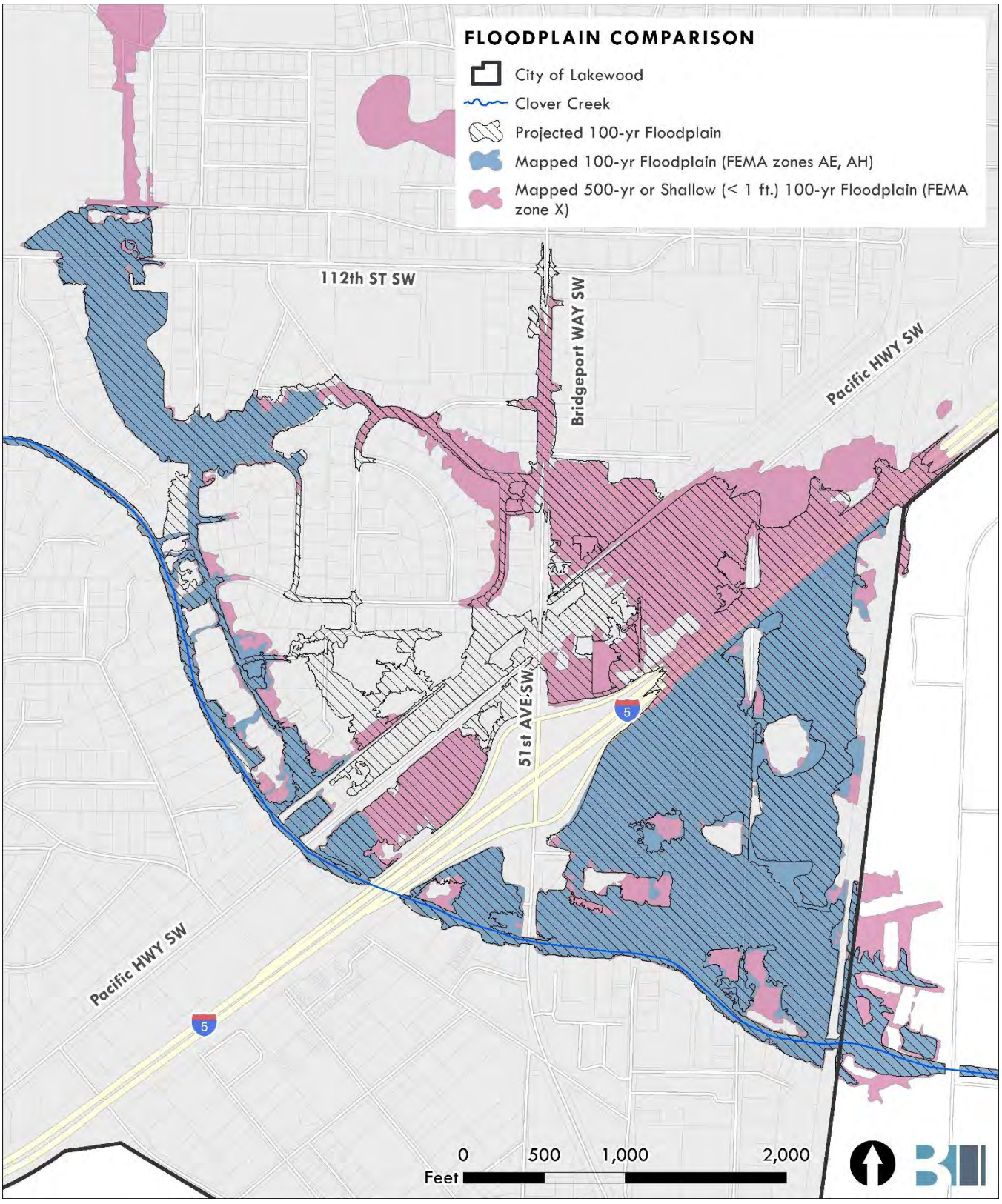
Sources: Pierce County GIS, 2024; FEMA, 2017

The City of Lakewood evaluated a portion of Clover Creek through the Clover Creek Flood Mitigation Study in 2022-2023. Points along the Clover Creek alignment have experienced flooding during large storm events, particularly in the area between Joint Base Lewis-McCord and I-5, as well as northwest of I-5 along Pacific Highway. The City proactively developed a study (Brown and Caldwell, 2023), which:

- Developed conceptual alternatives and flood mitigation strategies,
- Evaluated flood mitigation concepts,
- Engaged stakeholders throughout the study, and
- Provided funding alternatives.

The floodplain areas reviewed are shown on Exhibit 3-7.

Exhibit 3-7. Clover Creek FEMA Floodplain Comparison



Sources: FEMA, 2017

Flooding threatens lives and damages property. Its frequency and severity tend to increase as a result of development, specifically as permeable forest cover is replaced by impervious surfaces such as rooftops or concrete or even by semi-permeable ground covers such as lawns. The most effective way to limit increasing urbanization-related flood risk is to limit changes to natural hydrologic functions. Accordingly, natural drainage channels need to be preserved whenever possible, and permeable surfaces should be protected. Changes to these system functions should be compensated by engineered systems such as retention/detention basins, swales, and other approaches designed to simulate natural flood control mechanisms by allowing stormwater to slowly seep into the ground or gradually drain downstream.

Geologically Hazardous Areas

Geologically hazardous areas typically include areas subject to structural failure, usually as a result of mass wasting or seismic incident. Most of Lakewood is located on relatively flat lands sloping 8% or less. The steepest significant land area in Lakewood, and consequently the area most vulnerable to landslide, is the southern rim of the Chambers Creek canyon, which is the northwestern boundary of the city. (Washington Department of Natural Resources, 2024) Other sloping areas include hillsides with moderate slopes scattered in primarily residential areas and some former gravel quarries with slopes over 30% grade.

Each shoreline water body's shoreline contains a small amount of steep slope areas, with the exception of Clover Creek, which contains no documented geologic hazards. (AHBL, Otak, Herrera, 2019)

Most of the city is mapped as having very low risk of seismic liquefaction except in the Chambers Creek Canyon area, or around the rim of lakes and wetlands. (Washington Department of Natural Resources, 2024)

Creeks, Streams, and Lakes and their Shorelines

Much of Lakewood lies within the Chambers Creek drainage basin. Chambers Creek flows into Puget Sound between Steilacoom and University Place and forms Lakewood's northern boundary. Chambers Creek is joined by Leach and Flett Creeks near Lakewood's boundary with University Place and Tacoma. Flett Creek originates in southern Tacoma and drains the largest palustrine wetland system in the city, Flett wetlands.

As previously mentioned, there are numerous lakes in Lakewood. Most of these lakes, including American, Gravelly, Waughop, and Seeley lakes and Lake Louise, are of glacial origin. Steilacoom Lake was formed as the result of damming Clover Creek to create a millpond. Chambers Creek flows from the south and drains Lake Steilacoom, which is impounded by the dam at Steilacoom Boulevard. The largest stream feeding Lake Steilacoom is Clover Creek, which flows from the southeast through Ponders Corner and Springbrook. A smaller stream, Ponce de Leon Creek, drains the Lakewood Mall site flowing past the current City Hall, emptying into Lake Steilacoom.

Many of Lakewood's lakes are fed by groundwater flow. The water table underlying the city is very shallow and moves rather freely through the permeable glacially deposited sandy and gravelly soils. Where the depressions in local topography go deep enough, they intercept the water table and form lakes. Lake levels fluctuate seasonally with local water tables.

Waterbodies with water quality impairments include:

- American Lake - Phosphorus
- Spanaway Lake - Bacteria
- Clover Creek - Bacteria, Temperature
- Steilacoom Lake - Phosphorus
- Chambers Creek - Bacteria, Copper
- Leach Creek - Mercury

Stormwater runoff is one of the major causes of pollution. State and county watershed assessments have identified mitigation approaches. (Chambers-Clover Creek Watershed Council, ND)

Tillicum-Woodbrook Subarea

The Tillicum-Woodbrook Subarea lies along American Lake, considered part of Pierce County biodiversity corridors, and mapped as a priority habitat and containing cutthroat trout and waterfowl concentrations. Wetlands are mapped in the Woodbrook portion of the subarea. Urban Oak Canopy is mapped in the Tillicum and Woodbrook portions of the subarea.

Impacts

For the purposes of this EIS, a significant impact is defined as:

- Increase the exposure of people to risk of injury or substantial damage to structures and infrastructure due to a geologic or flood hazard;
- Direct impacts to critical areas from groundwater contamination, wetland fill, stream or wetland buffer loss, or net loss to critical fish and wildlife habitat; or
- Indirect impacts include changes to water quality and quantity of downstream water bodies.

Impacts Common to All Alternatives

Exposure to Hazards

New development will occur under all alternatives. New development would be exposed to flood hazards in some locations of the city such as the Clover Creek floodplain. Development in floodplains would need to meet flood hazard regulations and provide building designs that minimize risk. The City has planned mitigation in the form of levees to protect I-5, a critical route, as well as channel and floodplain enhancements to benefit water quality and flood reduction. (Brown and Caldwell, 2023)

There are limited locations of mapped geologic hazards, primarily in the Chambers Creek vicinity and limited development is anticipated there. Construction and development activities can increase the risk of erosion with the exposure of soils and removal of trees and shrubs. Future developments would need to comply with building, land use and critical areas regulations.

Direct Impacts to Critical Areas

The study area is urban in character and there is a potential for direct impacts to critical areas from groundwater contamination, wetland fill, or stream or wetland buffer loss. In areas where development is older and has not undergone redevelopment, and thus does not have stormwater treatment, there is a greater potential to affect groundwater quality. Newer (existing development) and future redevelopment will comply with adopted stormwater manuals at the time development occurs; "Storm drainage provisions are covered in LMC Chapter 12A.11 – Stormwater Management. The City adopted the Ecology stormwater manual as the primary manual but also allows the use of the Pierce County 8-2 Stormwater Management and Site Development Manual and the WSDOT Highway Runoff Manual (current editions). LMC Chapter 12A.11 was revised in 2016 to incorporate Low Impact Development principles and standards." (City of Lakewood, 2022)

These manuals outline stormwater requirements for construction and operation of development projects, including permanent stormwater control plans, construction stormwater pollution prevention plans, and groundwater (wellhead) protection plans. As a result, infiltration, stormwater, and surface water runoff would include appropriate treatment measures to decrease the potential for groundwater contamination.

If development were proposed in the vicinity of wetlands and streams such as Ponce De Leon Creek, Clover Creek, or other streams, wildlife habitat conservation area (stream) and wetland regulations would apply and require avoidance and/or minimization of impacts as appropriate.

With greater development in centers and in residential neighborhoods, there could be potential impacts to critical fish and wildlife habitat, such as oak woodlands. However, the City requires protection and mitigation (LMC 14.154.080 and 18A.70.330)

Indirect Impacts to Water Quality and Quantity

As a result of redevelopment and installation of stormwater treatment, potential indirect impacts include changes to water quality and quantity of downstream water bodies in the Chambers-Clover Creek Watershed.

Tillicum-Woodbrook Subarea

Impacts are similar to those identified for the citywide evaluation above.

No Action Alternative

The No Action Alternative would allow for growth capacity that meets total 2044 job and housing targets but its modeled growth retains current assumptions to the year 2035. It would focus most growth in centers like Downtown and the Station District. Less infill housing may occur compared to the Proposed Action. The lesser growth may avoid potential impacts; however, the current critical area regulations would be retained.

Tillicum-Woodbrook Subarea

Similar to the citywide analysis.

Action Alternative

The Action Alternative would allow for more growth in single family zones where there tends to be more tree canopy. Infill and middle housing development have the potential to impact existing vegetation including trees. However, at the same time the critical areas regulations are being updated and would strengthen regulations such as aquifer protection, and stream and other habitat protection. These regulations should further avoid direct impacts to critical areas.

Tillicum-Woodbrook Subarea

The Subarea Plan would be updated and more housing growth and civic and transportation access improvements would be encouraged. Similar to the citywide alternative, enhanced critical areas regulations would be implemented.

Mitigation Measures

Incorporated Plan Features

Lakewood is adopting an updated Natural Environment Element with goals and policies meant to promote protection, conservation, and enhancement of fish and wildlife habitat, streams, and wetlands, and protection of groundwater quality and quantity. Policies also address protection from floodplain and geological hazards.

Critical area regulation amendments address use of best available science (BAS), avoidance of impacts with exempt or allowed activities, and general mitigation requirements. Improvements to critical area specific regulations include:

- Seismic hazard standards,
- Mine hazard protections,
- Requirement for a hydrogeological assessment in aquifer areas, and updated mapping references, and updated protection standards,
- Additions of the following habitats as habitats of species of local importance:
    - Aspen stands
    - Biodiversity areas and corridors
    - Herbaceous balds
    - Riparian habitats.
    - Freshwater wetlands

- Riparian buffers considering urban nature of the city and guidance regarding site potential tree height.
- Special provisions for streams including standards for stream crossing, utilities, stormwater facilities and others.
- Adjustment of wetland buffers in relation to habitat score. Measures to minimize wetland impacts, and methods of compensatory mitigation.

Regulations and Commitments

The following would apply to all alternatives:

- City of Lakewood Title 14 Environmental Protection contains critical area regulations, which includes protection of:
    - Aquifer recharge areas;
    - Fish and wildlife habitat areas (including streams) and their buffers;
    - Flood hazard areas;
    - Wetlands and their buffers;

LMC Chapter 12A.11 – Stormwater Management. The City adopted the Ecology stormwater manual as the primary manual but also allows the use of the Pierce County 8-2 Stormwater Management and Site Development Manual and the WSDOT Highway Runoff Manual (current editions). LMC Chapter 12A.11 was revised in 2016 to incorporate Low Impact Development principles and standards." (City of Lakewood, 2022)

Other Potential Mitigation Measures

The following measures can be applied to all alternatives, including No Action:

- The City could require a conservation easement or other regulatory structure for piped streams to ensure that the possibility of creek daylighting is not precluded by future redevelopment. For example in the Downtown Subarea, the ecological benefits of daylighting a portion of Ponce de Leon Creek could be evaluated by the City. An evaluation could include leaving the stream piped but identifying its historic location, as well as considering water quality treatments that benefit the nearby open channel stream, and serve as landscape amenities.
- Landscaping could consist of native species or species with low water requirements.
- The City could develop pre-prepared housing plans for ADUs and other small, attached dwellings that minimize footprints and retain tree canopy to the extent feasible.
- The City could require educational signage for aboveground stormwater facilities and/or added natural features.
- The City can continue to evaluate and update its stormwater regulations as the State Department of Ecology addresses emerging issues. For example, chemicals released from automotive tires (6PPD pollution) creates road dust that can affect salmon and other species. (Washington Department of

Ecology, 2023) A second example includes per- and polyfluoroalkyl substances (known as PFAS) which are “forever chemicals” in waterproof clothes, nonstick cookware, and many other products. (Washington Department of Ecology, 2023)

Significant Unavoidable Adverse Impacts

Unregulated wildlife and native vegetation could be lost as a result of population growth and development associated with all alternatives. Regarding critical areas, the City’s critical areas ordinance regulations would apply.

There would be no significant unavoidable adverse impacts with any of the alternatives. Redevelopment would require stormwater best management practices, which would result in an improvement to stormwater runoff and a benefit to the natural environment. The City’s critical areas ordinance regulations would apply, and no direct impacts to critical areas are assumed. The Action Alternative in particular would improve the application of critical area regulations on the basis of BAS with improved evaluations and standards for mitigation.

3.1.2 Climate Change Mitigation and Adaptation

Under the Growth Management Act (GMA), local governments must prepare climate mitigation and resilience goals and policies, and develop reduction goals for greenhouse gas and vehicle miles traveled.

The section describes existing greenhouse gas (GHG) emissions, regional and City goals, and related regulations. It assesses the sources and potential changes in greenhouse gas (GHG) emissions based on the growth under the alternatives. Existing conditions were developed through regional and local GHG emission inventories; existing guidance documents, regulations, goals, and associated forecast data. In addition to addressing GHG emissions, this section addresses the potential for climate hazard exposure to the community including overburdened populations and potential for adaptation.

Exhibit 3-8 lists guiding document analyzed to help guide this analysis.

Exhibit 3-8. Climate Change Documents Included in this Supplemental Environmental Impact Statement

Topic Area	Provider	Guiding Document
Climate Change and Vulnerability	City of Lakewood	Comprehensive Plan Energy & Climate Change Chapter (ECCC) (2021)
GHG Emissions	Pierce County	Pierce County Communitywide Geographic Greenhouse Gas Emissions (August 2022) Pierce County Comprehensive Plan Periodic Review and Draft EIS (2024)
GHG Emissions	Google	Environmental Insights Explorer (EIE); Lakewood city limits

Topic Area	Provider	Guiding Document
Vehicle Miles Traveled	The Transpo Group	Regional Travel Demand Model and proposed Land Use. See Section 3.4.
Urban Forestry Program	City of Lakewood	2022 City Tree Code and Urban Forestry Program
Climate Change and Vulnerability	Pierce County	Pierce County Climate Vulnerability Assessment (2023)

Affected Environment

This section describes GHG emissions and trends in the City of Lakewood. It also describes areas with climate vulnerability. These metrics provide a basis for comparing the alternatives and describing how the alternatives may affect the current trends.

GHG Emissions

Greenhouse gases include carbon dioxide, methane, nitrous oxide, and certain synthetic chemicals that trap some of the Earth's outgoing energy, thus retaining heat in the atmosphere. Larger emissions of greenhouse gases lead to higher concentrations in the atmosphere (US Environmental Protection Agency, 2024).

Climate change is an urgent environmental, economic, and equity threat being addressed at the local, regional, state, and federal level. Reducing GHG emissions involves reducing fossil fuel consumption, using other sources of renewable energy, and conserving energy associated with homes, businesses, industry, and transportation.

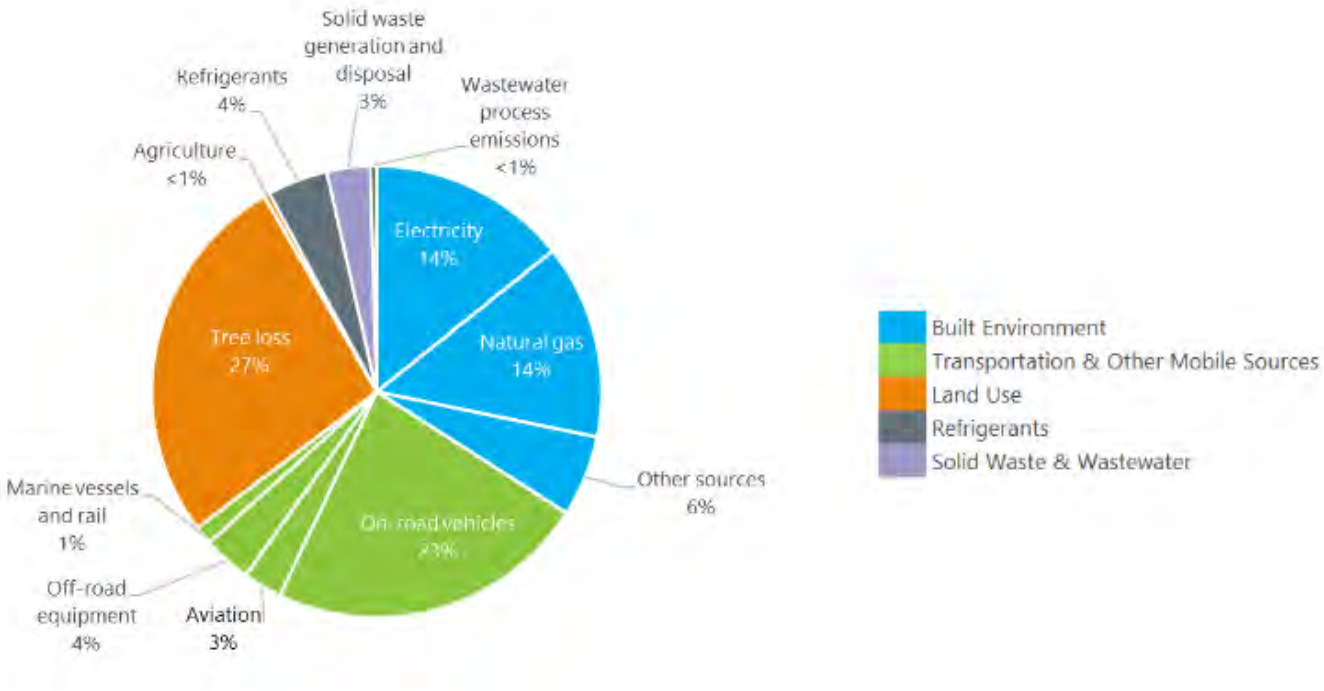
Sources

Building and Transportation Emissions

The primary sources of GHG emissions in cities are from building emissions and transportation emissions. Building emissions are estimated from heating, cooling, and powering residential and non-residential buildings. Transportation emissions are from fuel-powered vehicles and can be measured by VMT (vehicle miles traveled). Other drivers of GHG emission increases include tree canopy loss, changes in the electricity fuel mix, and overall population growth.

In 2022, the County produced a GHG emission inventory that summarizes the status of emissions in 2019 across five sectors: the built environment, land use, refrigerants, solid waste and wastewater, and transportation and other mobile sources (Cascadia Consulting Group, 2022). In 2019, Pierce County's residents, businesses, employees, and visitors produced 10.8 million metric tons of GHG emissions. Exhibit 3-9 displays the primary sources of GHG emissions in Pierce County in 2019. The largest GHG emissions sources in Pierce County are tree loss (~27%), on-road transportation (~23%), building electricity (~14%), and building natural gas (~14%).

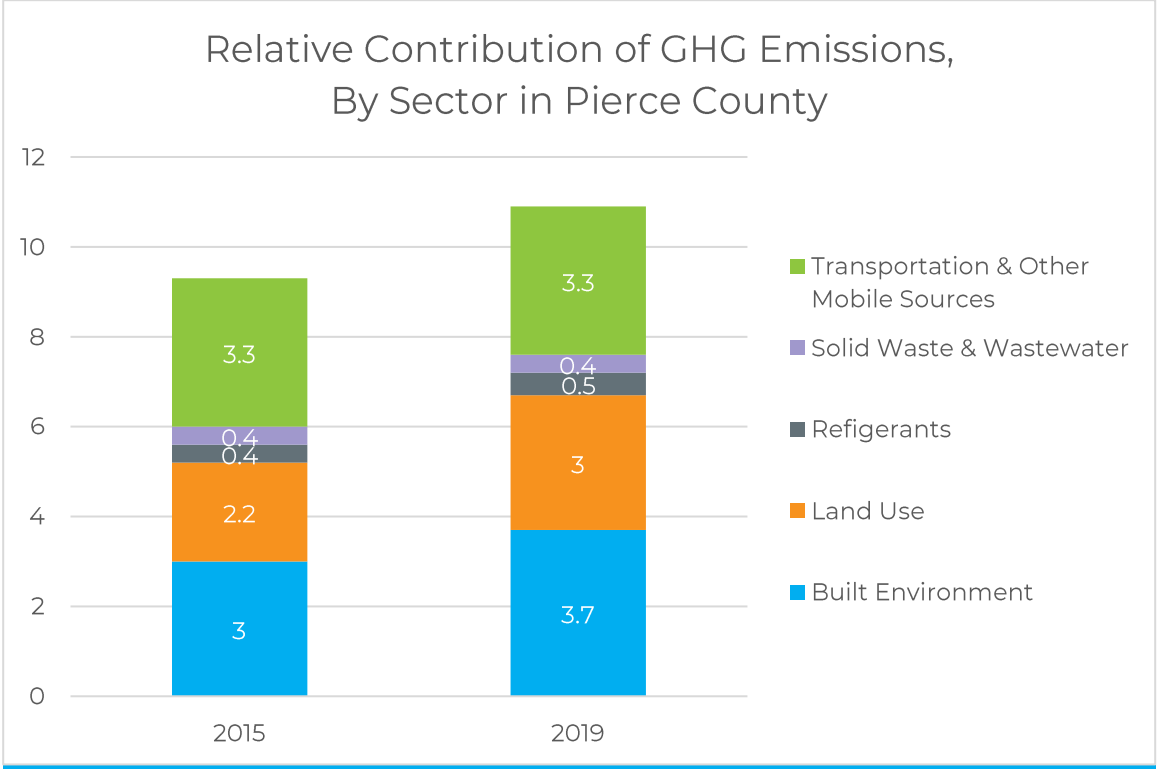
Exhibit 3-9. Sources of GHG Emissions in Pierce County in 2019



Source: Cascadia Consulting Group, 2022

Exhibit 3-10 depicts how GHG emissions in Pierce County have changed over time. From 2015 to 2019, there was an increase in overall GHG emissions (16%), along with a 7% population increase and a 9% increase in per capita emissions.

Exhibit 3-10. GHG Comparison between Inventories for Pierce County

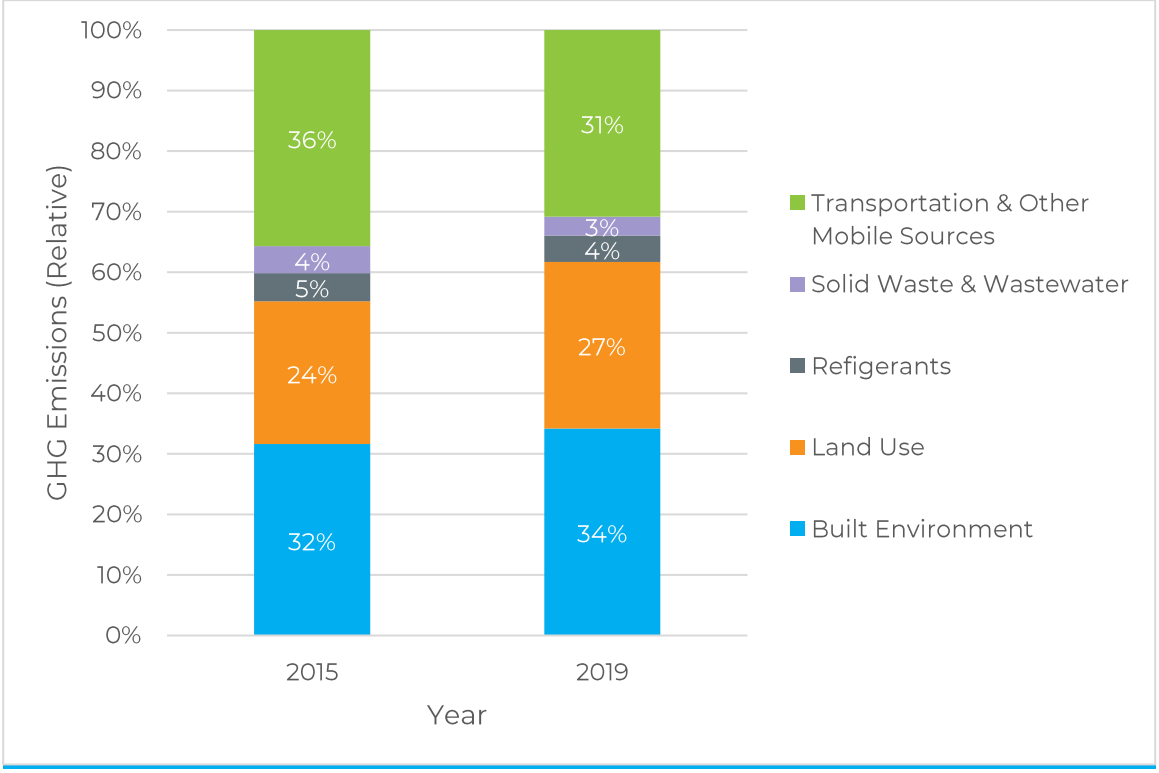


Source: Cascadia Consulting Group, 2022.

Exhibit 3-11 depicts the relative contribution of GHG emissions by sector over time in Pierce County. The relative contribution of GHG emissions from the built environment increased by 2% from 2015 to 2019; GHG emissions from land use increased by 3% in that same time period. However, the relative contribution of GHG emissions from transportation and other mobile sources decreased by 5% in that same time period.

The increased efficiency and decreased emissions per mile of passenger vehicles are the greatest contributor to decreasing transportation emissions. Other ways that emissions have decreased include efficient electricity use in the commercial and residential sectors in the built environment, and a reduction in per-capita solid waste generation.

Exhibit 3-11. Relative Contribution of GHG Emissions by Sector



Source: Cascadia Consulting Group, 2022.

In the City of Lakewood, GHG emissions are primarily generated by motor vehicles and buildings. Lakewood is bisected by Interstate-5, which is a significant source of GHG emissions caused by transportation emissions. Other sources of emissions are generated by buildings through the direct combustion of fossil fuels for heating or indirectly through electricity consumption needed to support residents and businesses. The heating and cooling technologies deployed, the carbon intensity of utility's fuel mix used to support Lakewood's electricity grid, the sources of electricity, the quantity of electricity used by residents and businesses, and the energy efficiency of buildings can all contribute to increased GHG emissions produced in the built environment.

Exhibit 3-12 compares how emission types have changed from 2019 to 2022 in the City. Overall, GHG emissions have decreased from 2019 to 2022. While transportation emissions represent the greatest contributor to GHG emissions in the City, its overall percentage decreased by 4% from 2019 to 2022, possibly due to increased fuel efficiency among motor vehicles and buses and potentially due to reduced commuting during the pandemic. Overall residential emissions decreased from 2019 to 2022; however, there was a marked increase due to the measurement of residential diesel emissions in the total residential emissions.

Exhibit 3-12. Comparison of Lakewood GHG Emissions in 2019 and 2022

Emission-Type	2019 Emissions (MgCO2e)	Percent of Total	2022 Emissions (MgCO2e)	Percent of Total	Difference
Residential					
Residential Electricity	72,121	11%	68,800	11%	(3,321)
Residential Natural Gas	59,071	9%	46,400	7%	(12,671)
Residential Diesel	N/A	N/A	44,800	7%	44,800
Sub-Total	131,192	21%	160,000	26%	28,802
Commercial/Industrial					
Non-Residential Electricity	110,746	17%	95,040	15%	(15,706)
Non-Residential Natural Gas	35,629	6%	18,480	3%	(17,149)
Non-Residential Diesel	N/A	N/A	18,480	3%	18,480
Sub-Total	146,375	23%	132,000	21%	-14,375
Transportation					
On-road vehicles – cross boundary inbound	156,997	25%	148,607	24%	(8,390)
On-road vehicles – cross boundary outbound	158,353	25%	150,197	24%	(8,156)
On-road vehicles – in boundary	34,216	5%	28,187	5%	(6,029)
Bus VMT – Cross boundary inbound	5,274	<1%	2,586	<1%	(2,687)
Bus VMT – Cross boundary outbound	5,955	<1%	2,929	<1%	(3,025)
Bus VMT – In boundary	1,048	<1%	606	<1%	(442)
Sub-Total	361,843	57%	333,114	53%	-28,729
Total Emissions	**639,410**		**625,112**		**-14,296**

Notes:

- Transportation emissions are overstated since it includes I-5 and Highway 512 emissions, but it is difficult to determine emissions using the Google EIE model.
- Residential & non-residential emissions are also overstated since Google uses a 50/50 mix of electricity to carbon fuels. In actuality, the mix is closer to 80/20. If the 80/20 split is used, MgCO2e emissions are calculated at 194,297 for both residential and non-residential.

Source: City of Lakewood Energy and Climate Change Chapter, 2021; Google Environmental Insights Explorer 2024; BERK 2024

Tree Canopy Changes

Deforestation and tree cover loss are a significant contributor to GHG emissions. In Pierce County, it accounted for 27% of the total communitywide GHG emissions in 2019 (Cascadia Consulting Group, 2022). See Exhibit 3-9. In 2019, the amount of tree-cover loss is estimated to have resulted in a 36% increase in GHG emissions compared to 2015. The City of Lakewood conducted a tree canopy assessment in 2022, and the tree cover citywide was 26.3%. The assessment found that between 2011 and 2019, the urban tree canopy change was a gain of 53.5 acres or 0.5%. The City developed tree preservation

code amendments in 2022 to reduce tree removal in residential areas and established an Urban Forest Program in 2023.

Policies

Policies at the local, regional, state, and federal level contribute to aiming to reduce GHG emissions in the City and surrounding area. The state's Clean Energy Transformation Act (CETA) produces the greatest reduction in emissions, along with the state's Internal Combustion Engine Ban.

Federal

Federal Vehicle Regulations (CAFE): The Corporate Average Fuel economy (CAFE) standards, regulated by the DOT and supported by the EPA, require an average of approximately 49 mpg for passenger cars and light trucks by 2026. This results in a fuel efficiency increase of 8-10% annually.

State

WA Clean Buildings Act (HB 1257): This state bill requires all new commercial buildings over 50,000 square feet to reduce their energy use intensity by 15%, compared to the 2009-2018 average. The compliance date is staggered based on building size, with buildings greater than 220,000 square feet required to comply by June 1, 2026, and buildings greater than 50,000 square feet required to comply by June 1, 2028.

WA Clean Fuel Standard (HB 1091): This state bill sets a Clean Fuel Standard that requires a 20% reduction in the carbon intensity of transportation fuels by 2038, compared to a 2017 baseline. This reduction can be achieved through cleaner fuels or through the purchasing of clean fuel credits from cleaner producers.

WA Internal Combustion Engine Ban (SB 5974) This state bill establishes a target that all passenger and light duty vehicles of model year 2030 and later must be electric vehicles. Washington would ban the sale of gasoline/diesel passenger vehicles by 2030.

WA Clean Energy Transformation Act (CETA): CETA applies to electric utilities serving Washington customers. By 2025, utilities must eliminate coal-fired electricity from their portfolios. By 2030, these utilities must be greenhouse gas neutral, with flexibility to use some natural gas for electricity if offset by other actions. By 2045, utilities must supply Washington customers with 100% renewable or non-emitting electricity.

WA Climate Commitment Act (E2SSB 5126): The Climate Commitment Act places an economy-wide cap on carbon to meet the state GHG reduction targets. This applies to polluting facilities in the built environment. 35-40% of investments must be made in overburdened communities to reduce health disparities and create environmental benefits.

WA Growth Management Act Climate Element (HB 1181): HB 1181 requires local governments to incorporate climate change into comprehensive plans. It makes changes to the mandatory land use and transportation elements and adds a new climate change element.

Regional

PSRC Vision 2050: The Puget Sound Regional Council (PSRC) Vision 2050 includes 12 goals related to climate change, including reducing greenhouse gas emissions to 80% below 1990 levels. PSRC also incorporates a four-part Greenhouse Gas strategy that aims to reduce GHG emissions to 80% below 1990 levels. Methods to accomplish this reduction include compact growth patterns within land use, low-carbon travel choices, and forest and open space protection.

PSRC Regional Transportation Plan VMT Reductions: PSRC Regional Transportation Plan (RTP) is a long-term transportation plan for the region and outlines investments being made in multi-modal transportation options, including transit, rail, ferry, roads, freight, and bicycle and pedestrian facilities.

Local

Energy and Climate Change Chapter: In 2021, the City of Lakewood adopted a new Comprehensive Plan Energy and Climate Change Chapter (ECCC), based on low- or no-cost International Council for Local Environmental Initiatives (ICLEI) and Google Environmental Impact Explorer (EIE) data collection tools. By adopting this chapter, the City intends to proactively develop policies, incentives, and voluntary actions, and potentially regulations prior to the development of state mandates.

City Tree Code and Urban Forestry: In 2022, the City adopted a new tree regulation that went into effect on March 1, 2023. The regulations promote tree preservation and protect some of the City's most significant trees, including the White Oak. Tree removal permits and new tree protection and mitigation standards were proposed. On May 22, 2023, the City Council accepted a report from the UW Evans School of Public Policy & Governance regarding establishing an urban forestry program over a 5-year period. On May 31, the Council obligated $340,000 of ARPA funds to help fund the report's recommendations for a certified arborist, tree assessment, and public outreach efforts through 2026. (City of Lakewood, 2022)

Ordinance No. 776: In 2022, the City adopted Ordinance No.776 to establish a three-year climate change work plan. It included fourteen items to make progress towards responding to the impacts of climate change and relevant future goals and policies. These goals include a five-year plan in partnership with PSE, Tacoma Power, Lakeview Light & Power, and the Pierce County Sustainability Collaborative to support GHG emission reduction; this five-year action plan is anticipated to be adopted in 2024. Another relevant goal is the update to the City's non-motorized transportation plan, which was completed in June 2023.

Vulnerability and Climate Change Adaptation

Climate change is expected to have wide-ranging impacts to the region's environment, infrastructure, and communities. In the near future, these impacts and changes are expected to become more significant to a jurisdiction's resources, critical assets, and its residents and community. Some of the impacts of climate change to the city include more frequent peak storm events, rising Puget Sound water levels, changes in intermittent lakes, increased landslides due to heavy rainfall along areas with steep slopes, increased flood risk in the Clover Creek watershed, additional pollutant loading from peak

storm events, and increased potential for wildfires in Steilacoom Park and other areas with significant open space and vacant land near the city.

The extent to which resources (e.g., assets, sectors, communities) are susceptible to and at risk from the impacts of climate change is described as vulnerability (Pierce County, 2023). Elements of vulnerability include exposure, sensitivity, and adaptive capacity. When combined, exposure and sensitivity summarize the potential impact posed by climate change to a resource, while adaptive capacity can either moderate or exacerbate potential impacts. A resource or community is more likely to be vulnerable to climate change if it is exposed to changes (e.g., sea level rise, extreme heat), if it is sensitive to those changes (e.g., plants that cannot survive prolonged periods of heat, individuals with existing respiratory or cardiovascular diseases), and if it has low adaptive capacity (e.g., unable to cope with or recover from changes such as flooding and heat). By identifying how and why a particular resource is vulnerable to climate change, decision makers can more effectively identify and implement strategies to reduce vulnerability—an effort known as adaptation. Adaptation strategies reflect efforts to prepare for, respond to, and recover from the impacts of climate change by reducing potential impacts and increasing adaptive capacity.

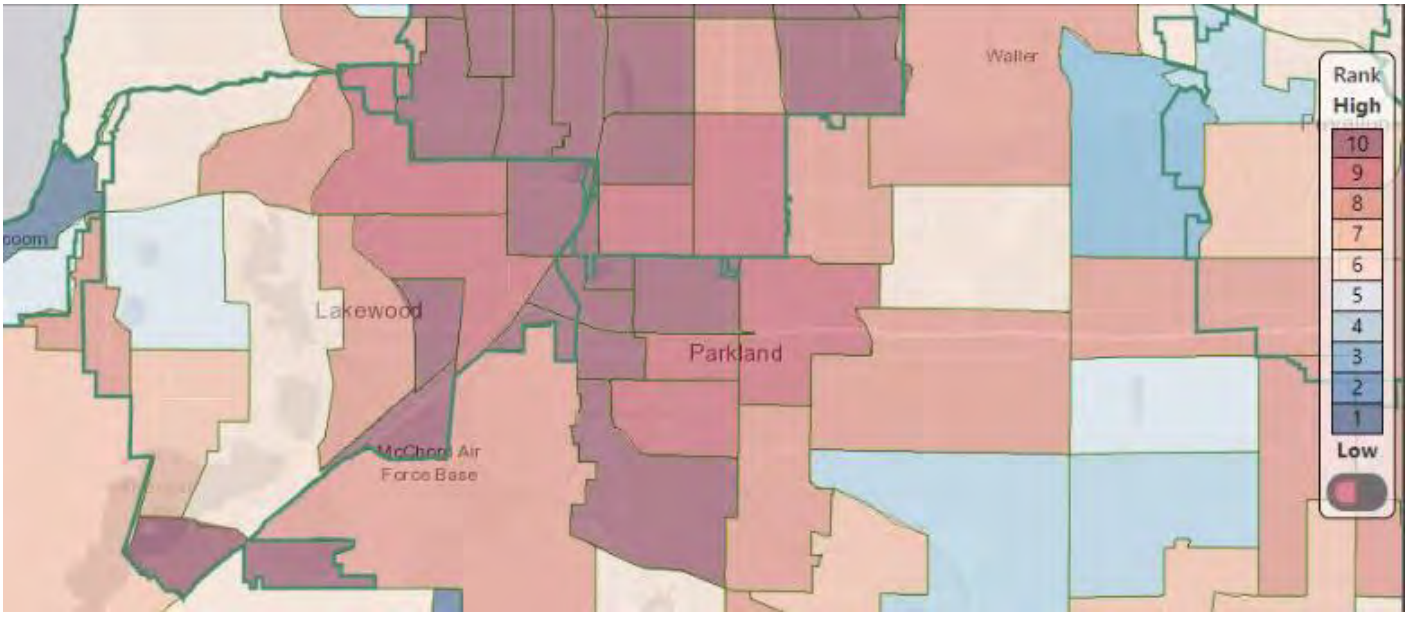
In the City of Lakewood, there are specific elements of vulnerability including vulnerable populations within the community, urban heat islands and its tree canopy, and the city's floodplain.

Vulnerable Populations and Environmental Justice

An individual's race and ethnicity may impact the level of climate change impact they are likely to experience at home and in employment. Racially discriminatory practices have created disproportionate environmental health and climate change exposure for people of color and tribal members. Historical practices and events such as redlining (Nelson et al. 2023) and dispossession of land or non-fulfillment of treaty rights (Norton-Smith 2016; Whyte 2013) have contributed to the built environments of today including where people live and what resources they have available to them (UW CIG et al. 2018). Currently, more people of color reside in South Pierce County near Lakewood, Parkland, and JBLM than in other regions of the county (Pierce County, 2023).

Exhibit 3-13 shows the environmental health disparities map for the city. The level of disparities is fairly high (rank of 7-10) for large sections of the city. These high levels of disparities and exposures include northeast Lakewood (the Air Corridor zones), central Lakewood, Springbrook, Tillicum, and Woodbrook. In addition, the city has two sites on the Superfund National Priority List, one in Woodbrook and the other in Springbrook near Pacific Highway SW

Exhibit 3-13. City of Lakewood Environmental Health Disparities



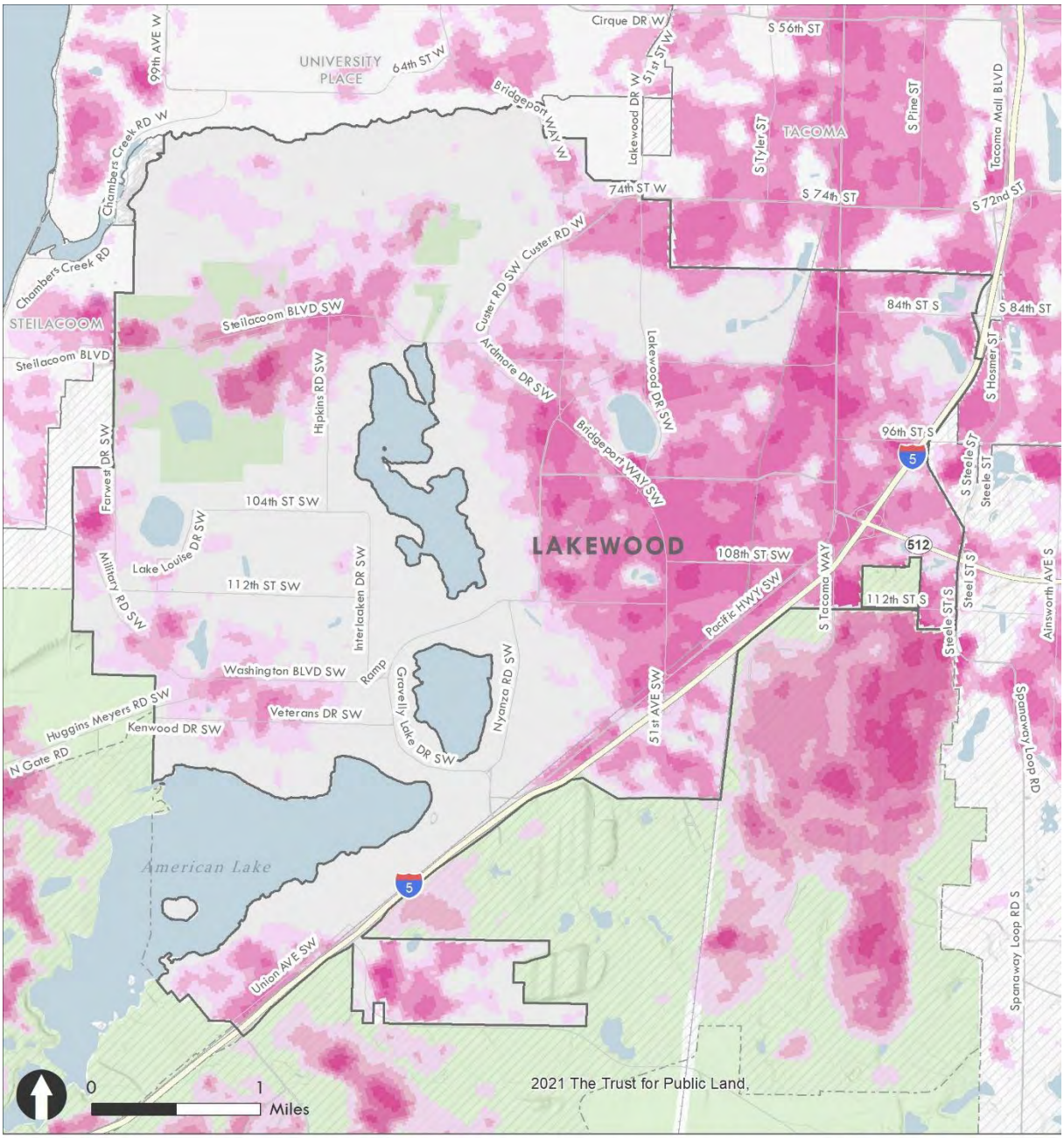
Source: City of Lakewood Energy and Climate Change Chapter, 2021; Washington State DOH

Urban Heat Islands & Tree Canopy

Heat islands are defined as urbanized areas that experience higher temperatures than surrounding rural areas (U.S. Environmental Protection Agency (EPA), 2024). Structures in urban environments, such as buildings, roads, and infrastructure, absorb and re-emit heat from the sun at a greater level than the natural environment. With decreased greenery and high concentration of structures, it produces urban heat islands, particularly in summer months. The impacts of urban heat islands include increased energy and electricity consumption to cool buildings, and increased GHG emissions due to increased electricity demand. Urban heat islands and excessive heat events pose increased risk to vulnerable populations that include older adults, young children, low-income populations, people in poor health, and people who spend their working hours outdoors. Urban heat islands can also negatively affect water quality due to warmed stormwater runoff increasing the water temperature in streams, rivers, ponds, and lakes. This water temperature warming can stress aquatic life. Urban heat islands can be mitigated by expanding the tree canopy within a city.

Exhibit 3-14 depicts the level of heat severity in the city, highlighting areas with urban heat islands. Urban heat islands with high to severe heat severity are located in the eastern part of the city, near the City Center and the developed commercial, industrial, and multifamily areas.

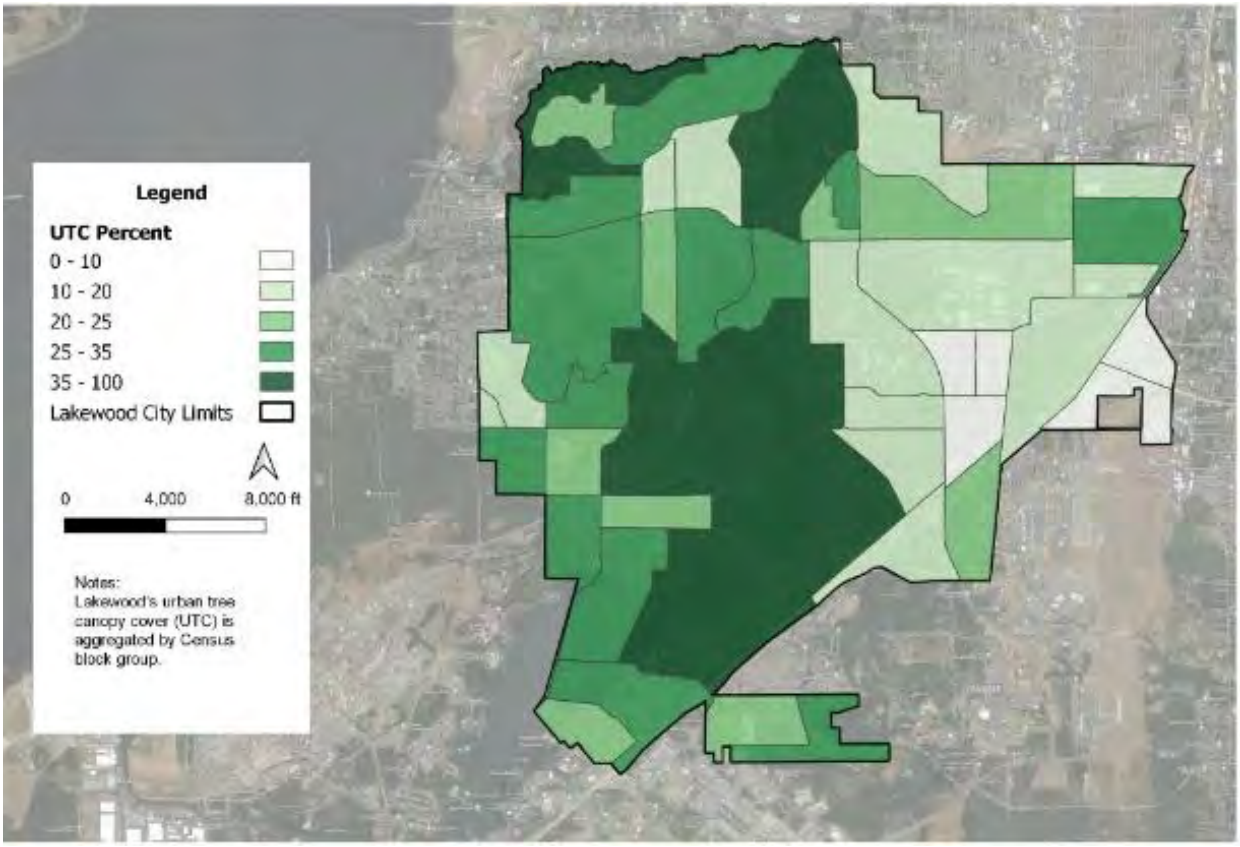
Exhibit 3-14. Lakewood Heat Severity (2020)



Sources: ESRI, 2021; US Census Bureau, 2020; Trust for Public Lands, 2021

Exhibit 3-15 shows the current tree canopy coverage in the city. The tree canopy is 29%, with 13 square kilometers of tree canopy coverage. Tree canopy is highest in neighborhoods in the-northwestern and central areas of the city. Areas with low amounts of tree canopy coverage include the northeastern and mid-western parts of the city.

Exhibit 3-15. Tree Canopy Coverage in the City of Lakewood

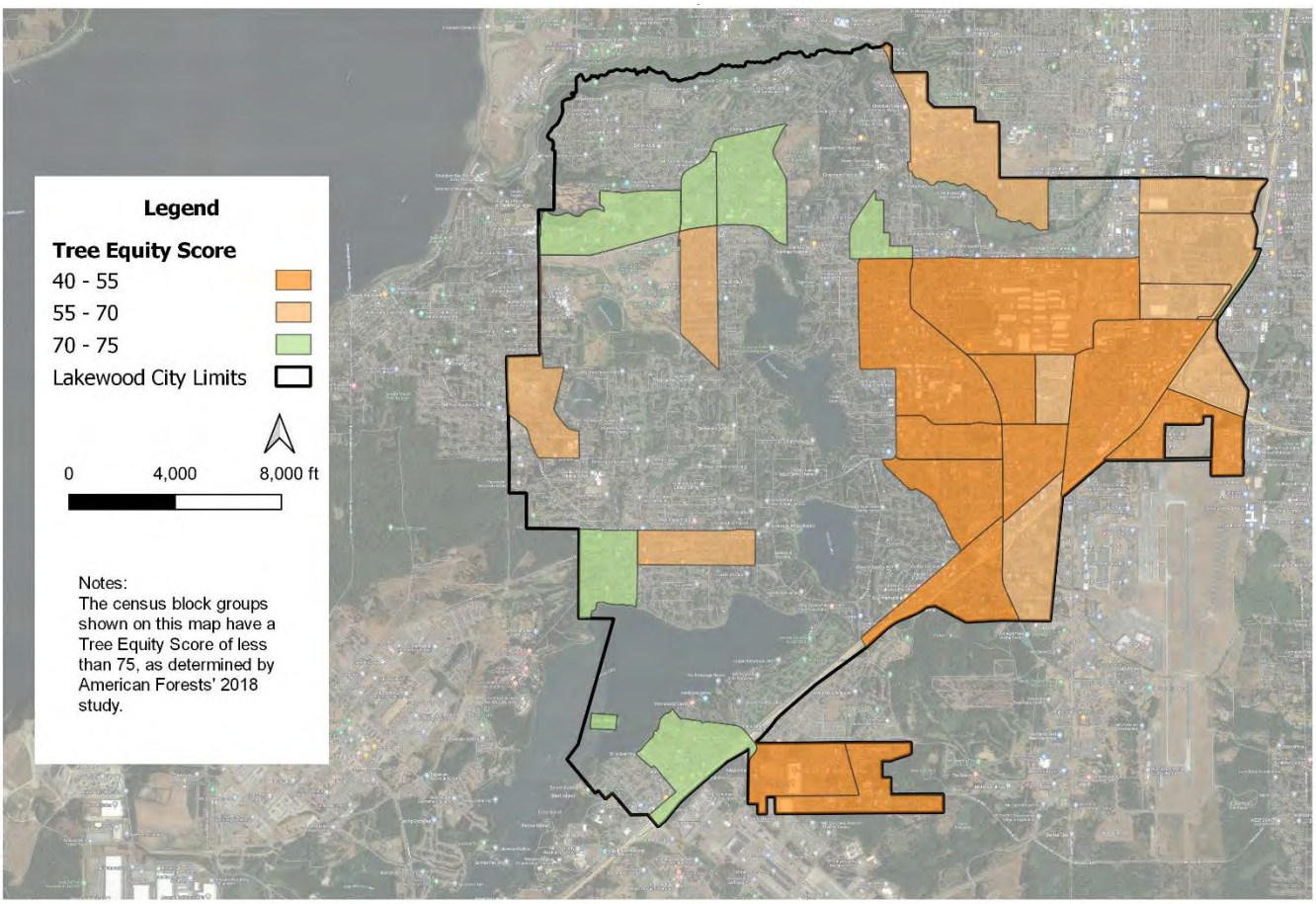


Source: Plan-it GEO, prepared for City of Lakewood 2022

A lack of adequate tree canopy coverage contributes to an increased urban heat island effect, particularly for vulnerable populations. An increase in tree canopy coverage can contribute to carbon sequestration and improve air quality, improve community health and well-being, cool the air, and manage stormwater (MSRC, 2023).

Exhibit 3-16 identifies areas with less tree canopy and a greater share of overburdened communities (lower incomes, unemployment, persons of color) indicates areas with less equity in tree canopy. These areas are largely in the greater developed commercial, industrial, and multifamily areas.

Exhibit 3-16. Tree Equity Score Less than 75, American Forest 2018



Lakewood, WA Tree Preservation Code Update 2022

Source: American Forest, Tree Equity.org, Plan-it Geo, 2022

Floodplain (lakes, wetlands, streams)

Lakewood has several lakes, wetlands, creeks, and streams. Approximately 9% of Lakewood's 12,127 acres, or 1,098 acres, are covered by lakes. In addition, the city has a significant number of creeks and wetlands. Potential related climate change impacts include rising flood waters, which could impact I-5 between Highway 512 and Bridgeport Way. In addition, additional pollutant loading may worsen existing water quality issues in the city's numerous lakes and streams. Furthermore, the city may be impacted by more frequent peak storm events, which potentially increases the likelihood of flooding and the impact of flooding events. (Environmental Science Associates and BERK Consulting, 2023)

Climate change impacts that require relocation or rebuilding (floods, fires) will be more impactful for those with limited resources (Green et al. 2007; Zoraster 2010). Parkland and Midland, Lakewood, Spanaway, and JBLM are home to the highest concentrations of low-income households in Pierce County and areas of high disparity. (Pierce County, 2023).

The Clover Creek watershed is the main watershed in the city limits. In 2019, FEMA updated the Clover Creek 100-year floodplain map, revealing a significant increase in the area impacted by floodwater compared to the previous floodplain map. Rising flood waters from a Clover Creek 100-year flood showed expanded impact to the floodwaters to the city, affecting the Springbrook neighborhood, I-5, and areas within the Hillside and Downtown neighborhoods. See Exhibit 3-6 and Exhibit 3-7.

Impacts

The metrics assessed to understand climate change impacts include the following:

- Actions would prevent or deter statewide, regional, or local efforts to reduce GHG emissions.
- Increase in per capita vehicle miles traveled (VMT).
- Growth concentrated in areas with high exposure to air pollution, noise pollution, or environmental hazards. Increases exposure of vulnerable populations to climate stressors or reduces adaptive capacity to respond.

Impacts Common to All Alternatives

GHG emissions associated with each alternative would likely decline at a per capita level even with planned growth due to the federal, state, and regional regulations. This includes but is not limited to:

- Fuel economy standards.
- Energy codes and standards.
- GHG and VMT reduction goals and new climate elements.
- Land use patterns promoting transit oriented development and infill development.
- Tree canopy protection and enhancement.

Growing consistent with regional growth strategies such as growth targets, land use patterns, multimodal transportation investments, retention of environmental and natural resource lands and other strategies are anticipated to help achieve reductions in regional air pollutant emissions. (Puget Sound Regional Council, 2020)

With transportation and on-road vehicles representing a significant contributor to GHG emissions, a measure of VMT helps measure the alternatives' impact on GHG emission reduction. Exhibit 3-17 shows how VMT compares by alternative. Based on future estimated VMT, the No Action alternative has a higher amount of VMT in the city overall. However, the Action Alternative has a higher amount of VMT in the CBD and Station area, due to the concentration of growth in these areas. However, the remaining area in the city is much lower under the Proposed Alternative compared to the No Action Alternative.

Exhibit 3-17. VMT Comparison by Alternatives

Alternative	Estimated Vehicle Miles Traveled (VMT)			
	Lakewood Overall	CBD (District 1)	Station Area (District 2)	Remaining Lakewood Area (District 3)
No Action Alternative	75,412	11,630	8,539	55,243
Proposed Alternative	74,496	12,339	9,489	52,668
Difference	(916)	709	950	(2,575)
Percentage Difference	-1.2%	6.1%	11.1%	-4.7%

Source: The Transpo Group, 2024

Both alternatives concentrate growth in the Downtown and the Station District Subareas. Both alternatives include a tree canopy goal of 40% and implementation of an Urban Forestry Program and recent tree code amendments.

The Downtown and Station District Subareas and higher density employment and multifamily areas have high or moderately high exposure to adverse air quality or noise. These areas also show a lower tree equity score and more exposure to urban heat islands. Both alternatives would apply the City's tree code and urban forest program and development in these locations, such as housing and mixed uses. Development represent opportunities to integrate green infrastructure and to place transit oriented development with amenities at all income levels. These activities would help the community adapt to climate change and realize greater climate resilience.

Tillicum-Woodbrook Subarea

The Subarea is part of the cumulative consideration of GHG reduction and VMT reduction above. It is a subarea where the population is exposed to air and noise pollution. It in part has a lower tree equity score. The alternatives address the subarea differently and climate adaptation is addressed under each below.

No Action Alternative

The No Action Alternative would retain the existing policies that the City has in place (e.g., land use, transportation, environment planning). Without a change in policies on development, growth, and other environmental considerations, the GHG emissions associated with the alternative would likely decline due to the federal, state, and regional regulations in place. However, the alternative is less consistent with county housing targets by income band and its modeled growth for transportation reflects a 2035 horizon rather than the full planning period. Thus, it does not fully support the regional GHG evaluation in VISION 2050 that showed a reduction with a coordinated regionwide growth strategy.

The No Action Alternative includes the City's recently created Climate element (2023), but additional regulations are needed for the City to achieve the element goals and policies and support regional GHG emission goals.

The No Action Alternative that models the City's 2035 growth targets for housing and jobs, even though lower than 2044 targets, results in higher VMT than the Action Alternative. The No Action Alternative does not implement middle housing in more locations in the city, which is shown to reduce VMT in areas outside of the mixed use areas.

The No Action Alternative includes policies and regulations meant to protect and enhance the city's tree canopy, but it does not implement improved critical area regulations.

Tillicum-Woodbrook Subarea

The No Action Alternative would allow for development consistent with existing plans in proximity to I-5 and American Lake. It would not update the Tillicum-Woodbrook Subarea Plan. It would not create new housing opportunities or civic and infrastructure investments. It would not contribute effectively to the City's climate goals and policies.

Action Alternative

The Action Alternative is expected to encourage growth near the city center, with middle housing densification throughout residential areas, resulting in a potential for a greater reduction of VMT than the No Action Alternative despite modeling greater growth that is consistent with the 2044 growth targets. Changes in multimodal transportation are expected due to densification, leading to a decrease in car usage and a decrease in expected transportation-generated GHGs, one of the main contributors to overall GHGs.

The Action Alternative is expected to result in higher density and more compact urban form, which results in less energy use for heating and cooling buildings, and therefore a reduction in GHG emissions created by the built environment. The Proposed Action includes updated middle housing regulations and critical areas regulations that provide additional habitat and stream protective measures (Washington Department of Commerce, 2023)

Highly effective measures for GHG reduction include:

- Increase tree canopy cover to boost carbon sequestration, reduce heat islands, and improve air quality, prioritizing overburdened communities.
- Increase housing diversity and supply within urban growth areas to reduce greenhouse gas emissions and support environmental justice. Allow middle housing types, such as duplexes, triplexes, and ADUs, on all residential lots.
- Foster higher-intensity land uses in mixed-use urban villages and transit corridors.

The infill development would extend into single-family residential areas and would generally be located away from air quality and noise exposure areas. City regulations for middle housing would limit the form and location of buildings in areas with critical areas. While the middle housing units would densify areas with more tree canopy relative to other areas in the city, the companion tree code that limits tree

removal and requires mitigation along with a more robust urban forestry program and enhanced critical area regulations should avoid impacts.

Tillicum-Woodbrook Subarea

The Subarea Plan would be updated and expanded for this subarea. Policies and strategies are intended to improve the housing and access multimodal transportation strategies. Improved critical area regulations would also apply in the Tillicum-Woodbrook Subarea. These policies and strategies support a higher quality of life despite exposure to air and noise pollution.

Mitigation Measures

Incorporated Plan Features

The Action Alternative includes updated critical area regulations that would set wider stream buffers and recognize other habitats for protection. The Action Alternative would also update middle housing regulations that would allow for moderate densities in single-family areas. This can improve VMT results and contribute to the reduction of GHG emissions.

Regulations and Commitments

- Lakewood Energy and Climate Change Chapter in the Comprehensive Plan.
- The Puget Sound Clean Air Agency Board's regional targets for reducing GHG emissions are 50% below 1990 levels by 2030 and 80% below 1990 levels by 2050.
- The City adopted an urban forestry program to preserve significant trees, promote healthy and safe trees, and expand tree coverage throughout the city. It is working towards a citywide goal of 40% tree canopy coverage by the year 2050.
- Lakewood's critical area and shoreline master program regulations promote conserving and protecting wetlands and riparian areas within the city and surrounding region.

Other Potential Mitigation Measures

Methods to Offset GHG Emissions

City Solar Potential

The city has the rooftop solar potential to reduce GHG emissions by 223,000 MgCO2e on an annual basis. Assuming solar panels receive 75% of the maximum annual sun in the city, this represents an approximate 35% reduction in total annual GHG emissions produced within the city using 2022 GHG emission totals. See Exhibit 3-18. In the city, the existing solar arrays are 57, which represent less than 1% of the total solar potential. Specific locations for potential solar panel placement are shown in Exhibit 3-19.

Exhibit 3-18. City's Total Solar Potential

Carbon Offset Metric Tons	(Property) Count Qualified	KW Median	KW Total	Percent Covered	Percent Qualified
223,314	14,589	11.75	331,290	97.5%	80.3%

Notes: Google's definition of "technical potential" requires solar installation to meet the following criteria:

- Sunlight: every included panel receives at least 75% of the maximum annual sun in the area
- Installation size: Every included roof has a total potential installation size of at least 2kW.
- Space and Obstacles: Includes only areas with roofs that have space to install four adjacent solar panels.

Source: City of Lakewood Energy and Climate Change Chapter, 2021; Google EIE, 2024.

Exhibit 3-19. Concentration of Sunlight on Rooftops in Lakewood

Source: Google EIE, 2024

Carbon Sequestration

To remove carbon emissions, the city analyzed how to improve carbon sequestration, which is the process of utilizing forested areas and tree canopy in designated open space areas, lawns/fields, and wetlands to remove carbon emissions from the atmosphere and store them back into the earth. Wetlands, such as the Fleet Creek Complex, can store a significant amount of carbon.

The city's forested areas and freshwater inland wetlands are protected or preserved through the City's open space policies, its shoreline master program, and its development regulations, including the tree preservation ordinance. However, the City does not yet consider the benefit of carbon sequestration within these resources and does not have an estimate of the amount of carbon removed from the atmosphere through these resources.

A variety of GHG mitigation measures could be implemented to reduce the exposure to residents and work towards goals. The following measures could be applied to reduce GHG emissions:

GHG Emissions Reduction

- Reduce exposure to traffic through the implementation of mitigation strategies, such as reducing VMT, land use buffers, improved urban design, building design strategies, and decking / lids over highways and high-capacity roadways
- Develop and implement strategies to reduce vehicle trips, improve vehicle fuel efficiency, and facilitate rapid adoption of zero-emissions alternative fuel vehicles.
- Apply transit oriented development to include more walkable communities.
- Promote the integration of neighborhood commercial uses in residential areas.
- Coordinate with and support local and regional transit efforts with Pierce County, Sound Transit and WSDOT (Washington Department of Transportation) towards expanding public transit service to improve mobility and reduce reliance on the private automobile.
- Promote walking and bicycling as safe and convenient modes of transportation, improving bicycling, pedestrian, and transit access through support for safe routes and infrastructure investment.
- Work with energy providers (Puget Sound Energy, Lakeview Light & Power, and Tacoma Power) to develop strategies that reduce energy demand and promote energy conservation.
- Increase the amount of locally forested areas and tree canopy in the City's designated open space areas, lawns/fields, and wetlands to increase the removal of carbon emissions from the atmosphere, otherwise known as carbon sequestration.
- Provide incentives to add solar panel capacity on commercial and industrial buildings.
- Promote mixed-use and infill development in the Downtown and other major activity centers, along key commercial corridors and on vacant and underutilized parcels.
- Prioritize the use of green and sustainable development standards and practices in planning, design, construction, and renovation of buildings and infrastructure.
- Ensure that buildings use renewable energy, conservation, and efficiency technologies and practices to reduce greenhouse gas emissions.

- Use urban design to enhance open space and urban tree canopy, and incorporate strategic building placement.
- The City could develop pre-prepared housing plans for ADUs and other small, attached dwellings that minimize footprints and retain tree canopy to the extent feasible.

Adaptation Measures

- Develop a Hazards Management Plan that works toward developing a climate-resilient community.
- Increase green infrastructure to cool stormwater runoff and work to mitigate urban heat island effects. Examples include rain gardens, planter boxes, bioswales, permeable pavements, green streets and alleys, green parking, and green roofs. (U.S. Environmental Protection Agency (EPA), 2024)
- Develop and implement an urban heat resilience strategy that includes land use, urban design, urban greening and tree canopy expansion, and waste heat reduction actions.
- Consider project-specific mitigation measures to limit exposures to emissions sources, such as high-capacity roadways. Land use buffers or building design (e.g., air filtration, thicker sound transmission classes, other) could be included near high-impact areas such as industrial and other nonresidential zones.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to air quality and greenhouse gas emissions are anticipated. Both the No Action Alternative and the Action Alternative would **result in a mitigated less-than-significant GHG impact**. Through mitigation implementation, local and state climate actions, and expected continued regulatory changes, the alternatives may result in lower GHG emissions on a per capita basis compared to existing conditions. The alternatives would not prevent or deter statewide, regional, or local efforts to reduce GHG emissions. While each alternative would generate GHG emissions from growth and development within the city, the benefit of channeling development to targeted areas that might otherwise occur in peripheral areas of the city or region could serve to offset these impacts.

3.2 Land Use Patterns and Policies

3.2.1 Affected Environment

Current Land Use Patterns

Lakewood is a largely single-family residential community. There are sizeable acres used by institutions (schools, fire stations, medical, nursing homes), commercial, industrial/manufacturing, multifamily, recreational, and other uses. See land uses by parcel acres in Exhibit 3-20.

Exhibit 3-20. Current Land Uses on Parcels (2019)

Parcel Uses	Acres	Percent
Single Family Residential	3,988.6	44.0%
Public/Private Institutional & Services	1,002.9	11.1%
Commercial	687.1	7.6%
Industrial/Manufacturing	577.1	6.4%
Multifamily	574.9	6.3%
Recreational	542.8	6.0%
Vacant	540.1	6.0%
Open Space/Environmental	358.7	4.0%
Unknown	234.4	2.6%
Utilities/Transportation	226.4	2.5%
Middle Housing (Duplex, Triplex, Townhouse)	142.0	1.6%
Manufactured Home Park	133.0	1.5%
Manufactured Housing	32.0	0.4%
Military	23.3	0.3%
Sum	**9,063.4**	**100%**

Source: (Pierce County, 2022)

Future Land Use designations and Zoning districts generally match the existing uses as shown in the maps in Chapter 2, Exhibit 2-3 and Exhibit 2-4.

Acres by zone are shared in Exhibit 3-21. Single family residential is encompassed in Residential 1 through 4 zones and equals over 3,755 acres.

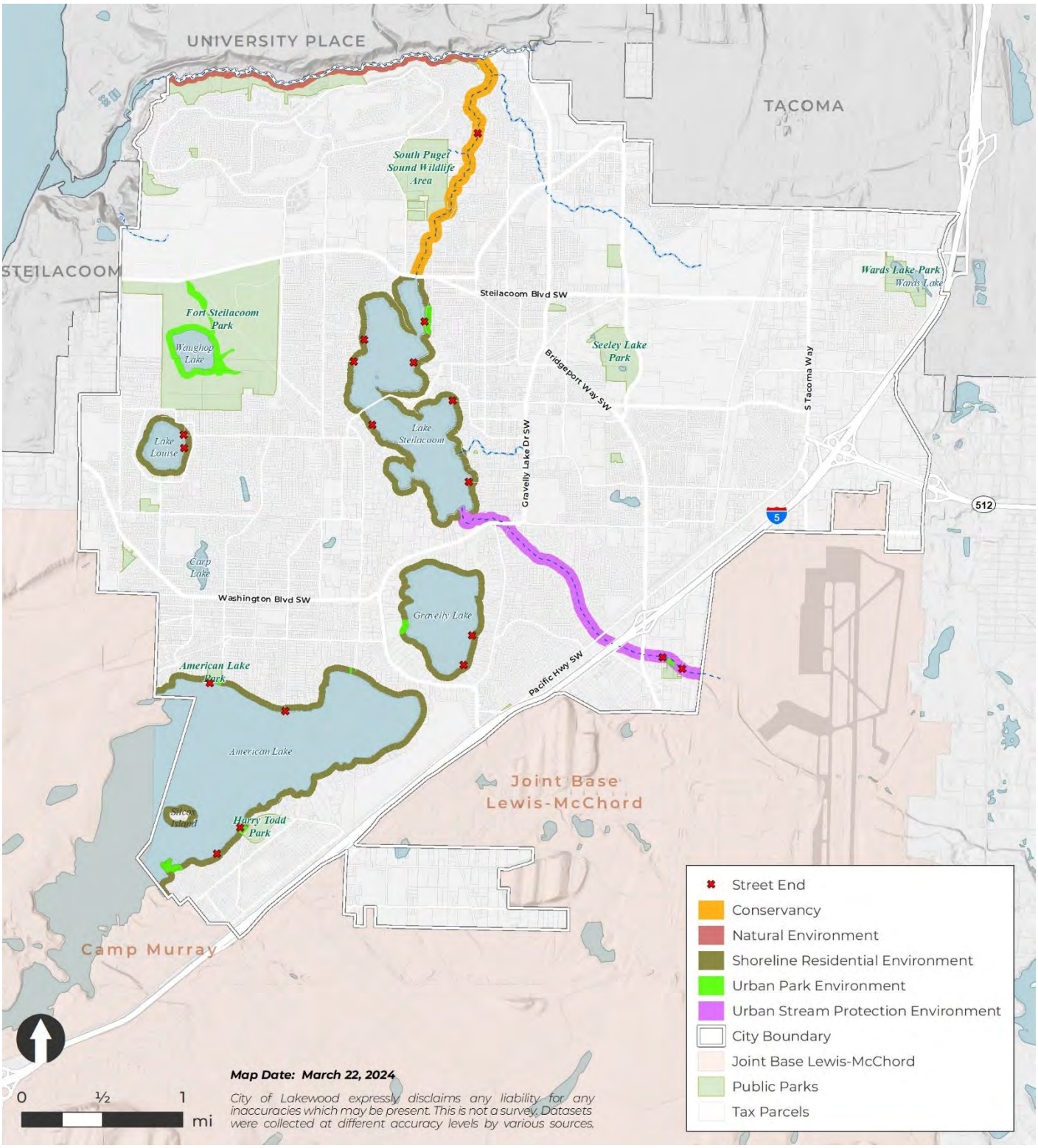
Exhibit 3-21. Zoning Districts – Parcel Acres (2019)

Zones	Gross Acres	Critical Area Acres	Net Acres
Air Corridor 1	262	27	235
Air Corridor 2	196	2	194
Arterial Residential/Commercial	17	0	17
Central Business District	266	1	264
Clear Zone	43	1	42
Commercial 1	57	9	48
Commercial 2	210	6	205
Commercial 3	25	8	17
Industrial 1	250	18	232
Industrial 2	32	9	23
Industrial Business Park	332	59	273
Military Lands	23	-	23
Mixed Residential 1	115	7	108
Mixed Residential 2	157	14	142
Multifamily 1	232	24	208
Multifamily 2	211	25	186
Multifamily 3	154	2	152
Neighborhood Commercial 1	12	-	12
Neighborhood Commercial 2	204	6	198
Open Space & Recreation 1	894	350	544
Open Space & Recreation 2	457	37	421
Public Institutional	717	49	667
Residential 1	402	36	366
Residential 2	543	98	447
Residential 3	2,300	212	2,088
Residential 4	870	36	833
Right Of Way	0	-	0
Transit Oriented Commercial	83	27	55
Grand Total	**9,063**	**1,062**	**8,002**

Source: (Pierce County, 2022)

Lakewood's Shoreline Master Program (SMP) provides a set of shoreline environment designations that function to manage land uses, public access, and environmental protection with policies and regulations. The designations are illustrated on Exhibit 3-22.

Exhibit 3-22. Lakewood Shoreline Environment Designations



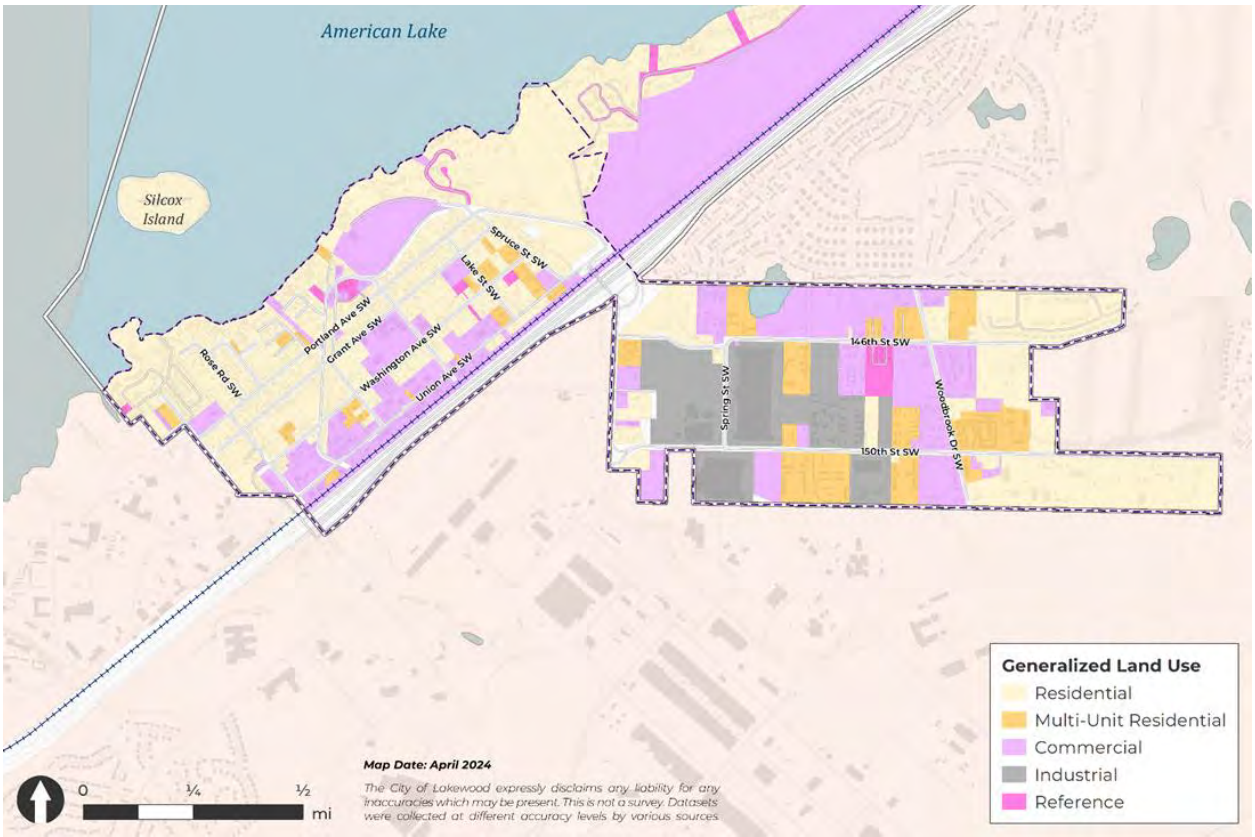
Source: City of Lakewood, 2024.

The City's greatest acres are in Residential zones but its greatest planned density is in the Central Business District (CBD). The City created a subarea plan and planned action ordinance in 2018 to facilitate growth and development in that area which also contains the City's primary commercial center as well as a transit center. In 2023, the City made a small expansion of the CBD.

Tillicum-Woodbrook Subarea

The western portion of Tillicum largely includes single-family residential development with a few multi-unit residential buildings. Commercial development is largely concentrated between Washington Avenue SW and Union Avenue SW, though there are small pockets of commercial uses in the residential areas. There is one park, Harry Todd Park, in the northwest corner of Tillicum. Woodbrook, across I-5 from Tillicum, contains industrial uses, as well as some commercial and multi-unit residential development. The City rezoned many parcels in Woodbrook in the 2010's to reflect the vision of the City that it would be an area for industrial and warehouse uses. The general land uses for the Tillicum-Woodbrook Planning Area are depicted on Exhibit 3-23.

Exhibit 3-23. General Land Use – Tillicum-Woodbrook Planning Area



Source: BERK, 2023; City of Lakewood, 2023.

State, Regional, and Local Plans

Growth Management Act

Comprehensive plans and development regulations within Pierce County must be consistent with the provisions of the GMA. The GMA was adopted in 1990 to address concerns about the impacts of uncoordinated growth on Washington communities and the environment and provides a framework for land use planning and development regulations in the state. The GMA directs coordinated regional and countywide planning, which then informs the locally adopted comprehensive plans and development regulations of individual cities and counties. Key provisions of the GMA include:

- Planning Goals
- Land Designations: Urban, Resource, and Rural Lands
- Consistency with Multicounty Planning Policies (MPPs)
- Buildable Lands Program
- Consistency with Countywide Planning Policies (CPPs)
- Local Comprehensive Planning

The GMA is primarily codified under Chapter 36.70A RCW, although it has been amended and added to in several other parts of the RCW and WAC. In 2021, GMA goals and element requirements regarding housing were amended to require jurisdictions to plan for and accommodate housing that is affordable to all economic segments of the population (see Chapter 4, *Population, Housing, and Employment*). The Washington State Department of Commerce (Commerce) published a summary of amendments to the GMA from 1995 through 2022 (Commerce 2023).

Relationship between the GMA, VISION 2050 and MPPs, CPPs, and local comprehensive plans.
SOURCE: PSRC 2022

Goals

The GMA includes 15 planning goals, in no particular order, to guide the development and adoption of local comprehensive plans and development regulations. See Exhibit 3-24.

Jurisdictions planning under the GMA are required to balance these goals in the development and adoption of their comprehensive plans and development regulations. Counties and cities in most parts of the state—including Central Puget Sound—must prepare comprehensive plans that include objectives, principles, standards, and a future land use map. Required elements of a comprehensive plan include land use, housing, capital facilities plan, utilities, rural (for counties), transportation, economic

development, and parks and recreation. Local governments may include other elements if they wish. Development regulations, such as zoning, must be consistent with the local government's comprehensive plan. Counties and cities must be up to date with the requirements of the GMA, including the periodic update requirements, to be eligible for grants and loans from certain state infrastructure programs.

Exhibit 3-24. GMA Goals

GMA Goal	Text
(1) Urban growth	Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
(2) Reduce sprawl	Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
(3) Transportation	Encourage efficient multi-modal transportation systems that will reduce greenhouse gas emissions and per capita vehicle miles traveled and are based on regional priorities and coordinated with county and city comprehensive plans.
(4) Housing	Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
(5) Economic development	Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.
(6) Property rights	Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.
(7) Permits	Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.
(8) Natural resource industries	Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forestlands and productive agricultural lands and discourage incompatible uses.
(9) Open space and recreation	Retain open space and green space, enhance recreational opportunities, enhance fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.

GMA Goal	Text
(10) Environment	Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
(11) Citizen participation and coordination	Encourage the involvement of citizens in the planning process, including the participation of vulnerable populations and overburdened communities, and ensure coordination between communities and jurisdictions to reconcile conflicts.
(12) Public facilities and services	Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.
(13) Historic preservation	Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.
(14) Climate change and resiliency	Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies under RCW 36.70A.210 and Chapter 47.80 RCW adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.
(15) Shorelines	For shorelines of the state, the goals and policies of the Shoreline Management Act as set forth in RCW 90.58.020 shall be considered an element of the county's or city's comprehensive plan.

SOURCES: RCW 36.70A.020 and RCW 36.70A.480 (1), 2023; Engrossed Second Substitute House Bill 1181, 2023

PSRC develops policies and coordinates decisions about regional growth, transportation, and economic development planning within Pierce, King, Snohomish, and Kitsap counties. VISION 2050 is the long-range growth management, environmental, economic, and transportation strategy for the four-county Puget Sound region. It was adopted by PSRC in October 2020 and is endorsed by more than 100 member cities, counties, ports, state and local transportation agencies, and tribal governments within the region.

VISION 2050 includes the GMA-required MPPs for the King/Pierce/Snohomish Counties and voluntarily applied to Kitsap County. VISION 2050 also includes a regional strategy for accommodating growth through 2050. The MPPs provide direction for more efficient use of public and private investments and inform updates to countywide planning policies and local comprehensive plan updates. VISION 2050 includes 216 MPPs, organized by the topic area goals in Exhibit 3-25.

The Regional Growth Strategy in VISION 2050 calls for focusing new housing, jobs, and development within regional growth centers and near high-capacity transit. The strategy also aims to keep rural areas, farmland, and forests healthy and thriving.

Exhibit 3-25. VISION 2050 Topic Area Goals

Topic Area	VISION 2050 Goal
Regional Collaboration 15 MPPs	The region plans collaboratively for a healthy environment, thriving communities, and opportunities for all.
Regional Growth Strategy 16 MPPs	The region accommodates growth in urban areas, focused in designated centers and near transit stations, to create healthy, equitable, vibrant communities well-served by infrastructure and services. Rural and resource lands continue to be vital parts of the region that retain important cultural, economic, and rural lifestyle opportunities over the long term.
Environment 22 MPPs	The region cares for the natural environment by protecting and restoring natural systems, conserving habitat, improving water quality, and reducing air pollutants. The health of all residents and the economy is connected to the health of the environment. Planning at all levels considers the impacts of land use, development, and transportation on the ecosystem.
Climate Change 12 MPPs	The region substantially reduces emissions of greenhouse gases that contribute to climate change in accordance with the goals of the Puget Sound Clean Air Agency (50% below 1990 levels by 2030 and 80% below 1990 levels by 2050) and prepares for climate change impacts.
Development Patterns 54 MPPs	The region creates healthy, walkable, compact, and equitable transit oriented communities that maintain unique character and local culture, while conserving rural areas and creating and preserving open space and natural areas.
Housing 12 MPPs	The region preserves, improves, and expands its housing stock to provide a range of affordable, accessible, healthy, and safe housing choices to every resident. The region continues to promote fair and equal access to housing for all people.
Economy 23 MPPs	The region has a prospering and sustainable regional economy by supporting businesses and job creation, investing in all people and their health, sustaining environmental quality, and creating great central places, diverse communities, and high quality of life.
Transportation 32 MPPs	The region has a sustainable, equitable, affordable, safe, and efficient multi-modal transportation system, with specific emphasis on an integrated regional transit network that supports the Regional Growth Strategy and promotes vitality of the economy, environment, and health.
Public Services 30 MPPs	The region supports development with adequate public facilities and services in a timely, coordinated, efficient, and cost-effective manner that supports local and regional growth planning objectives.

SOURCE: VISION 2050 (PSRC 2020)

Regional growth centers have been a central strategy of regional planning for decades, although centers have been designated through different procedures depending on when they were first designated. Pierce County has six regional growth centers (RGCs) and three manufacturing industrial centers (M/ICs) designated in VISION 2050, all located within UGAs. One of the designated centers is Lakewood's Downtown. See Exhibit 3-26.

Exhibit 3-26. PSRC Regional Growth Centers in Pierce County

Center	VISION 2050 Center Designation
Tacoma	Regional Growth Center—Metro
Tacoma Mall	Regional Growth Center—Urban
University Place	Regional Growth Center—Urban
Lakewood (Downtown)	Regional Growth Center—Urban
Downtown Puyallup	Regional Growth Center—Urban
Puyallup/South Hill	Regional Growth Center—Urban
Port of Tacoma	Manufacturing Industrial Center—Growth
Frederickson	Manufacturing Industrial Center—Growth
Sumner-Pacific	Manufacturing Industrial Center—Employment

SOURCE: VISION 2050 (PSRC 2020)

VISION 2050 includes updated regional geographies and modified classifications for cities and unincorporated urban areas. HCT communities are a new geography in VISION 2050 compared to VISION 2040. The updated regional geographies are:

- Metropolitan cities
- Core cities
- HCT communities (includes both incorporated and unincorporated areas)
- Cities and towns
- Urban unincorporated areas
- Rural and Natural Resource Lands
- Other Planning Areas: Major military installations and Indian reservation lands

VISION 2050 incorporates a renewed focus on locating growth near current and future HCT facilities and includes a goal for 65% of the region's population growth and 75% of the region's employment growth to be in regional growth centers and within walking distance of HCT.[2]

[2] *High-capacity transit* is defined as existing or planned light rail, commuter rail, ferry, streetcar, and/or bus rapid transit. HCT communities are cities and unincorporated areas that are connected to the regional HCT system. HCT areas and UUAs are planned for annexation or incorporation.

Lakewood is considered a "Core City," one of 16 in the region that have designated regional centers, and that contain "key hubs for the region's long-range multimodal transportation system and are major civic, cultural, and employment centers within their counties. The Regional Growth Strategy envisions a major role for these cities in accommodating growth while providing a significant share of the region's housing."

Major military installations and tribal lands are not subject to the state and regional planning framework—these areas plan differently than local governments, but VISION 2050 recognizes their important roles in the region and their influence on regional growth patterns. Major military installations and tribal lands are both recognized as regional geographies by PSRC. In Pierce County, this includes Joint Base Lewis-McChord (JBLM), Camp Murray, most of the Puyallup Indian Reservation, and portions of the Nisqually Indian Reservation and Muckleshoot Indian Reservation. The Squaxin Island Reservation is located in Mason County, but some tribal natural resource areas are within Pierce County.

Countywide Planning Policies

Cities and counties fully planning under RCW 36.70A.040 must complete a periodic review every 10 years for their entire comprehensive plan and development regulations, including those related to critical areas and natural resource lands.[3] Pierce County and the cities and towns within are fully planning communities under GMA.

The periodic review of the Lakewood Comprehensive Plan and implementing development regulations and any necessary revisions will be undertaken to comply with the updated requirements of the GMA, including the VISION 2050 MPPs and recently amended Pierce County CPPs. The next periodic update of the Comprehensive Plan for Pierce County and the cities and towns within must be completed on or before December 31, 2024. Pierce County and the cities and towns within must be up to date with the requirements of the GMA—including the periodic update requirements—to be eligible for grants and loans from certain state infrastructure programs.

Lakewood's current Comprehensive Plan applies to the year 2035. The Comprehensive Plan was adopted in 1995 with major updates in 2005 and 2015. Individual requests for changes to the Comprehensive Plan are allowed every 2 years during a separate process, known as the Amendment Cycle.

Each city and town in Pierce County adopt a comprehensive plan consistent with the same legislative framework applicable to Pierce County. Consistency with the MPPs and CPPs helps ensure all of these comprehensive plans are compatible.

Military Planning

Lakewood is abutted on the east and south by military land uses. The U.S. Army founded Fort Lewis in 1917 and McChord Air Force Base two decades later. Today, Joint Base Lewis-McChord hosts roughly 50,000 military service members and civilian employees and is the 3rd largest employer in the State of

[3] In 2022, approval of House Bill 1241 by the Washington State Legislature changed the periodic update cycle occurrence from 8 years to 10 years after the 2024–2027 update cycle (RCW 26.70A.130(5)).

Washington. Most major entrances into JBLM are through Lakewood, and many of the military personnel and their families live and shop in the city. The presence of the military has had a noticeable impact on Lakewood's demographics and, consequently, its economy and land use patterns.

Tillicum-Woodbrook Subarea

The Tillicum Neighborhood Plan (TNP) was originally adopted in 2011. In 2022, the City of Lakewood produced a status report of the Tillicum Neighborhood Plan's implementation and adopted an Addendum to the TNP explaining progress to date to make the Plan's vision a reality. While much has been accomplished to realize the visions and priorities discussed in the original Tillicum Neighborhood Plan, many of the plan's Action Items are not yet complete.

In September 2022, the City announced that the Tillicum Neighborhood Plan would be replaced with a Tillicum-Woodbrook Subarea Plan (TWSP) as part of the 2024 Comprehensive Plan Periodic Review (24CPPR) process. While the 2011 Plan boundaries were reserved to the Tillicum neighborhood north of I-5, the 2024 update incorporated the Woodbrook area south of I-5 due to the historical community connection between the two areas.

3.2.2 Impacts

Thresholds of significance utilized in this land use pattern impact analysis include:

- Change to land use patterns or development intensities that preclude reasonable transitions between areas of less intensive zoning and more intensive zoning.
- Differences in activity levels at boundaries of uses likely to result in incompatibilities.
- Impacts to designated shorelines.

According to WAC 365-196-210(8), consistency means "that no feature of a plan or regulation is incompatible with any other feature of a plan or regulation. Consistency is indicative of a capacity for orderly integration or operation with other elements in a system." For the purposes of this analysis, consistency means that the alternative can occur and be implemented together with the selected goal or policy without contradiction. In this section, a finding of inconsistency or contradiction with plans and policies would be considered to result in a significant adverse impact.

Impacts Common to All Alternatives

Land Use Patterns/Development Intensities

The alternatives continue zoning that emphasizes residential uses. Both alternatives continue to emphasize housing in mixed use and multifamily zones such as in Downtown and the Station District. Using the density allowances, form-based code, and master planning approach, properties could redevelop and replace existing dwellings. There is an opportunity to increase the affordable housing available in the subareas, and the City may condition development to meet the vision of the plan as well as proposed Action Alternative policies that are intended to provide housing affordable to all incomes and to mitigate displacement.

Under either alternative, it would be appropriate to amend the Downtown Planned Action Ordinance to add the parcels rezoned in 2023 to CBD on the south along Main Street SW[4] towards the high school, since they are in the City's multifamily tax exemption area, and property owners intend to develop housing similar to that identified for the Downtown Plan. The inclusion of the properties make for a logical boundary and cohesive land use pattern. They contribute to the potential for mixed use and affordable housing that were contemplated in the Downtown Plan.

Outside of the Downtown and Station District Subareas, the No Action Alternative allows fewer housing types in Residential zones. The Action Alternative also emphasizes a low density residential pattern, but with more middle housing opportunities across R1-R4 zones, and in the "Transit" overlay, which is about 420 acres and has less than 10% of the total Residential zones' capacity. The Action Alternative will comply with recent state legislation (HB 1337, HB 1110) that provides development and design standards that treat accessory dwelling units and other middle housing similar to single family dwellings. See Exhibit 3-27.

Exhibit 3-27. Zone Capacity by Alternative

Zone	No Action Capacity	Action Capacity	Difference
ARC	127	151	24
CBD	2,590	3,580	990
MF1	1,181	1,294	113
MF2	1,514	1,602	88
MF3	1,131	1,314	183
MR1	117	760	643
MR2	532	1,523	991
NC1	54	18	-36
NC2	421	477	56
R1	45	306	261
R2	148	570	422
R2T		16	16
R3	850	3,431	2581
R3T		302	302
R4	287	1,148	861
R4T		218	218
TOC	1,283	779	-504
Total in Residential / Mixed Use Zones	**10,280**	**17,488**	**7,209**
Housing in Commercial / Industrial Zones	-38	-38	0
Total Residential and Commercial Zones	**10,242**	**17, 450**	**7,209**

Source: BERK, 2024.

[4] See: https://cityoflakewood.us/wp-content/uploads/2022/09/092122-23CPAs-PlComm-Staff-Report.pdf.

Activity Levels

Higher activity levels by population and jobs can create more economic activity in the community and support goals for prosperity. Activity levels created by population and jobs including demand for services and infrastructure would likely vary under the alternative based on planned growth.

Both alternatives allow for housing and job growth capacity that more than meet the 2044 growth targets. During the 20-year planning period, which does not assume buildout, modeled growth for the Action Alternative is slightly higher than the No Action Alternative. See Exhibit 3-28.

Exhibit 3-28. Targets, Capacity, Modeled Growth by Alternative

	Jobs	Housing
2020	29,872	26,999
Growth Target 2020-2044	9,863	9,378
No Action Growth Modeled 2020-2035	9,287 (94% of Target)	7,441 (79% of Target)
No Action Capacity	12,212	10,242
No Action Meets 2044 Targets?	Yes, total	Yes, total, not affordability
Proposed Action Capacity	15,238	17,488
Proposed Action Meets 2044 Targets?	Yes, total	Yes, total + affordability
Proposed Action Growth Modeled 2020-2044	9,863	9,378

Source: Pierce County, 2022. BERK, 2024.

Shorelines

Under all alternatives, no changes to the shoreline environment designations would be made. The City is reviewing whether any updates to SMP are required in 2024 to be consistent with the required critical areas updates; otherwise, the City would address the shorelines under the next SMP periodic update in 2029.

The Action Alternative assumes some middle housing in shoreline areas where the housing types are allowed in the SMP, but likely lesser units in these areas due to the presence of either critical areas, or narrower roads where on-street parking is not available. See Exhibit 2-9. For more information on parking impacts, see Chapter3.4. Transportation and Parking.

Policy Evaluation

The alternatives are largely consistent with GMA goals and VISION 2050 goals and multi-county planning policies. The No Action Alternative is less consistent with goals and policies on providing for a range of affordable housing choices whereas the Action Alternative provides updated policies and zoning codes to increase housing types to meet targets for each affordability bands. The Action Alternative provides updated Natural Environment policies and codes and reinforces Climate mitigation and resilience. Even though modeled growth (transportation, and other infrastructure) for the Action Alternative matches

the 2044 growth targets and the No Action Alternative is modeled at a lower growth level to originally meet a 2035 horizon, the Proposed Action produces less vehicle miles traveled (VMT). See Exhibit 3-29.

Exhibit 3-29. Growth Management Act and VISION 2050 Goal Consistency

GMA Goal	VISION 2050 Goals	No Action	Action Alternative	Discussion
(1) Urban growth	Regional Growth Strategy 16 MPPs	√	√+	Both alternatives focus growth in urban areas, including in the Downtown Center and Station District. The Action Alternative allows middle housing in more locations and advances build out of the City's subareas near existing or planned transit resources.
(2) Reduce sprawl	Development Patterns 54 MPPs	√	√	Both alternatives focus growth in urban areas, and alternatives have capacity for growth targets, consistent with Countywide Planning Policies and VISION 2050, which can help avoid rural sprawl.
(3) Transportation	Transportation 32 MPPs	√	√+	Both alternatives increase the demand for multimodal transportation. The Proposed Action, even with higher modeled growth, produces less vehicle miles traveled (VMT) due to the focus of growth in the Downtown and Station District Subareas as well as the middle housing opportunities.
(4) Housing	Housing 12 MPPs	√-	√+	The Proposed Action includes an updated Housing Element that meets newer state laws for affordable housing targets, removal of barriers to housing, and addition of new housing types at moderate/middle densities. The No Action Alternative does not meet affordable housing bands.
(5) Economic development	Economy 23 MPPs	√	√	Both alternatives allow for job growth and capacity above targets.
(6) Property rights		√	√	Both alternatives provide for a reasonable use of properties with allowances for residential, commercial, or institutional uses.
(7) Permits		√	√+	Both alternatives provide for policies and codes meant to facilitate permits that meet the Comprehensive Plan. Code changes are proposed under the Action Alternative to allow for greater housing types, as well as remove barriers to housing, and to address some critical area regulations.
(8) Natural resource industries		√	√	See (2). By providing growth capacity to meet targets consistent with Countywide Planning Policies and VISION 2050 the rural and resource lands would be formatted.

GMA Goal	VISION 2050 Goals	No Action	Action Alternative	Discussion
(9) Open space and recreation		√	√	Both alternatives provide a Parks Element and protect critical areas that are protected and provide open space.
(10) Environment	Environment 22 MPPs	√-	√+	Both alternatives provide for critical area regulations, but the Action alternative provides proposed regulatory edits based on a gap and opportunity analysis. See Exhibit 2-12.
(11) Citizen participation & coordination		√	√+	The No Action Comprehensive Plan was based on community participation and coordination. More recently, the City has conducted an extensive public participation program on housing, climate change, and the Tillicum Woodbrook Subarea Plan.
(12) Public facilities and services	Public Services 30 MPPs	√	√	Both Alternatives will increase demand for public services with growth, with the Action alternative modeled to meet growth targets by 2044 but the No Action Alternative is modeled at growth to the year 2035 and would have slightly less demand.
(13) Historic preservation		√	√	Both alternatives including historic preservation and cultural resources protection policies and codes.
(14) Climate change and resiliency	Climate Change 12 MPPs	√	√+	Both alternatives include climate mitigation and resilience policies with the Proposed Alternative modifying the growth strategy and reducing VMT. The Action Alternative further addresses GHG mitigation strategies through the land use and zoning amendments.
(15) Shorelines		√	√	Both alternatives maintain Lakewood's Shoreline Master Program.
	Regional Collaboration 15 MPPs	√-	√+	The Action Alternative provides updated climate change policies and critical areas regulations that are meant to address a healthy environment, and more housing opportunities for all persons at all income levels.

Legend: √- lesser consistency | **√** general consistency | **√+** greater consistency

Source: RCW 36.70A.020 and RCW 36.70A.480 (1).

No Action Alternative

The No Action Alternative maintains the current planned land use patterns and development intensities which separate single family and multifamily units, with different design standards. Rather than allowing gentler middle housing densities, the differences in activity levels and scales of development would remain in the policies and code.

The No Action Alternative provides capacity that exceeds total growth targets, but growth is modeled consistent with past plans to the year 2035, which is slightly lower than the Action Alternative, and thus could have slightly less activity levels.

No changes are proposed to designated shorelines under the No Action Alternative. There would be no changes made to address more recent State rules on critical areas and responding to gaps and opportunities in critical areas regulations.

Tillicum-Woodbrook Subarea

The Tillicum Subarea Plan created in 2011 would be retained without addressing the gaps in implementation identified in 2022 in Ordinance 772 such as additional housing types, infrastructure investments, and park and community facility investments.

Action Alternative

The Action Alternative offers capacity for housing and jobs that meets growth targets, including growth targets by affordable housing band. It provides a greater range of housing types in the Downtown and Station District Subareas and in residential areas that offer more moderate density and ownership housing choices. It allows for greater density along transit corridors and in the Downtown and Station District Subareas. That allows for a reduced VMT.

Rather than largely single family areas, there would be instead “lower density zones” allowing for gentle and moderate density with accessory dwelling units, townhouses, and small attached apartments. The Action Alternative would include development regulations treating accessory dwelling units and middle housing similar to single family in terms of design and development regulations. Reasonable transitions between areas of differing density are anticipated with similar design and development regulations. In some areas with narrower roadways, parking standards would not be reduced for middle housing otherwise required by state legislation. See Section 3.4 for additional information.

Under the Action Alternative, the potential residential capacity in the TOC (Transit-Oriented Commercial) zone in the Station District Subarea is reduced due to non-residential uses currently in the “permit pipeline.” By increasing the TOC zone density limit from 54 to 80 units per acre and other land use zone capacities, the City can provide capacity for housing in the Station District matching the Planned Action level of growth for 2035. The City may wish to apply similar form-based zone standards in the TOC zone that are in the Downtown Subarea code (LMC Title 18B).

No impacts to designated shorelines are anticipated since the Shoreline Master Program would be retained. In addition, it is anticipated that in the shoreline jurisdiction where there may be critical areas, less middle housing is anticipated. See Exhibit 2-9.

Tillicum-Woodbrook Subarea

The Action Alternative includes an updated Tillicum-Woodbrook Subarea that responds to the 2022 plan audit and provides a cohesive plan for an expanded subarea that includes acreage on both sides of I-5 with the incorporation of the Woodbrook neighborhood. The TWSP goals and policies emphasize:

- Investing in unique landmarks, education, and library services.

- Increasing the capacity of the community to advocate for community needs.
- Diversifying housing options.in the community.
- Improving connectivity and availability of multiple modes of travel.
- Increasing economic development opportunities.
- Protecting the natural environment and reducing exposure to air pollution and improving resilience to climate change.

3.2.3 Mitigation Measures

Incorporated Plan Features

The Action Alternative updates the Comprehensive Plan for greater consistency with the 2044 job and housing growth targets, including affordable housing targets. It refreshes policies to be consistent with a plan audit meant to meet recent GMA updates as well as create a more streamlined and up to date document. Development regulation amendments would be implemented to meet recent legislative requirements for accessory dwelling units and middle housing. In addition, critical area regulations would be amended to meet the latest State guidance and the urban conditions in Lakewood.

Regulations and Commitments

The City provides regulations of land uses, and development standards for consistent compatible development. In Downtown and the Station District a form-based code applies:

- 18A Land Use and Development Code
- 18B Downtown Development Code
- 18C Station District Development Code

Other Potential Mitigation Measures

The City intends to amend the Downtown Planned Action Ordinance (PAO) to add the parcels rezoned in 2023.[5] The inclusion of the properties make for a logical boundary and cohesive land use pattern.

3.2.4 Significant Unavoidable Adverse Impacts

Under both alternatives, additional growth and development will occur, resulting in increased land use intensity. This transition is unavoidable, but it is not considered significant or adverse within an urban area where growth is focused under CPPs and VISION 2050. Most of the City's planned job and much of the planned housing growth is in Downtown, a designated regional urban growth center. Other growth is planned in mixed use and multifamily zones such as in the Station District. The Action Alternative's

[5] See: https://cityoflakewood.us/wp-content/uploads/2022/09/092122-23CPAs-PlComm-Staff-Report.pdf.

inclusion of middle housing in historically single family areas is accompanied by development and design standards similar to those governing single family development.

Future growth is likely to create temporary or localized land use compatibility issues as development occurs. The potential impacts related to these changes may differ in intensity and location under each alternative; however, with existing and new development regulations, zoning requirements, and design guidelines, no significant adverse impacts are anticipated.

3.3 Housing

3.3.1 Affected Environment

Housing Policy Framework

Housing in Lakewood is influenced by the current policy and regulatory framework, including the Washington State Growth Management Act (GMA), Puget Sound Regional Council (PSRC) VISION 2050, Countywide Planning Policies (CPPs), and Lakewood's plans and regulations per Section 3.2.

The GMA includes a goal promoting housing variety and affordability:

> *(4) Housing. Plan for and accommodate housing affordable to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.*

The GMA also requires a Comprehensive Plan housing element. House Bill (HB) 1220 added requirements for the housing element. Lakewood and other jurisdictions planning under the GMA are now required to:

- Include a statement of goals, policies, objectives, and provisions for "middle housing" or moderate-density housing (for example, duplexes, triplexes, and townhomes)
- Identify policies that result in racially disparate impacts, displacement, and exclusion in housing, and implement policies that address and begin to undo these impacts.
- Allow permanent supportive housing, transitional housing, emergency housing, and emergency shelters with limited restrictions.
- Plan for and accommodate housing affordable to all income bands. The City must determine whether zoning and available land can accommodate 2044 housing growth targets for all income levels, adjust accordingly, and reduce barriers to housing production and affordability.

Pierce County adopted housing targets in 2023, including the target for the Lakewood. See Exhibit 3-30.

Exhibit 3-30. Housing Targets by Area Median Income (AMI)

Income	Projected Housing Need
0-30% Non-PSH	1,212
0-30% PSH	1,637
>30-50%	1,739
>50-80%	1,375
>80-100%	592
>100-120%	536
>120%	2,287
Total	**9,378**

PSH – Permanent Supportive Housing
Source: Pierce County, 2023.

Lakewood completed a Housing Needs Assessment and an evaluation of Racially Disparate Impacts in 2023 per a state grant intended to address HB 1220 requirements.

Middle Housing Units and Accessory Dwelling Units

Other recent changes to state housing requirements include House Bill 1110 and House Bill 1337 to expand housing types allowed in single-family areas. See a description of requirements for Lakewood in Exhibit 2-7.

HB 1110 passed in 2023 with the intent to increase middle housing in areas traditionally dedicated to single-family detached housing and address regional housing challenges. HB 1110 also dictates that standards for middle housing, such as permit processes and development regulations, may not be more restrictive than those for single-family homes. Two middle housing units would be allowed per lot, or four units per lot within a quarter mile of a frequent transit route.

Key provisions of HB 1110 include:

- Middle housing regulations must be same as for single family
- Design review must be administrative
- Limits to SEPA and appeals
- Cannot require parking if within 1/2 mile walk of a major transit stop, except through a professional transportation and land use evaluation as noted in Chapter 2 and evaluated in Section 3.4.
- Exceptions for critical areas

An alternative approach to middle housing is allowed where such units are allowed on at least 75% of single family lots.

25% excluded lots may include:

- Risk of displacement areas
- Areas with lack of infrastructure
- Critical areas, buffers or areas subject to sea level rise, flooding, wildfires or hazards

25% excluded lots must not:

- Result in racially disparate impacts
- Be within 1/2 mile of major transit stop
- Include areas with historic racial covenants

HB 1337 also passed in 2023 with the intent to expand housing units through accessory dwelling units (ADUs). HB 1337 requires allowing 2 accessory dwelling units in all single-family zoning districts. Some limitations can be placed where there are critical areas or a lack of sewer facilities. Cities need to allow 2 accessory dwelling units in all single-family zoning districts, and address development standards as follows:

- Must allow detached units.
- Must allow at least 1,000 SF size of units.

- Roof height allowed must be at least 24 feet.
- Setbacks, etc., must not be more restrictive than for principal residence.
- May not require street improvements.
- Impact fees limited to 50% of the principal unit.
- May not require owner occupancy.
- Must allow sale as condominiums.

In terms of the current use allowances for ADUs, Lakewood allows them in all zones allowing single family dwellings except in the Arterial Residential/Commercial (ARC) zone. The ARC zone allows for all types of middle housing.

The Residential 1 to Residential 4 zones do not allow for middle housing, though they allow ADUs. In some zones middle housing is allowed but not with the same permit types, e.g., R4, MR1, and MR2 zones. Per 18B.200.220, in the CBD zone, detached single-family dwellings, duplexes and triplexes are prohibited except along one street in the southeast called the Low-Impact Mixed-Use Roads District. See Exhibit 3-31.

Exhibit 3-31. Housing Types Allowed in Different Zones, LMC 18A.40.110

Residential Uses	R1	R2	R3	R4	MR1	MR2	MF1	MF 2	MF 3	ARC	NC1	NC 2	TOC	CBD
Accessory dwelling unit	P	P	P	P	P	P	P	P	–	–	–	–	P	–
Cottage housing	P	P	P	P	–	–	–	–	–	–	–	–	–	–
Detached single-family	P	P	P	P	P	P	–	–	–	P	–	–	–	–
Two-family residential	–	–	–	C	P	P	P	–	–	P	P	P	–	–
Three-family residential	–	–	–	–	C	C	P	–	–	P	P	P	–	–
Multifamily, four + units	–	–	–	–	–	–	P	P	P	P	P	P	P	P
Mixed use	–	–	–	–	–	–	–	–	–	–	P	P	P	P

P: Permitted Use C: Conditional Use "–": Not allowed

[ ] Zones allowing single family dwelling units and that do not allow either ADUs or Middle Housing that could be amended to meet HB 1110 and HB 1337.

[ ] Zones need to allow middle housing with a similar permit type and standards.

[ ] The CBD zone is not dedicated to single-family dwellings. Single family, duplex, and triplex homes are also not allowed except in the Low-Impact Mixed-Use Roads District. In the Low-Impact Mixed-Use Roads District the City could review and amend regulations as needed to address middle housing.

The City has provisions that address HB 1337 parameters such as allowing sizes of 1,000 square feet, and both detached and attached units. The ADU height, setbacks, and design are to match those for the single family homes. Parking is required except in proximity to transit routes. Ownership is not referenced in regulations.

LMC 18A.40.110 (B)1. Accessory dwelling units (ADUs) are permitted when added to, created within, or detached from a principal dwelling unit subject to the following restrictions:

a. One (1) ADU shall be allowed as an accessory use in conjunction with any detached single-family structure, duplex, triplex, townhome, or other housing unit. ADUs shall not be included in the density calculations. A lot shall contain no more than one (1) ADU.

b. An ADU may be established by creating the unit within or in addition to the new or existing principal dwelling, or as a detached unit from the principal dwelling.

c. The ADU, as well as the main dwelling unit, must meet all applicable setbacks, lot coverage, and building height requirements.

d. The size of an ADU contained within or attached to an existing single-family structure shall be limited by the existing structure's applicable zoning requirements. An attached ADU incorporated into a single-family house shall be limited to one thousand (1,000) square feet, excluding garage area. The size of a living space of a detached ADU shall be a maximum of one thousand (1,000) square feet excluding garage.

e. An ADU shall be designed to maintain the appearance of the principal dwelling as a single-family residence.

f. Wherever practicable, a principal dwelling shall have one (1) entrance on the front, with additional entrances permitted on the side and rear. On corner lots, it is permissible to locate the entry door to the accessory dwelling unit on a street side of the structure other than the street side with the entry door for the principal dwelling unit. The entrance to an attached accessory dwelling unit may be on the front of the house only if (i) it is located in such a manner as to be clearly secondary to the main entrance to the principal dwelling unit; or (ii) it is screened from the street.

g. The design of an attached ADU, including the facade, roof pitch and siding, shall be complementary to the principal dwelling unit, so as not to be obvious from the outside appearance that it is a separate unit from the principal dwelling unit.

h. A minimum of one (1) off-street parking space shall be required for the ADU, in addition to the off-street parking required for the principal dwelling, pursuant to LMC 18A.80.030(F). Such parking shall consist of a driveway, carport, garage, or a combination thereof, located on the lot they are intended to serve.

i. For lots located within one-quarter (1/4) mile of a Pierce Transit bus route, the Sound Transit Lakewood Station, or other major transit stop, and also zoned R1, R2, R3, R4, MR1, MR2, MF1, MF2, or TOC, off-street parking may not be required provided there is adequate street capacity, and there is curb, gutter, and sidewalk, constructed to City standards, adjoining the lot where an ADU is proposed. Parking may be required if the ADU is in an area with a lack of access to street parking capacity, physical space impediments, or other reasons to support that on-street parking is infeasible for the ADU.

j. Any legally constructed accessory building existing prior to the effective date of the ordinance codified in this title may be converted to an accessory dwelling unit, provided the living area created within the structure does not exceed one thousand (1,000) square feet, excluding garage area.

k. Where the residential accessory building is detached from an existing single-family structure, the building height shall be limited to twenty-four (24) feet.

l. If a structure containing an ADU was created without a building permit that was finalized, the City shall require a building inspection to determine if the structure is sound, will not pose a hazard to people or property, and meets the requirements of this section and building code.
The ADU application fee will cover the building inspection of the ADU.

Under state laws passed in 2019 (RCW 35.21.689) and 2021 (HB 1220), the City must allow for permanent supportive housing (PSH) wherever residential dwellings or hotels are allowed.

- A city shall not prohibit transitional housing or permanent supportive housing in any zones in which residential dwelling units or hotels are allowed.
- A city shall not prohibit indoor emergency shelters and indoor emergency housing in any zones in which hotels are allowed, except in such cities that have adopted an ordinance authorizing indoor emergency shelters and indoor emergency housing in a majority of zones within a one-mile proximity to transit.
- Reasonable occupancy, spacing, and intensity of use requirements may be imposed by ordinance on permanent supportive housing, transitional housing, indoor emergency housing, and indoor emergency shelters to protect public health and safety.

Lakewood allows a wide range of special housing needs. See Exhibit 3-32. In all zones allowing hotels, there are allowances for permanent supportive housing and transitional housing. Emergency housing and emergency shelters are allowed where hotels are allowed.

Exhibit 3-32. Special Housing Needs (LMC 18A.40.120)

Description(s)	R1, R2, R3, R4	MR1, MR2	MF1, MF2, MF3	ARC, NC1, NC2	TOC, CBD	C1, C2, C3	PI
Assisted Living Facility	–	C	P	P	P	P	–
Confidential Shelter	P	P	P	P	P	–	P
Continuing Care Retirement Community	–	C	P	P	P	P	–
Emergency Housing	–	–	–	–	P	P	–
Emergency Shelter	–	–	–	–	P	P	–
Enhanced Services Facility	–	–	–	C	C	C*	–
Hospice Care Center	C	C	P	–	–	–	–
Nursing Home	–	C	P	P	P	P	–
Permanent Supportive Housing	P	P	P	P	P	P	C
Rapid Re-Housing	P	P	P	P	P	–	C
Transitional Housing	P	P	P	P	P	P	C
Type 1 Group Home, adult family home	P	P	P	P	P	–	C
Type 2 Group Home	P	P	P	P	P	–	C

Description(s)	R1, R2, R3, R4	MR1, MR2	MF1, MF2, MF3	ARC, NC1, NC2	TOC, CBD	C1, C2, C3	PI
Type 3 Group Home	–	C	C	C	C	–	C
Type 4 Group Home	–	–	–	–	–	C**	–
Type 5 Group Home	–	–	–	C***	C	C*	–
Hotels and Motels					P	C/P****	
Residential Uses LMC 18A.40.110	Y	Y	Y	Y	Y	N	N

P: Permitted Use C: Conditional Use "–": Not allowed | Y = Yes see 18A.40.110 for permit types
Notes: *C2 zone only | **C1 and C2 zones only | ***NC2 zone only | ***C1=C and C2 or C3 = P

The Downtown and Station District have their own form-based codes in Titles 18B and 18C, respectively. Some reconciliation between 18A.40.120 Special Housing Needs and these titles are needed:

- **Downtown:** Emergency and permanent supportive housing is allowed in Downtown in LMC 18A.40.120, Special Needs Housing. Group Homes 4 and 5 are prohibited in the Downtown regulations. but LMC 18A.40.120 indicates Group Home 5 (for secure community transition facilities) is allowed by Conditional Use Permit in the CBD zone. This difference should be addressed in housekeeping code amendments.
- **Station District:** LMC 18A.40.120, Special Needs Housing: Emergency housing is allowed in the TOC and C1and C2 zones in the subarea. Permanent supportive housing is allowed in all residential, multifamily, commercial and mixed use zones in the study area, excluding the Air Corridor 1. Group home types 4 and 5 are prohibited in LMC 18C.200.220 in the C1 zone but are allowed by Conditional Use Permit in LMC 18A.40.120. Amendments to reconcile the conflict should be addressed.

Permanent Supportive and Emergency Housing Definitions (RCW 36.70A.030)

(14) "Emergency housing" means temporary indoor accommodations for individuals or families who are homeless or at imminent risk of becoming homeless that is intended to address the basic health, food, clothing, and personal hygiene needs of individuals or families. Emergency housing may or may not require occupants to enter into a lease or an occupancy agreement.

(15) "Emergency shelter" means a facility that provides a temporary shelter for individuals or families who are currently homeless. Emergency shelter may not require occupants to enter into a lease or an occupancy agreement. Emergency shelter facilities may include day and warming centers that do not provide overnight accommodations.

(31) "Permanent supportive housing" is subsidized, leased housing with no limit on length of stay that prioritizes people who need comprehensive support services to retain tenancy and utilizes admissions practices designed to use lower barriers to entry than would be typical for other subsidized or unsubsidized rental housing, especially related to rental history, criminal history, and personal behaviors. Permanent supportive housing is paired with on-site or off-site voluntary services designed to support a person living with a complex and disabling behavioral health or physical health condition who was experiencing homelessness or was at imminent risk of homelessness prior to moving into housing to retain their housing and be a successful tenant in a

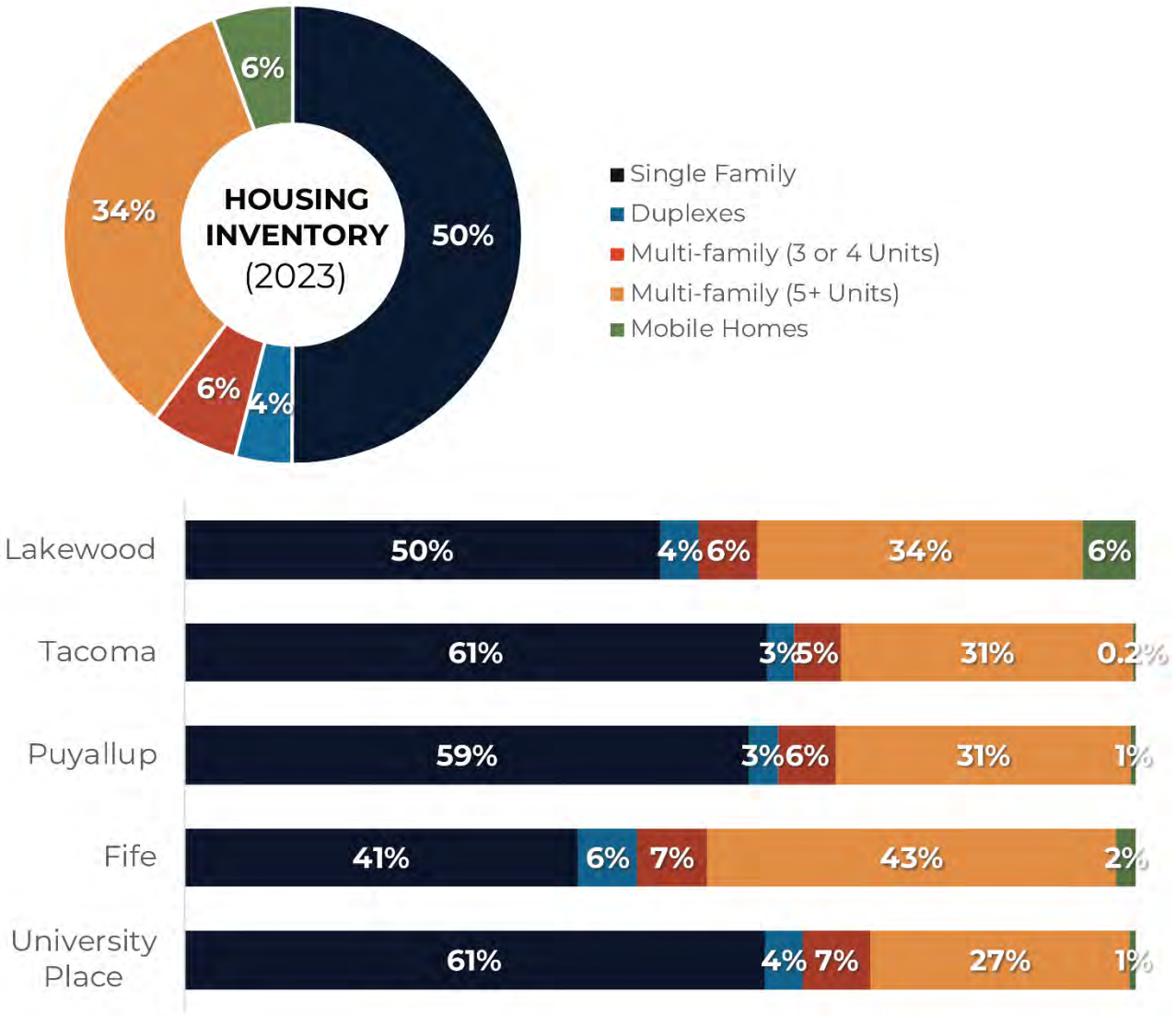
housing arrangement, improve the resident's health status, and connect the resident of the housing with community-based health care, treatment, or employment services. Permanent supportive housing is subject to all of the rights and responsibilities defined in chapter 59.18 RCW.

Citywide Housing Stock

Lakewood possesses a diverse housing stock with a wide range of unit types and prices, most of which were constructed prior to incorporation in 1996. The inventory includes large residential estate properties, single-family homes of all sizes, some townhouses, semi-attached houses, low- and mid-rise apartments, and high-density apartments. See Exhibit 3-33 and Exhibit 3-34.

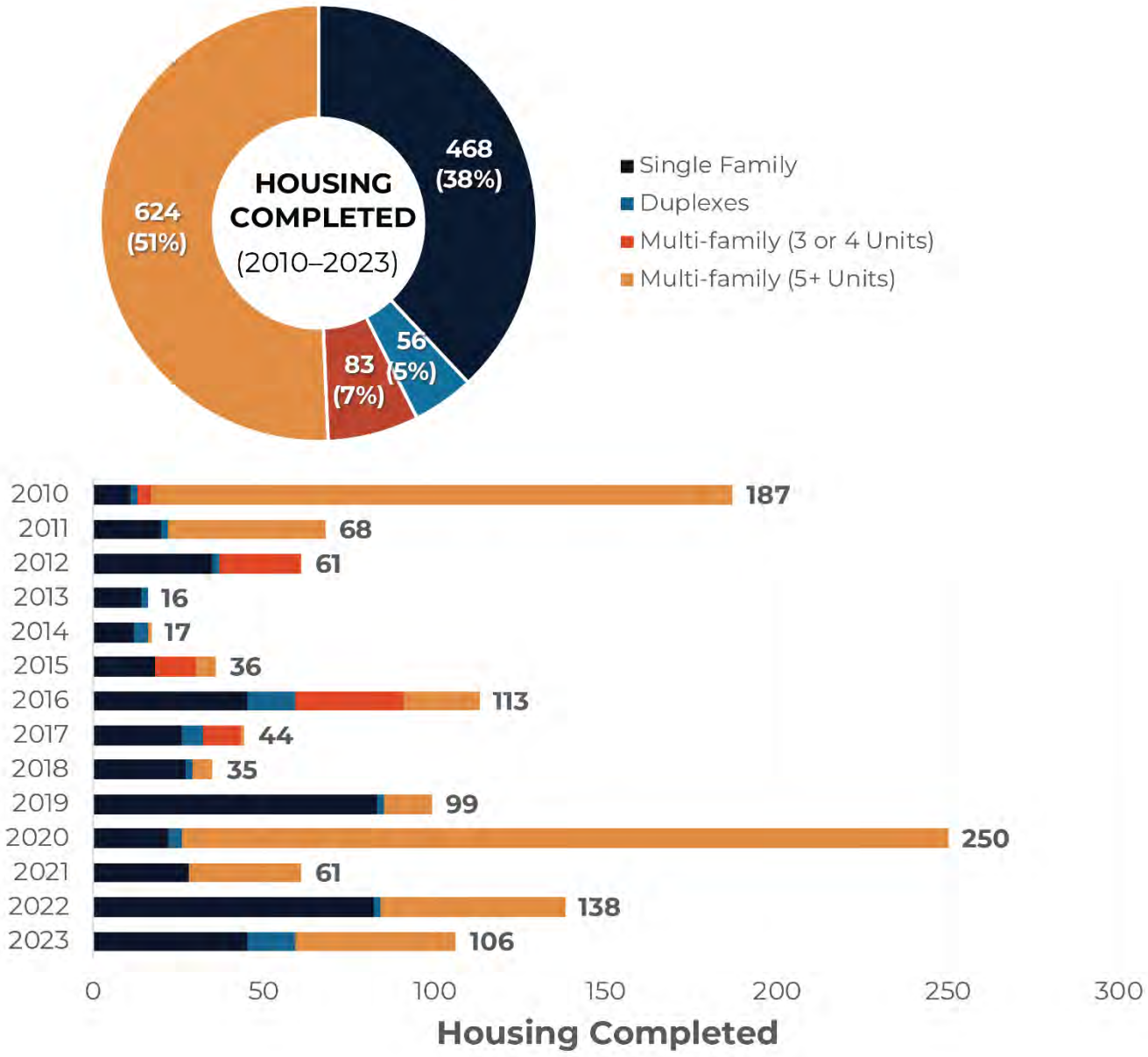
- **Lakewood has had a long history of single-family housing development.** While Lakewood has a smaller proportion of housing as single-family detached units than other communities in the area, half of the housing available as of 2023 consists of these units. This housing type is dominant in the city, and future planning for growth needs to consider the prevalence of this development pattern.
- **Recent growth has been more dominated by multifamily housing, however.** While half of housing in Lakewood consists of single-family units, ongoing growth is more towards attached housing and multifamily housing types. Over half of housing completed since 2010 has been larger multifamily projects, and plex development has accounted for an additional 12% of growth.
- **Manufactured housing plays a greater role in the local housing market.** As opposed to other comparable communities in Pierce County, mobile and manufactured homes form about 6% of the local housing stock. While this is a small part of the total market, this housing type often provides options for lower-income households, and local housing policy should consider the management of manufactured home parks as part of an effort to retain affordable housing.
- **Available capacity for new housing development is enough to meet local needs.** Based on an assessment of the buildable lands in Lakewood, there is sufficient development capacity available to meet the long-term needs of the city over the next 20 years. This includes both the overall growth in housing that is assumed under the Pierce County CPPs, as well as housing needs by income category.

Exhibit 3-33. Proportion of Current Housing Types, Lakewood and Surrounding Communities, 2023.



Source: WA Office of Financial Management, 2024.

Exhibit 3-34. Housing Units Completed in Lakewood by Type, 2010–2023.



Source: WA Office of Financial Management, 2024.

The region is experiencing critical challenges with its housing supply not keeping pace with growth, resulting in significant impacts. These impacts are particularly felt by communities of color that do not have the resources available to respond to these trends. These communities often face higher costs, poorer housing quality, and reduced opportunities for homeownership due to longstanding discriminatory practices.

The 2024 updates to the Comprehensive Plan must address these disparities through various strategies, including identifying and amending policies that contribute to racial disparities and displacement, and implementing anti-displacement measures, particularly in areas prone to market-driven displacement.

Displacement in housing is increasingly problematic as rising costs and inadequate housing supply prevent many from securing suitable, affordable homes. Displacement types include:

- **Economic displacement**, when increases in rents and other costs result in people and businesses moving where these costs are lower;
- **Physical displacement**, when housing units and other buildings are demolished or renovated and no longer available; and
- **Cultural displacement**, when a local community changes due to economic and/or physical displacement, and other residents are driven away because of declining community cohesion and social bonds.

Displacement has broader implications for community dynamics and regional stability. It leads to longer commutes, fragmented community ties, and increased strain on social services, potentially escalating homelessness. Addressing these issues through local policies can help retain community integrity and support economic and social sustainability in the face of inevitable urban changes.

Comprehensive Plan updates for cities like Lakewood are encouraged to integrate racial equity in housing policies to mitigate displacement risks. These updates should include thorough assessments of existing housing policies that might perpetuate racial disparities and propose new strategies to prevent displacement. The focus will be on preserving community and cultural continuity while providing practical housing solutions to meet the diverse needs of the population.

The following exhibits highlight relevant statistics for the city regarding racial equity in housing:

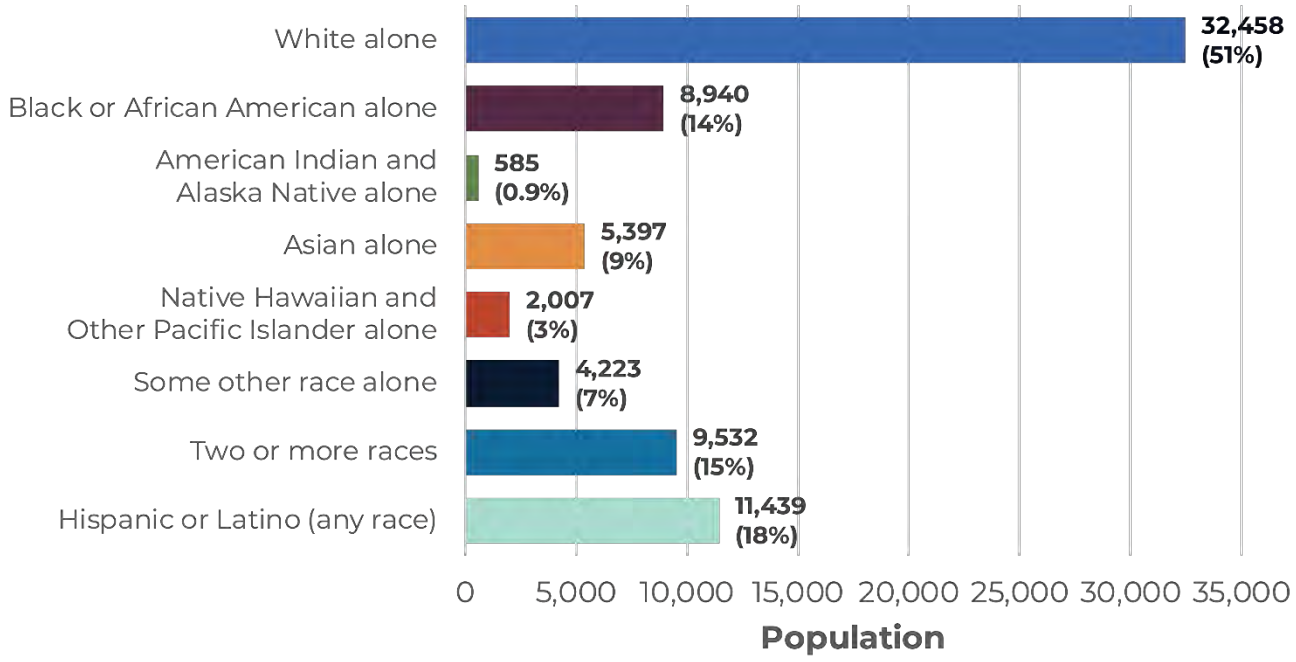
- Exhibit 3-35 provides a breakdown of the Lakewood population by race and ethnicity, based on 5-year American Community Survey data from 2022. (Note that these statistics do not separate Hispanic/Latino residents by race.)
- Exhibit 3-36 highlights the difference of tenure by race and ethnicity, indicating how many renters versus owners are found in each category.
- Exhibit 3-37 breaks down proportions of households by income categories, determined by percent of area median income (AMI).
- Exhibit 3-38 indicates housing cost burdens by race and ethnicity in Lakewood, highlighting cases where households are cost burdened (paying over 30% of their income on housing costs) or severely cost burdened (paying over half of their income on housing).

- Exhibit 3-39 provides a displacement risk index provided by the PSRC by US Census Bureau census tract. This is divided based on the regional distribution and indicates where the risks of displacement may be "higher," "moderate," or "lower" in the regional distribution.
- Exhibit 3-40 identifies displacement risk using a Commerce index, showing low, moderate, or high risk of displacement. It provides a change-over-time component that accounts for recent demographic and housing market changes that is not part of the PSRC displacement risk index.
- Exhibit 3-41 provides a distribution of residents by race at the Census block level, based on information from the 2020 US Decennial Census.

There are several high-level conclusions that can be reached from this information:

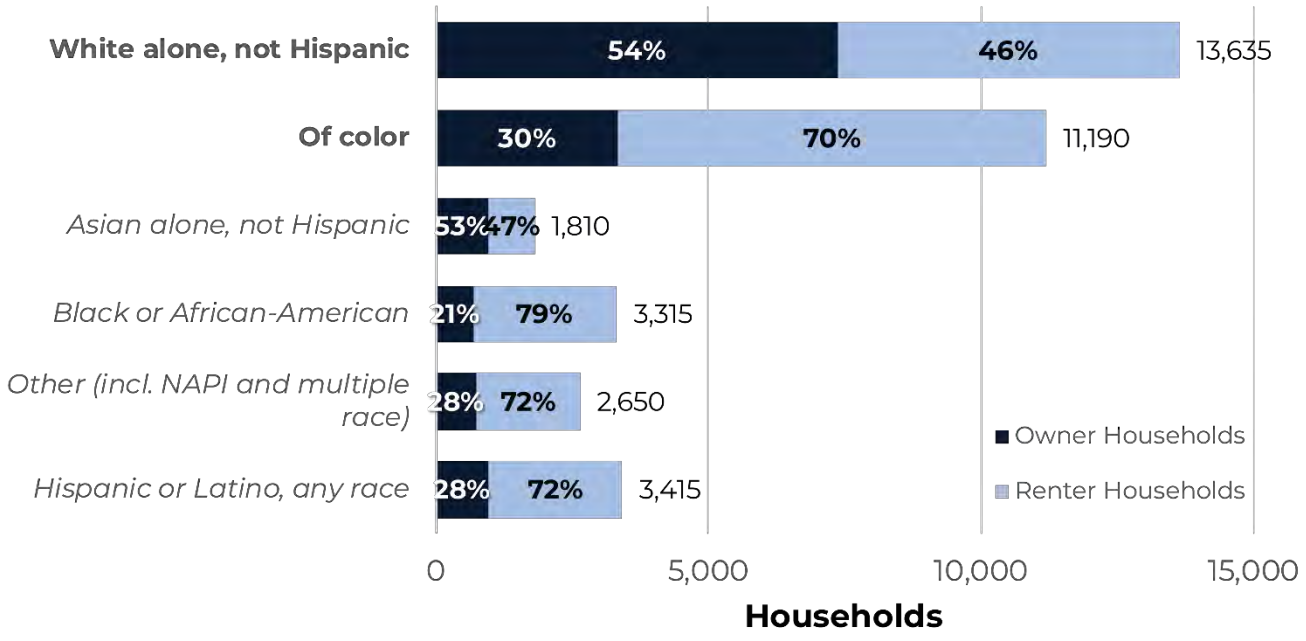
- **There are some income disparities by race/ethnicity in Lakewood that could lead to housing challenges.** The distribution of white households in the city generally includes greater representation at higher income levels, with only 16% households at extremely low-income and 38% above median income. In contrast, about 21% of households of color are extremely low-income, and only 24% surpass the median income threshold.
- **The distribution of households between renters and owners by race suggests some vulnerabilities to housing stability by race/ethnicity.** Households of color face significant challenges in homeownership and housing stability: about 54% of White households own homes compared to only 30% of BIPOC households. Particularly, about 79% of Black or African American and 72% of Hispanic/Latino households are renters, which indicates possible vulnerabilities to local rent increases.
- **On average, higher housing cost burdens are more common for Black households.** A substantial number of Black or African American households in Lakewood (58%) experience some type of housing cost burden, with 34% facing severe difficulties. These economic pressures suggest a critical need for targeted housing policies and community support.
- **There is a likely risk of displacement in key areas of the city.** The Lakewood Station District and the Lakeview/Kendrick area are identified as high-risk zones for displacement, especially among communities of color. These neighborhoods, along with the International District, face challenges that may also extend to local businesses, potentially necessitating protective measures and anti-displacement strategies.

Exhibit 3-35. Lakewood Population by Race and Ethnicity, 2022.



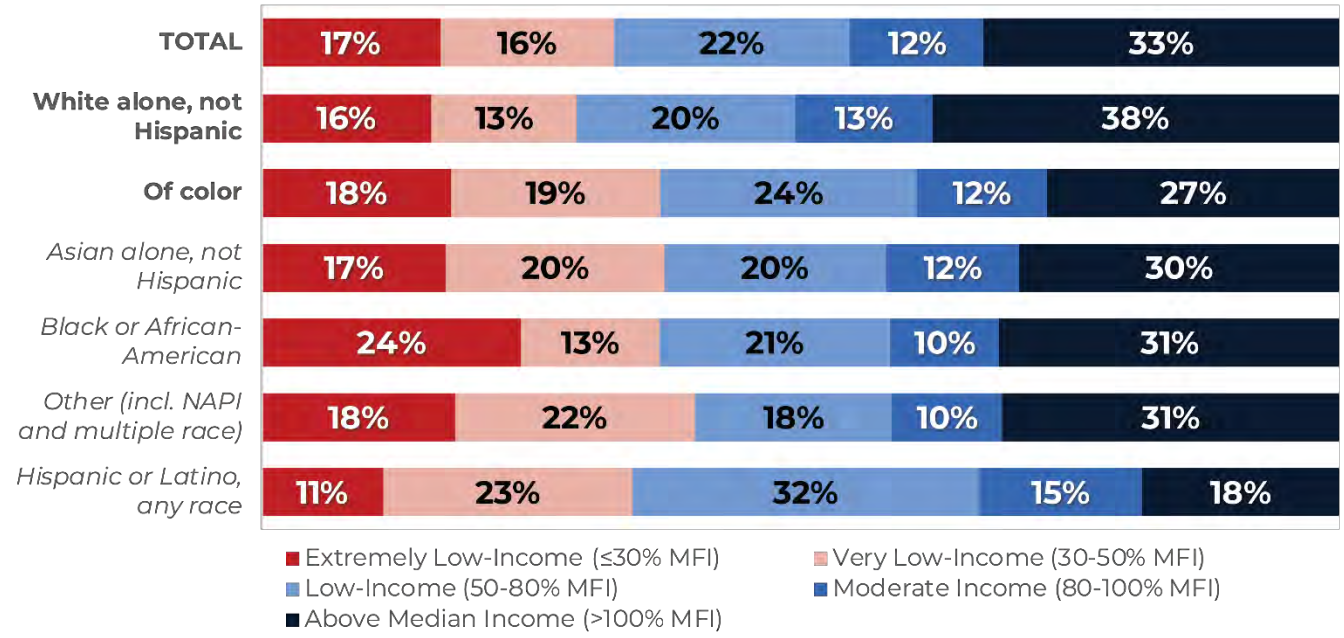
Source: US Census Bureau, 2018-2022 American Community Survey 5-Year Estimates, 2023.

Exhibit 3-36. Lakewood Households by Race/Ethnicity and Tenure, 2020.



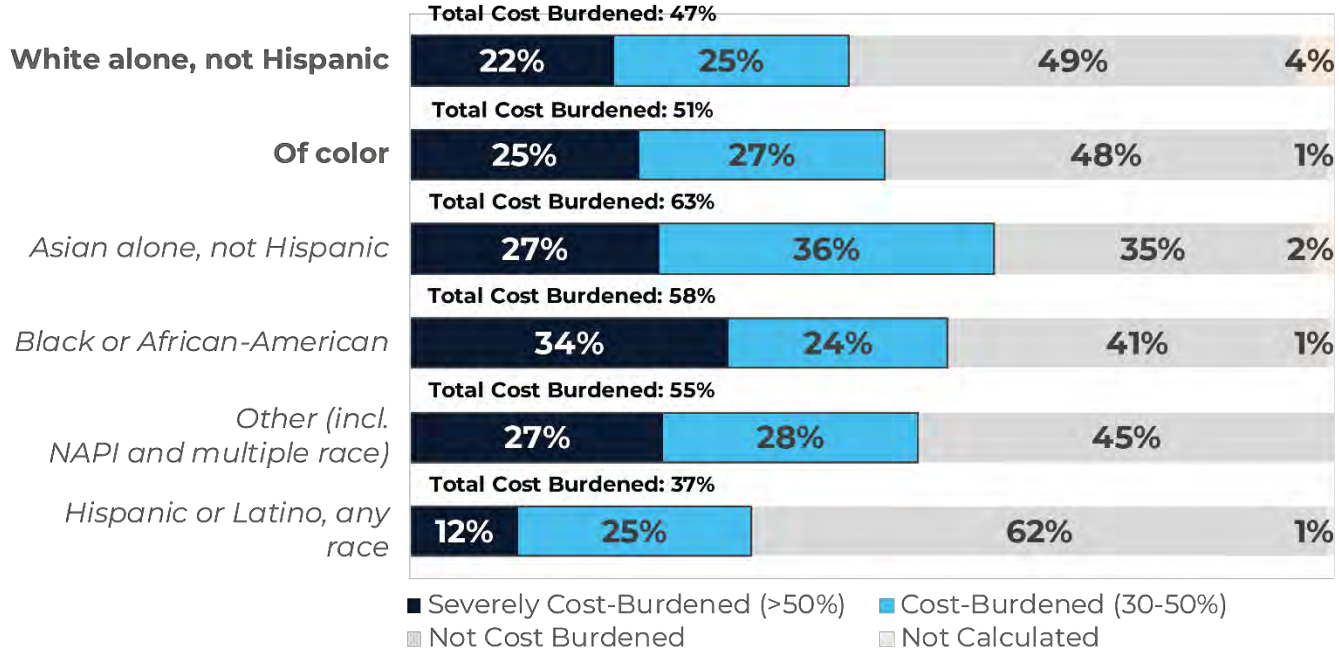
Source: US HUD Comprehensive Housing Affordability Strategy (CHAS) data, 2016–2020.

Exhibit 3-37. Lakewood Households by Race/Ethnicity and Income Category, 2022.



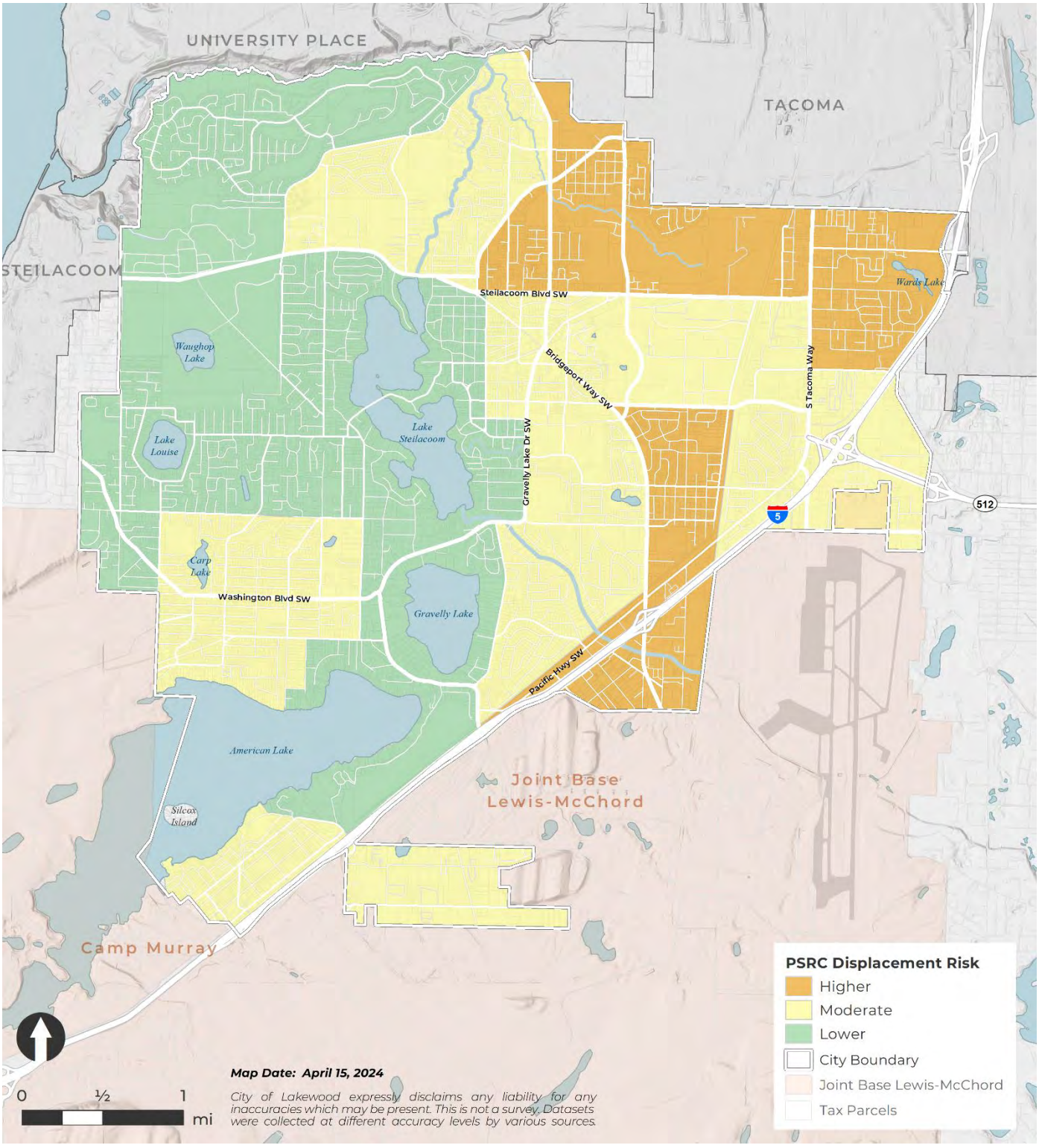
Source: US HUD Comprehensive Housing Affordability Strategy (CHAS) data, 2016–2020.

Exhibit 3-38. Lakewood Households by Race/Ethnicity and Cost Burden, 2020.



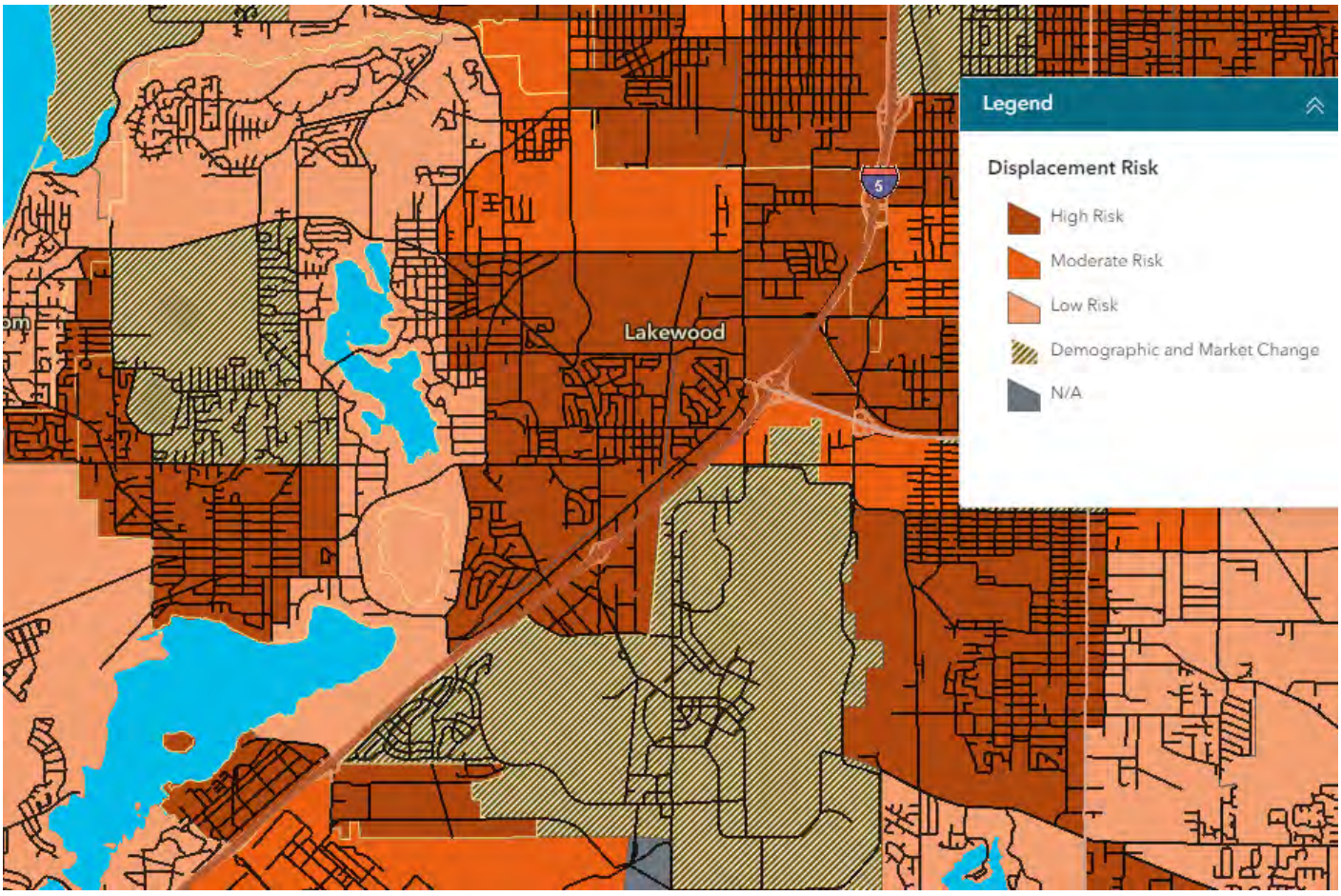
Source: US HUD Comprehensive Housing Affordability Strategy (CHAS) data, 2016–2020.

Exhibit 3-39. PSRC Displacement Risk Index for Lakewood.



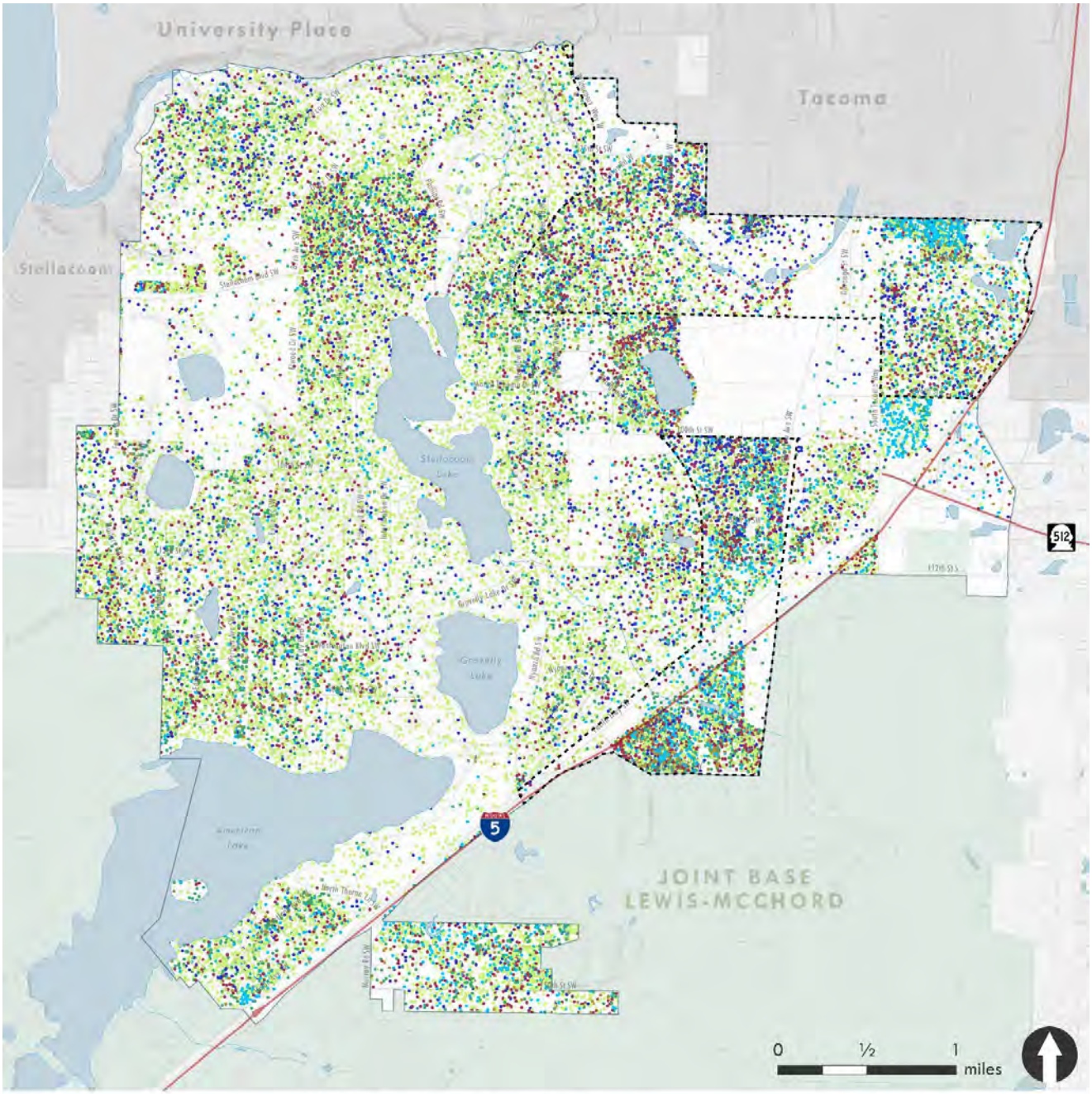
Source: PSRC, 2024; City of Lakewood, 2024; Pierce County GIS, 2024.

Exhibit 3-40. Commerce Displacement Risk Map (Draft 2023)



Note: Compared to the PSRC Displacement Risk Index, the Commerce map includes relatively fewer data measures, yet it adds a change-over-time component that accounts for recent demographic and housing market changes. The PSRC map, in contrast, relies on a snapshot-in-time approach by using a broader set of most recently available data to provide a relatively comprehensive picture of prevailing displacement risk factors. Local jurisdictions in the four-county central Puget Sound region may benefit from focusing their analysis of displacement risk on the PSRC map because it is the basis for PSRC's Regional Housing Strategy, and some jurisdictions have already used it in their recent housing work. Local jurisdictions may, however, use either or both maps in their analysis of displacement risk.
Source: Washington Department of Commerce, September 2023

Exhibit 3-41. Distribution of Population by Race in Lakewood, 2020.



Legend

- City of Lakewood
- Other cities
- Joint Base Lewis-McChord
- Water
- Highways
- Arterials
- Roads

Distribution of Population by Race

- White alone
- Black or African American alone
- American Indian and Alaska Native alone
- Asian alone
- Native Hawaiian and Other Pacific Islander alone
- Some Other Race alone
- Two or more races

PSRC Displacement Index: Higher Risk

BERK

Map Date: January 2023

Sources: Pierce County GIS, 2022; ESRI, 2022; City of Lakewood, 2022; BERK, 2022.

Tillicum-Woodbrook Subarea

The Subarea is largely included in Census Tract 720[6], which is slightly smaller than the study area.

Housing Occupancy: As of 2020, Tract 720 had 2,189 total housing units. Tract 720's number of units increased between 2000 and 2012 but decreased between 2010 and2020. Of the total housing units in Tract 720 in 2020, 8.1% are vacant, which is greater than both the City of Lakewood and Pierce County (both at 5.5%). However, vacancy rates dropped for Tillicum from 2010 to match similar levels as Lakewood.

Housing Tenure and Type: Of the occupied housing units in Tract 720, 74% are occupied by renters and 26% are occupied by owners. The City of Lakewood is also majority renter-occupied (54%), but Tract 720 has a greater share of renters. The majority of Tract 720's housing stock is multifamily, with 52% of housing units containing three or more units.

Eviction Rates and Displacement: Tillicum and Woodbrook have higher eviction rates and more cost-burdened households than Lakewood overall. See Exhibit 3-42. More Tillicum and Woodbrook families also rent, which puts them at a higher risk of displacement than homeowners.

Exhibit 3-42. Eviction Rate – 2017

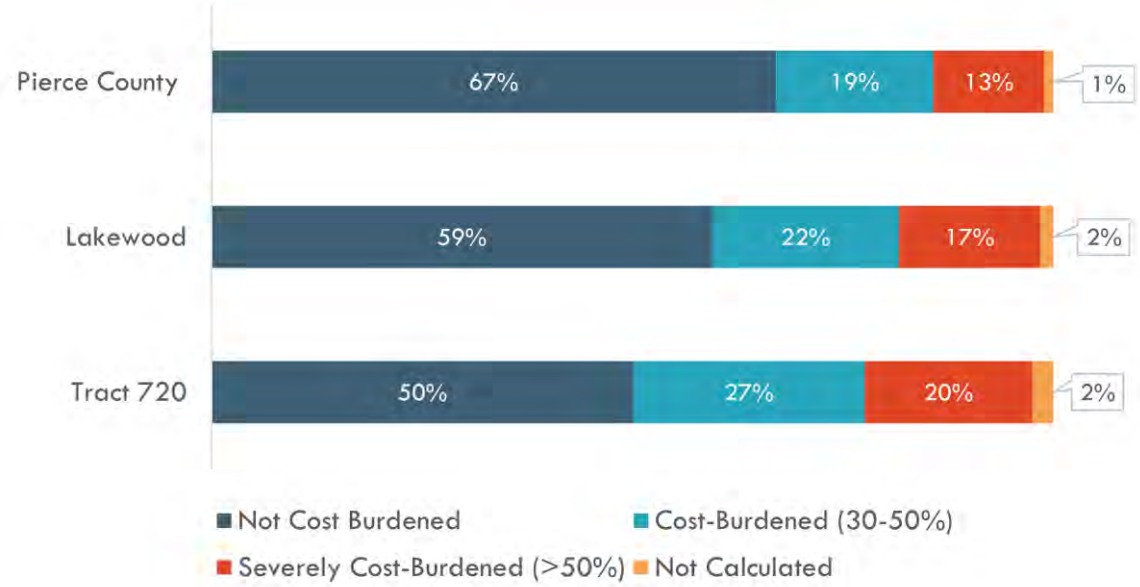
Jurisdiction	2017 Eviction Rate
Tract 720	7.8%
Lakewood	3.8%
Pierce County	2.7%

Source: The Evictions Study Map, University of Washington, 2017.

Half (50%) of Tract 720's residents are cost-burdened. Of those that are cost-burdened, 20% are severely cost-burdened. It has a greater share of its population that are cost-burdened or severely cost-burdened (47%) than the City of Lakewood (39%) and Pierce County (32%). See Exhibit 3-43.

[6] See Lakewood's Equity Index, available: https://lakewood.caimaps.info/cailive?layer=EquityLayer&area=EquityCalcLakewood&tab=equity.

Exhibit 3-43. Tillicum-Woodbrook, City, County Cost Burden – 2020



Source: CHAS, 2023.

3.3.2 Impacts

Impacts of the alternatives on housing are considered significant if they would:

- Fail to meet state requirements for middle housing (HB 1110), accessory dwelling units (HB 1337), or planning for and accommodating housing at all income levels (HB 1220), including permanent supportive housing (PSH) and emergency housing.
- Increase risk for involuntary residential displacement.

Impacts Common to All Alternatives

Each alternative provides total capacity that meets citywide housing growth targets. However, only the Action Alternative both meets capacity at all income levels, due largely to the added middle housing opportunities and the reinforcement of growth in Lakewood's Downtown and Station District.

Exhibit 3-44. Projected Housing Needs and Capacity by Alternative

Income	2020-2044 Aggregated Housing Needs	No Action Capacity	No Action Capacity Surplus/ Deficit	Proposed Action Capacity	Action Alternative Capacity Surplus/ Deficit
0-80%	5,963	8,136	2,173	9,064	3,101
>80-120%	1,128	776	(352)	2,969	1,841
>120%	2,287	1,330	(957)	5,455	3,168
Total	**9,378**	**10,242**	**864**	**17,488**	**8,110**

Sources: (Pierce County, 2022), BERK 2024.

Under both alternatives, most higher density growth is planned in northeast and east Lakewood. Single family areas are largely located west of Bridgeport Way and Downtown.

High displacement risk is identified in areas along the north and east side of Lakewood where there is more multifamily and mixed use zoning including in Station District. With the Commerce displacement risk evaluation there are areas that are considered at higher risk rather than moderate risk, such as on the north and east side of American Lake.

Tillicum-Woodbrook Subarea

Under both alternatives, the Future Land Use Map would be retained in the subarea except that the Subarea Plan boundary would extend under the Action Alternative to match the amended Subarea Study Area.

Most Zoning districts would stay the same under both Alternatives including several Residential, Multifamily, Mixed Residential, Neighborhood Commercial, and Industrial zones. Under the Proposed Action, some citywide proposals would apply to middle housing in the subarea, and Residential 2/Transit (R2T) would apply in some portions of the subarea to the north and east.

Under both alternatives, the density of land uses will be similar, except where the Action Alternative implements middle housing per recent legislation. The PSRC displacement map rates the subarea's displacement risk as moderate, while the Commerce displacement map rates the risk as high.

No Action Alternative

The No Action Alternative provides housing that meets overall City targets for the year 2044 but does not meet housing needs at all income levels.

The No Action Alternative does not alter the Future Land Use Map or Zoning Districts or regulations. However, based on existing plans, it is possible that new development could replace existing housing in east/northeast Lakewood leading to physical displacement.

While identified as a high displacement risk, Downtown has limited housing now and most housing is planned on land identified for commercial mixed use development such as the Town Center. Some units that exist on the north side of the district may be redeveloped over time.

The Station District zoning standards were altered to allow for middle housing in 2021, and the density was not changed in multifamily zones. Between 2021 and 2023, the city has attracted growth on a variety of sites with non-residential uses to date. Other dwellings may infill or alter existing dwellings.

Tillicum-Woodbrook Subarea

No change in the Tillicum-Woodbrook Subarea is proposed in the Future Land Use Map and Zoning Districts. Housing could be developed based on existing regulations, which includes multifamily and single family units. However, middle housing would not be allowed in the Residential zones that are on the north and east sides of the subarea.

Action Alternative

The Action Alternative provides for housing capacity at all income levels. It increases capacity primarily due to the allowance for middle housing. Other attached housing is focused in Downtown and the Station District.

Middle housing would allow for moderate density housing meant to integrate into historically single family areas, with similar scale and increase housing ownership and rental opportunities. It may displace existing units, but it could also add to existing properties without replacing the primary unit.

Downtown and Station District conditions are similar to the No Action Alternative.

Tillicum-Woodbrook Subarea

Subarea goals and policies support adding affordable housing and protecting affordable housing including existing manufactured and mobile homes. Goals and policies also point to infill housing and ADUs. More middle housing opportunities would be added to the subarea in the Residential zones that are on the north and east sides of the subarea.

3.3.3 Mitigation Measures

Incorporated Plan Features

The Action Alternative includes a new Housing Element addressing citywide housing needs and opportunities. It includes amendments to the Future Land Use Map and Zoning Districts to incorporate middle housing. It also includes a new Tillicum-Woodbrook Subarea Plan with goals, policies, and actions regarding housing development and preservation.

Regulations and Commitments

Housing allowances and standards are found in:

- Title 18A Land Use and Development Code
- Title 18B Downtown Development Code
- Title 18C Station District Development Code

The codes include allowances for a full range of housing types including Special Needs Housing.

Chapter 18A.90 Housing Incentives Program provides a central location of housing incentives like density bonuses and development standard modifications.

Other incentives for housing, particularly in the Downtown and Station District Subareas include:

- Title 3.64 Property Tax Exemptions for Multifamily Housing

Lakewood has a Rental Housing Safety Program with goals including:

- Ensure Lakewood's rental housing meets specific life and fire safety standards;
- Promote compliance with these standards so that the health and safety of tenants are not jeopardized;
- Increase awareness and sharing of information related to rental housing standards among existing and future rental property owners, property managers, landlords, and tenants.

Lakewood has a Housing Program meant to assist with home repairs and general home upgrades.

In conjunction with Tacoma, Lakewood has a consolidated plan for Housing and Community Development which uses Community Development Block Grant and HOME funds to develop affordable housing.

Other Potential Mitigation Measures

Amendments to some zones are needed to ensure ADUs and middle housing are implemented. In addition to the changes to add middle housing in the R1 to R4 zones, some adjustments to the Arterial Residential Corridor (ARC) and the Low-Impact Mixed-Use Roads District within the Central Business District zone in the Downtown may be needed. Amendments to reconcile the Special Needs Housing Allowances for some types of group homes in the Downtown and Station District Subareas are needed (see Lakewood Municipal Code (LMC Titles 18B and 18C.)

3.3.4 Significant Unavoidable Adverse Impacts

Housing growth will occur under both alternatives, which could result in impacts to current residents, including residential displacement in parts of the city. The No Action Alternative, specifically, is inconsistent with state requirements, because it does not provide enough capacity to accommodate housing targets at all income bands, as is now required under GMA.

3.4 Transportation and Parking

This section addresses current conditions and compare alternatives regarding future transportation and parking impacts and mitigation measures addressing the impacts. It incorporates by reference the transportation evaluations in the following SEPA documents:

- City of Lakewood, Downtown Lakewood Plan and Planned Action Final EIS, July 20, 2018, and associated Addenda, September 10, 2018 and September 26, 2018
- City of Lakewood, Lakewood Station District Subarea Plan, Form-Based Code, and Planned Action, Revised Determination of Non-Significance, November 12, 2020, March 30, 2021, and April 29, 2021

In addition, this section incorporates by reference the Lakewood Non-Motorized Plan Update 2023. As a Supplemental EIS, this section focuses on roadways and parking.

3.4.1 Affected Environment

Citywide

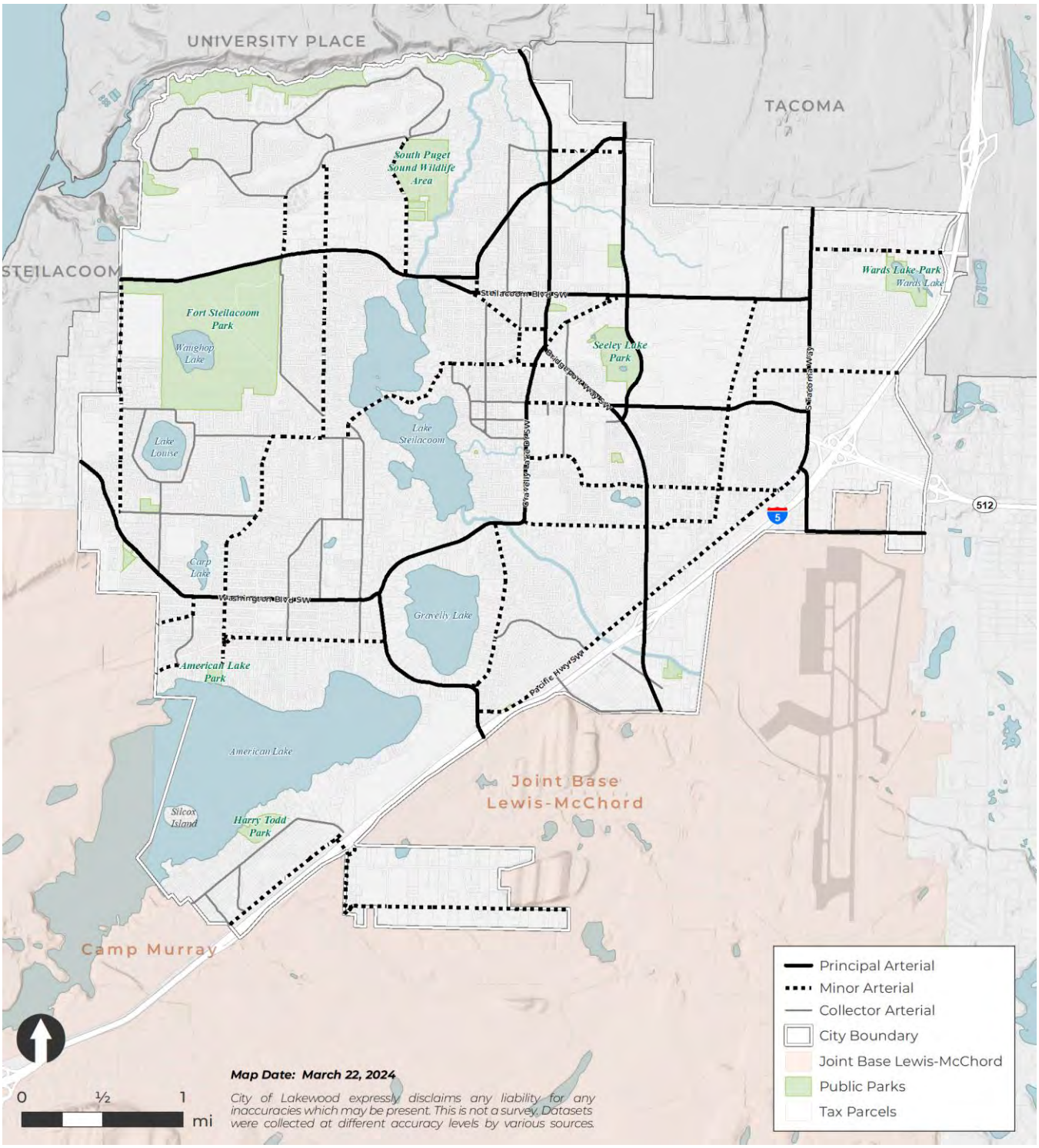
Street Classifications

For the purposes of managing the city's street network, the streets in the city can be classified as follows:

- **Principal arterials** (major arterials) are roadways that provide access to principal centers of activity. These roadways serve as corridors between principal suburban centers, larger communities, and between major trip generators inside and outside the plan area. Service to abutting land is subordinate to travel service to major traffic movements. The principal transportation corridors within the City of Lakewood are principal arterials. These roadways typically have daily volumes of 15,000 vehicles or more.
- **Minor arterials** (minor arterials) are intra-community roadways connecting community centers with principal arterials. They provide service to medium-size trip generators, such as commercial developments, high schools and some junior high/grade schools, warehousing areas, active parks and ballfields, and other land uses with similar trip generation potential. These roadways place more emphasis on land access than do principal arterials and offer lower traffic mobility. In general, minor arterials serve trips of moderate length, and have volumes of 5,000 to 20,000 vehicles per day.
- **Collector arterials** (minor arterials) connect residential neighborhoods with smaller community centers and facilities as well as provide access to the minor and principal arterial system. These roadways provide both land access and traffic circulation within these neighborhoods and facilities. Collector arterials typically have volumes of 2,000 to 8,000 vehicles per day.
- **Local access roads** (access streets) include all non-arterial public city roads used for providing direct access to individual residential or commercial properties. Service to through traffic movement usually is deliberately discouraged. This also includes private access roads.

The definition of the streets in Lakewood as part of these categories is provided in Exhibit 3-45.

Exhibit 3-45. Lakewood Street Classifications.



Sources: City of Lakewood, 2024; Pierce County GIS, 2024.

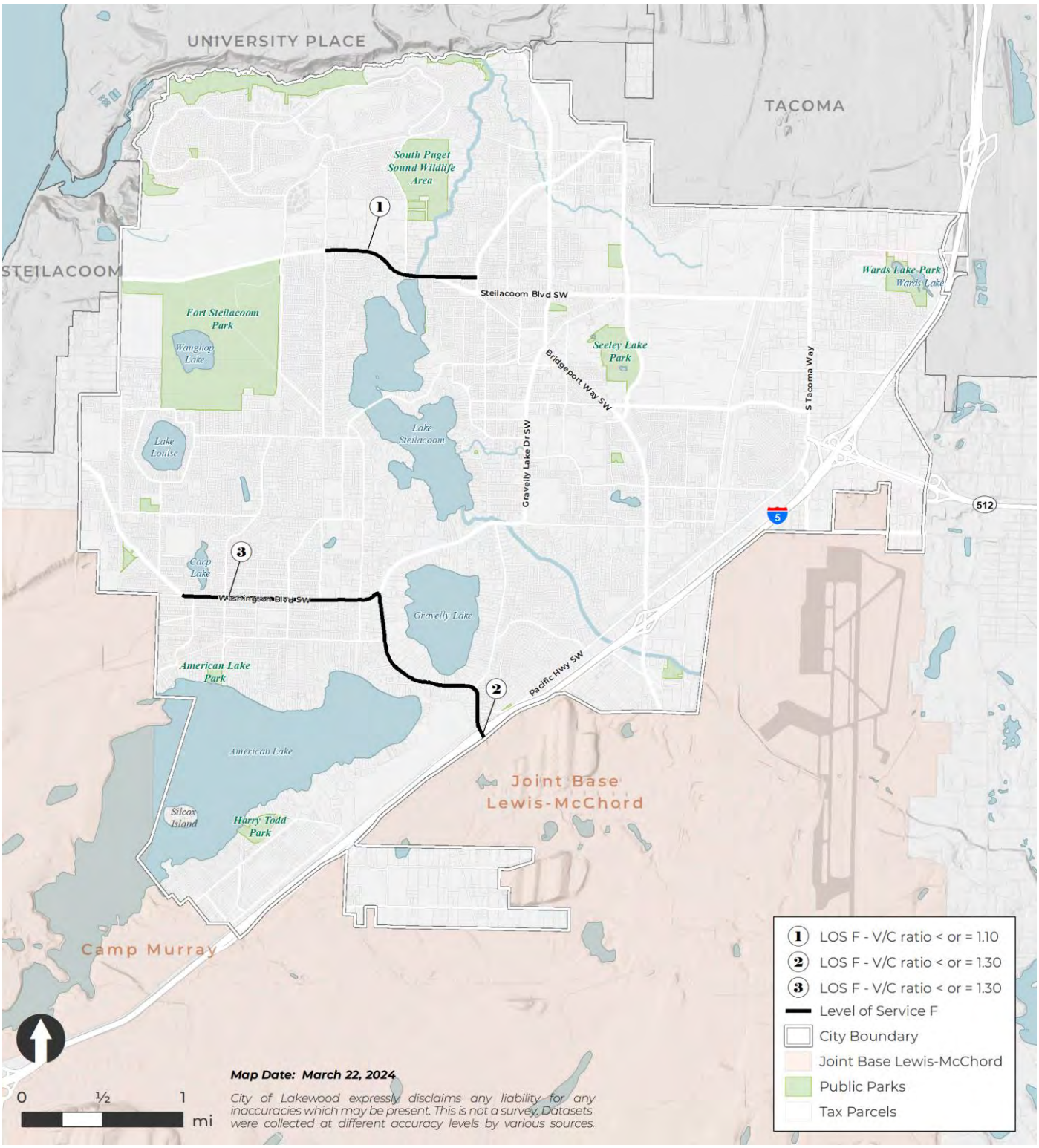
Levels of Service

With respect to the transportation system in Lakewood, the target LOS thresholds for the system are established as shown in Exhibit 3-46. The specific corridors with thresholds of LOS F are also denoted in Exhibit 3-47. Note that the City may allow additional two-way and one-way stop-controlled intersections to operate worse than the LOS standards, but these instances should be thoroughly analyzed from an operational and safety perspective.

Exhibit 3-46. LOS Standards for Lakewood Streets.

Area/Facility	LOS Threshold	Volume/Capacity (VC Ratio)
All arterial streets and intersections in the city, including state highways of statewide significance except as otherwise identified	LOS D	0.90
▪ **Steilacoom Boulevard corridor between 88th Street SW and 83rd Avenue SW**	LOS F	1.10
▪ **Gravelly Lake Drive, between I-5 and Washington Boulevard SW** ▪ **Washington Boulevard SW, west of Gravelly Lake Drive**	LOS F	1.30

Exhibit 3-47. Lakewood Arterials Allowing LOS F Thresholds.



Sources: City of Lakewood, 2024; Pierce County GIS, 2024.

Recent Trends

Overall, historical traffic data analyzed from 2013 to 2022 also indicates a decline in traffic volumes on local streets, suggesting a shift in transportation preferences among Lakewood residents. This trend towards reduced vehicle usage, possibly accelerated by the adoption of remote work and digital services, suggests a potential for lower-than-anticipated future traffic growth rates. These findings reinforce the need for flexible, adaptive strategies in transportation planning to accommodate future shifts in travel behavior in Lakewood.

Tillicum-Woodbrook Subarea

Streets in Tillicum include minor and collector arterials as well as local streets. See Exhibit 3-47.The level of service (LOS) for streets is LOS D per Exhibit 3-47.

3.4.2 Impacts

Impacts Common to All Alternatives

Travel Forecasts

This section provides an overview of the potential roadway deficiencies of the Action Alternative scenario and any mitigation necessary to accommodate the City's housing and job growth targets. To do this, we conducted a travel demand model comparison between the No Action Alternative and Action Alternative land use scenarios.

The travel demand model used for this analysis was derived from the previous Lakewood Model that was prepared as part of the last Comprehensive Plan update and more recent Subarea Plans. This model can be utilized to forecast travel demand based on the City's housing and job growth targets. The land use assumptions included in this analysis are consistent with work being performed in updating the Land Use Plan and are intended for planning purposes only and in no way are meant to restrict or require specific land use actions.

No Action Alternative Scenario

The No Action Alternative scenario model builds upon the 2030 Plan scenario model used in the previous Transportation Element update and incorporates more recent land use planning efforts, such as the Downtown Plan and Station Area Plan. Additionally, the No Action Alternative scenario model includes one minor roadway improvement – the widening of Murray Road north of 146th SW to two lanes in each direction. This scenario is used as a future baseline to consider only approved land use capacity and roadway improvements.

Action Alternative Scenario Model

The Action Alternative scenario model builds upon the No Action Alternative scenario model by adding the City's housing and job growth targets through the year 2044. The two models are otherwise identical, allowing for a measurement of the traffic volume effects of the additional housing and job growth.

Land Use Changes

Exhibit 3-48 shows a comparison of total occupied households and employees for the No Action Alternative and Action Alternative scenarios for the city overall and within specific districts. For reference, Exhibit 3-49 shows the analysis districts included in this analysis. Land uses outside of the City of Lakewood were assumed to be unchanged in both future scenarios in order to compare and contrast the transportation impacts of the land use changes internal to the city.

Exhibit 3-48. Transportation Impacts by Land Use Assumption

	Downtown District	Station Area District	Other Lakewood District[1]	City of Lakewood Total
Occupied Households				
No Action Alternative	2,688	2,553	31,727	36,968
Action Alternative	2,915	2,564	30,151	35,630
Difference	*227*	*11*	*(1,576)*	*(1,338)*
% Difference	*8.4%*	*0.4%*	*(5.0%)*	*(3.6%)*
Employees				
No Action Alternative	13,498	3,145	24,407	41,050
Action Alternative	14,739	4,998	20,007	39,744
Difference	*1,241*	*1,853*	*(4,400)*	*(1,306)*
% Difference	*9.2%*	*58.9%*	*(18.0%)*	*(3.2%)*

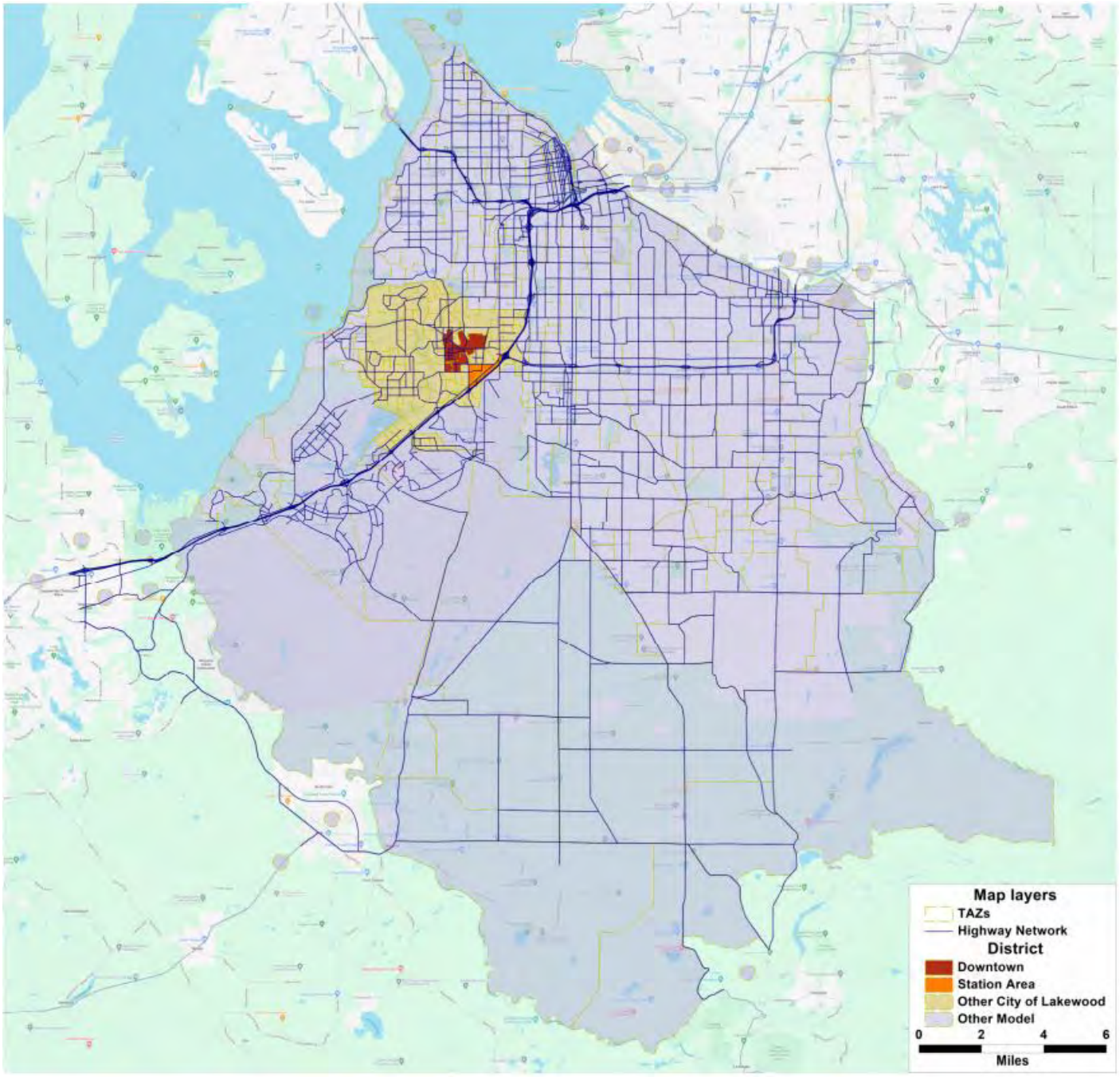
[1]All other areas in the city outside the Downtown and Station Area Districts.
Source: Transpo, 2024

Under the Action Alternative scenario, there is a slight decrease in households and employees citywide compared to the No Action Alternative scenario.

The Action Alternative scenario shifts household growth to concentrate more within the Downtown (+227) and Station Area (+11) districts and less outside of these areas (-1,576).·The Action Alternative scenario also shifts employee growth to concentrate more within the Downtown (+1,241) and Station Area (+1,853) districts and less outside of these areas (-4,400).

These land use changes for the Action Alternative scenario are intended to increase density in areas of the city with greater access to transit and other active transportation modes such as walking and biking.

Exhibit 3-49. Analysis Districts



Source: Transpo, 2024

Vehicle Miles Travelled

Vehicle Miles Travelled (VMT) measures the total number of miles travelled by all vehicles leaving, arriving, and/or passing through a geographic region. Exhibit 3-50 shows the VMT results for the two future scenarios overall and by analysis district.

Exhibit 3-50. Vehicle Miles Travelled Analysis Results

	Downtown District	Station Area District	Other Lakewood District[1]	City of Lakewood Total	Other Model
No Action Alternative	11,630	8,539	55,243	75,412	1,207,587
Action Alternative	12,339	9,489	52,668	74,496	1,218,125
Difference	*709*	*950*	*(2,575)*	*(916)*	*10,538*
% Difference	*6.1%*	*11.1%*	*(4.7%)*	*(1.2%)*	*0.9%*

Source: Transpo, 2024

Both the Downtown and Station Area districts show VMT increases of 6.1% and 11.1%respectively in the Action Alternative scenario. These increases are consistent with the changes in land use for this scenario. Other areas of the City of Lakewood are projected to produce less VMT (-4.7%) in the Action Alternative scenario, also consistent with the changes in land use for this scenario. VMT within the City of Lakewood overall is projected to decrease slightly (-1.2%) under the Action Alternative scenario. VMT outside of the City of Lakewood is projected to increase slightly (0.9%) under the Action Alternative scenario.

Level of Service Analysis

The travel demand model was utilized to model both land use scenarios outlined previously. Traffic volumes, roadway volume-to-capacity (v/c) ratios, and LOS were then calculated for mid-block arterial roadway segments throughout the City of Lakewood. The v/c and LOS calculations are based on the Highway Capacity Manual (HCM) methodology and the PM peak hour traffic volumes from the two model scenarios. The LOS is consistent with the methodologies adopted in the existing Comprehensive Plan. Exhibit 3-51 shows the results from this analysis.

Exhibit 3-51. 2044 Weekday PM Peak Hour Roadway Traffic Operations Summary

	No Action Alternative			Action Alternative		
Intersection	**LOS[1,2]**	**V/C (NB/EB)**	**VC (SB/WB)**	**LOS**	**V/C (NB/EB)**	**VC (SB/WB)**
Ardmore DR SW						
Southeast of Steilacoom Blvd SW	D	0.74	0.83	C	0.68	0.71
Northwest of Whitman Ave SW	B	0.40	0.63	A	0.36	0.55
Bridgeport Way W						
North of 75th St W	C	0.79	0.69	C	0.80	0.66
North of Custer Rd W	B	0.66	0.62	B	0.69	0.60
South of Custer Rd W	C	0.71	0.63	C	0.76	0.62
North of Gravelly Lake Dr SW	A	0.56	0.54	A	0.59	0.51
South of Gravelly Lake Dr SW	A	0.39	0.43	A	0.42	0.40
North of 100th St SW	A	0.50	0.52	A	0.53	0.53
South of 100th St SW	A	0.26	0.23	A	0.30	0.25
South of Lakewood Dr SW	A	0.51	0.56	A	0.58	0.60
North of 112th St SW	A	0.52	0.58	A	0.59	0.58
North of Pacific Highway SW	C	0.67	0.78	C	0.78	0.78
South of Pacific Highway SW	D	0.79	0.85	D	0.78	0.84
I-5 Overcrossing	B	0.58	0.62	B	0.54	0.65
At Clover Creek Bridge South of I-5	A	0.44	0.31	A	0.44	0.33
Custer Rd SW/W						
Northeast of Bridgeport Way SW	C	0.62	0.75	C	0.64	0.75
Southwest of Bridgeport Way SW	C	0.52	0.72	B	0.52	0.70
North of 88th St SW	B	0.47	0.66	B	0.47	0.64
South of 88th St SW	A	0.55	0.04	A	0.51	0.03
Far West Dr SW						
South of Steilacoom Blvd SW	A	0.12	0.16	A	0.25	0.18
Gravelly Lake Dr SW						
South of Steilacoom Blvd SW	A	0.30	0.56	A	0.34	0.59
Northeast of Bridgeport Way SW	A	0.15	0.37	A	0.19	0.39
Southwest of Bridgeport Way SW	A	0.25	0.29	A	0.26	0.29
South of Mount Tacoma Dr SW	A	0.26	0.19	A	0.29	0.22
South of 100th St SW	A	0.39	0.41	A	0.43	0.45
South of Alfaretta St SW	A	0.26	0.30	A	0.29	0.33
North of Wildaire Rd SW	A	0.48	0.50	A	0.45	0.49
North of 112th St SW	A	0.45	0.45	A	0.45	0.50
West of 112th St SW	B	0.50	0.65	B	0.48	0.62
West of Nyanza Rd SW/S	E	0.89	0.97	D	0.75	0.87
North of Pacific Highway SW	B	0.70	0.54	B	0.67	0.47

	No Action Alternative			Action Alternative		
Intersection	**LOS[1,2]**	**V/C (NB/EB)**	**VC (SB/WB)**	**LOS**	**V/C (NB/EB)**	**VC (SB/WB)**
South of Pacific Highway SW	B	0.68	0.55	B	0.65	0.51
I-5 Overcrossing	A	0.47	0.33	A	0.45	0.32
Hipkins Rd SW						
South of Steilacoom Blvd SW	A	0.33	0.43	A	0.26	0.36
Lakeview Ave SW						
South of 100th St SW	A	0.24	0.39	A	0.27	0.43
South of Steilacoom Blvd SW	A	0.34	0.26	A	0.44	0.28
Lakewood Dr SW						
North of 74th St W	D	0.66	0.86	D	0.72	0.88
South of 74th St W	D	0.66	0.81	D	0.72	0.82
North of Steilacoom Blvd SW	C	0.67	0.79	C	0.74	0.80
South of Steilacoom Blvd SW	A	0.54	0.51	A	0.60	0.51
North of 100th St SW	A	0.40	0.48	A	0.48	0.54
Military Rd SW						
South of 112th St SW	A	0.39	0.34	A	0.37	0.39
Northwest of 112th St SW	A	0.19	0.16	A	0.17	0.14
Mount Tacoma Dr SW						
West of Bridgeport Way	A	0.15	0.19	A	0.25	0.22
West of Gravelly Lake Dr	A	0.18	0.28	A	0.16	0.26
Murray Rd SW						
North of 146th St SW	A	0.58	0.50	A	0.55	0.45
North Thorne Ln SW						
Southeast of Union Ave SW	B	0.66	0.67	B	0.56	0.65
Nyanza Rd SW						
North of Gravelly Lake Dr SW	A	0.55	0.28	A	0.57	0.26
South of Gravelly Lake Dr SW	A	0.55	0.30	A	0.57	0.30
Pacific Highway SW						
North of 108th St SW	C	0.76	0.69	E	0.94	0.72
Southwest of 108th St SW	A	0.47	0.39	B	0.69	0.48
Northeast of Bridgeport Way SW	A	0.48	0.45	B	0.59	0.68
Southwest of Bridgeport Way SW	B	0.58	0.63	C	0.66	0.71
East of Gravelly Lake Dr SW	B	0.54	0.65	B	0.47	0.63
Phillips Rd SW						
North of Steilacoom Blvd SW	C	0.71	0.35	A	0.58	0.31
South Tacoma Way						
North of 84th St SW	D	0.64	0.89	D	0.65	0.90
North of Steilacoom Blvd SW	D	0.75	0.87	D	0.78	0.87

	No Action Alternative			Action Alternative		
Intersection	**LOS[1,2]**	**V/C (NB/EB)**	**VC (SB/WB)**	**LOS**	**V/C (NB/EB)**	**VC (SB/WB)**
South of Steilacoom Blvd SW	C	0.72	0.77	D	0.72	0.83
North of 96th St S	C	0.65	0.75	C	0.68	0.80
North of 100th St SW	D	0.89	0.62	E	0.93	0.62
South of SR 512	C	0.79	0.67	E	0.92	0.67
Southeast of Pacific Highway SW	A	0.30	0.29	A	0.30	0.31
Steilacoom Blvd SW						
East of Farwest Dr SW	A	0.39	0.49	A	0.48	0.47
West of 87th Ave SW	A	0.56	0.52	A	0.48	0.47
West of 83rd Ave SW/Hipkins Rd SW	A	0.52	0.51	A	0.46	0.50
West of Phillips Rd SW	F	0.84	1.02	E	0.72	0.94
East of Phillips Rd SW	F	0.84	1.12	F	0.73	1.01
Southeast of 88th St SW	C	0.78	0.68	B	0.66	0.60
West of Bridgeport Way SW	B	0.38	0.62	A	0.31	0.57
East of Bridgeport Way SW	A	0.33	0.53	A	0.28	0.49
West of Gravelly Lake Dr SW	A	0.32	0.47	A	0.28	0.43
East of Lakewood Dr SW	A	0.35	0.47	A	0.34	0.44
West of Lakeview Ave SW	A	0.35	0.49	A	0.34	0.46
West of South Tacoma Way	A	0.48	0.54	A	0.55	0.53
Union Ave SW						
Northeast of Berkeley St SW	A	0.16	0.21	A	0.13	0.16
Southwest of North Thorne Ln SW	A	0.37	0.31	A	0.28	0.29
Washington Blvd SW						
West of Gravelly Lake Dr SW	E	0.66	0.99	E	0.65	0.96
Whitman Ave SW						
South of Ardmore Dr SW	A	0.13	0.14	A	0.13	0.13
40th Ave SW						
North of 100th St SW	B	0.32	0.62	B	0.37	0.66
74th St S						
West of Lakewood Dr SW	C	0.56	0.71	A	0.57	0.71
83rd Ave SW						
North of Steilacoom Blvd SW	A	0.56	0.33	A	0.39	0.26
84th St S						
East of South Tacoma Way	A	0.39	0.25	A	0.41	0.26
87th Ave SW						
South of Steilacoom Blvd SW	A	0.09	0.09	A	0.03	0.03
North of Steilacoom Blvd SW	A	0.36	0.28	A	0.30	0.14

	No Action Alternative			Action Alternative		
Intersection	**LOS[1,2]**	**V/C (NB/EB)**	**VC (SB/WB)**	**LOS**	**V/C (NB/EB)**	**VC (SB/WB)**
88th St SW						
East of Steilacoom Blvd SW	A	0.17	0.58	A	0.15	0.53
93rd St SW						
East of Whitman Ave SW	A	0.46	0.34	A	0.39	0.32
96th St S						
West of South Tacoma Way	C	0.61	0.77	C	0.52	0.73
East of South Tacoma Way	D	0.81	0.45	D	0.81	0.44
100th St SW						
West of South Tacoma Way	C	0.72	0.53	C	0.78	0.53
East of Lakeview Dr SW	D	0.83	0.82	D	0.90	0.83
West of Lakeview Dr SW	C	0.74	0.63	C	0.80	0.63
East of Lakewood Dr SW	C	0.73	0.68	C	0.75	0.67
East of Bridgeport Way SW	B	0.64	0.63	B	0.69	0.65
East of Gravelly Lake Dr SW	A	0.13	0.19	A	0.16	0.21
108th St SW						
West of Pacific Highway SW	C	0.71	0.74	D	0.82	0.80
East of Bridgeport Way SW	A	0.57	0.42	A	0.60	0.45
West of Bridgeport Way SW	A	0.45	0.31	A	0.46	0.28
East of Davisson Rd SW	A	0.48	0.34	A	0.47	0.30
112th St SW/S						
Between Military Rd SW & Farwest Dr S	A	0.25	0.35	A	0.26	0.48
East of Gravelly Lake Dr SW	B	0.31	0.61	A	0.32	0.49
East of Bridgeport Way SW	B	0.54	0.66	A	0.56	0.56
West of Bridgeport Way SW	B	0.49	0.68	B	0.57	0.61
150th St SW						
East of Woodbrook Rd SW	F	1.05	0.75	C	0.80	0.57

[1] Level of service, based on Highway Capacity Manual, 7th Edition methodology
[2] Level of service reported for worst performing direction of travel
Source: Transpo, 2024

I-5 Volumes

GMA requires the City to assess the impact of land-use decisions on state-owned transportation facilities. Using the land use assumptions for each alternative and the travel demand model, volumes at ramps and mainline segments are compared in Exhibit 3-52 and Exhibit 3-53. The Action Alternative volumes are slightly lower in general compared to baseline or No Action though there are locations where Action Alternative volumes are greater.

Exhibit 3-52. Northbound I-5 Volumes

Interchange		No Action	Action	% Diff
	Mainline	15,590	15,370	-1.4%
Berkeley Ave	Off Ramp	920	830	-9.8%
	On Ramp	3,600	3,550	-1.4%
	Mainline	18,270	18,090	-1.0%
Thorne Lane	Off Ramp	880	1,040	18.2%
	On Ramp	3,370	3,180	-5.6%
	Mainline	20,760	20,230	-2.6%
Gravelly Lake Drive	Off Ramp	2,200	2,130	-3.2%
	On Ramp	1,430	1,370	-4.2%
	Mainline	19,990	19,470	-2.6%
Bridgeport Way	Off Ramp	1,930	1,930	0.0%
	On Ramp	2,660	3,040	14.3%
	Mainline	20,720	20,580	-0.7%
SR 512	Off Ramp	5,510	5,450	-1.1%
	On Ramp	5,230	5,300	1.3%
	Mainline	20,440	20,430	0.0%
S. 84th St	Off Ramp	1,930	1,820	-5.7%
	Mainline	18,510	18,610	0.5%
S. 74th Street	Off Ramp	1,840	1,780	-3.3%
	On Ramp	3,670	3,670	0.0%
	Mainline	20,340	20,500	0.8%

Source: Transpo, 2024

Exhibit 3-53. Southbound I-5 Volumes

Interchange		No Action	Action	% Diff
	Mainline	25,160	25,140	-0.1%
S. 74th Street	Off Ramp	4,970	4,970	0.0%
	On Ramp	990	1,010	2.0%
	Mainline	21,180	21,180	0.0%
S. 84th St	On Ramp	1,080	1,050	-2.8%
	Mainline	22,260	22,230	-0.1%
SR 512	Off Ramp	6,390	6,160	-3.6%
	On Ramp	4,920	4,600	-6.5%
	Mainline	20,790	20,670	-0.6%
Bridgeport Way	Off Ramp	2,500	2,850	14.0%
	On Ramp	2,650	2,510	-5.3%

Interchange		No Action	Action	% Diff
Gravelly Lake Drive	Mainline	20,940	20,330	-2.9%
	Off Ramp	1,850	1,880	1.6%
	On Ramp	2,050	1,790	-12.7%
Thorne Lane	Mainline	21,140	20,240	-4.3%
	Off Ramp	2,960	2,310	-22.0%
	On Ramp	840	870	3.6%
Berkeley Ave	Mainline	19,020	18,800	-1.2%
	Off Ramp	2,100	1,910	-9.0%
	On Ramp	390	380	-2.6%
	Mainline	17,310	17,270	-0.2%

Source: Transpo, 2024

Tillicum-Woodbrook Subarea

The travel demand model results show relatively low volumes in the subarea for both alternatives, though volumes are slightly lower with the Action Alternative. Under both alternatives, LOS does not exceed thresholds as shown in Exhibit 3-51 and listed below:

- Union Ave SW, Northeast of Berkeley St SW and Southwest of North Thorne Ln SW: LOS A
- North Thorne Ln SW, Southeast of Union Ave SW: LOS B

Volumes along I-5 show a reduction at Berkley Avenue Interchange with the Action Alternative in both directions. See Exhibit 3-52 and Exhibit 3-53.

No Action Alternative

The No Action Alternative would continue current LOS standards and plans and growth assumptions to 2035. It would have slightly higher VMT. It would perform less well than the Action Alternative for some intersections of Gravelly Lake Drive SW, Steilacoom Boulevard SW, Washington Boulevard, and 150th Street. It would have less impacts for some locations along Pacific Highway SW and South Tacoma Way. See the discussion of the Action Alternative below.

Similarly it would result typically in slightly higher volumes along I-5 in most interchange ramp and mainline locations.

The No Action Alternative would not allow middle housing to the same degree or change parking standards to meet state laws. It would retain current parking ratios as well as parking incentives as a means to alter parking standards (e.g., transportation demand management measures, electric vehicle parking, retention of significant trees, other).

Action Alternative

VMT

The overall growth was distributed per the proposed land use plan but capped at the 2044 target. The Action Alternative has lesser citywide VMT due to the mix of growth with most growth in centers as well as distribution of middle housing growth in neighborhoods including near transit corridors.

Level of Service (LOS) Analysis

The analysis of the two model scenarios focuses on roadway segments which operate at LOS E or worse (v/c > 0.90) since the general concurrency threshold for the City of Lakewood is to maintain LOS D or better along all arterial roadways. However, as discussed in greater detail below, the City has previously identified some roadway segments that are unable to maintain LOS D or better through feasible mitigation or improvements in the future. For these roadway segments, the City has established either a LOS E or LOS F threshold, depending on the roadway segment.

The following two lists summarize the roadway segments projected to operate at LOS E or worse in either the No Action Alternative or the Action Alternative model scenarios. The first list shows roadway segments projected to operate better in the Action Alternative than the No Action Alternative model scenario. The second list shows roadway segments projected to operate worse in the Action Alternative than the No Action Alternative model scenario.

- Roadway operating conditions are projected to improve under the Action Alternative model scenario for the following segments:
    - Gravelly Lake Dr SW west of the end of Nyanza Rd SW from LOS E (v/c 0.97) to LOS D (V/C 0.87)
    - Steilacoom Blvd SW west of Phillips Rd SW from LOS F (v/c 1.02) to LOS E (v/c 0.94)
    - Steilacoom Blvd SW east of Phillips Rd SW from LOS F (v/c 1.12) to LOS F (v/c 1.01)
    - Washington Blvd SW west of Gravelly Lake Dr SW from LOS E (v/c 0.99) to LOS E (v/c 0.96)
    - 150th St SW east of Woodbrook Rd SW from LOS F (v/c 1.05) to LOS C (v/c0.80)
- Roadway operating conditions are projected to worsen under the Action Alternative model scenario for the following segments:
    - Pacific Highway SW north of 108th St SW from LOS D (v/c 0.76) to LOS E (v/c 0.94)
    - South Tacoma Way north of 100th St SW from LOS D(v/c 0.89) to LOS E (v/c 0.93)
    - South Tacoma Way south of SR 512 from LOS D (v/c0.79) to LOS E (v/c 0.92)

State Routes

In most interchange ramp and mainline locations volumes would be reduced under the Action Alternative but in some locations, some movements would show increased volumes.

Parking Analysis

This section describes the analysis conducted by both BERK and Transpo Group to evaluate and identify areas within the City of Lakewood where a potential increase in on-street parking demand due to middle housing developments allowed under the State of Washington HB 1110 might cause significant safety issues. The State plans to provide guidance to local jurisdictions on how to evaluate significant safety issues related to HB 1110. However, prior to the issuance of this guidance, our analysis provides a methodology for evaluating significant safety issues that can be applied consistently to all roadway segments in the City related to parking impacts.

The analysis assumes that significant safety issues stemming from increased on-street parking could arise on roadways that were not originally designed for on-street parking. In the context of residential areas within the City of Lakewood, this would typically include narrow local roads without curbs. On-street parked vehicles on these roadways may contribute to significant safety issues, such as reduced sight distances, increased risk of dooring collisions for people biking, or preventing adequate space for two-way travel.

Data and Assumptions

The City of Lakewood provided the data used in this study. GIS data layers used included:

- **Travelways**: a line layer showing the edge of pavement for the entire city. This layer also shows driveway access to/from all parcels.
- **ROW under 60:** a line layer showing areas of the city where the public right of way is less than 60 feet wide.
- **Arterials:** a line layer showing all roads in the city.
- **Parcels:** a polygon layer showing parcels in the city.

These GIS data layers were utilized to identify narrow roadway segments throughout the City of Lakewood. However, it is important to note that since our analysis relies on the “ROWunder60” layer to identify narrow roadway segments, it is possible that this excludes other roadway segments that might have significant safety issues related to on-street parking. For example, a roadway segment with adequate public ROW but the pavement width is still narrow or missing curbs. The City should consider if further study is necessary to evaluate safety in these areas.

Once parcels along narrow roadway segments were identified, our analysis excluded parcels that were within 300 feet walking distance from a roadway segment with adequate public ROW. The assumption here is that a person living at one of these parcels could park their vehicle along the roadway segment with adequate public ROW and conveniently walk to their residence.

Methodology to Identify Inadequate On-Street Parking

The following steps were conducted to identify roadway segments with potentially significant safety issues related to on-street parking.

Step 1: *Identify where HB 1110 land uses would initially be allowed absent other data. Utilize the existing low-density residential zoning GIS layer for R1-R4 designated areas. Remove areas with lot sizes below a minimum threshold or lot size.*

This filtered dataset included 8,983 parcels.

Step 2: *Remove properties within ½ mile walking distance of a major transit stop. A major transit stop provides daily service frequency of 30 minutes or greater.*

Major transit stops within the city included stops with either future bus rapid transit or commuter rail service. Excluding parcels within a ½mile walking distance of major transit stops reduced the number of parcels relevant to the parking analysis to 2,300.

Step 3: *Utilize estimates of potential development capacity, such as number of additional units that could be added, to highlight areas with higher likelihood of off-site parking needs.*

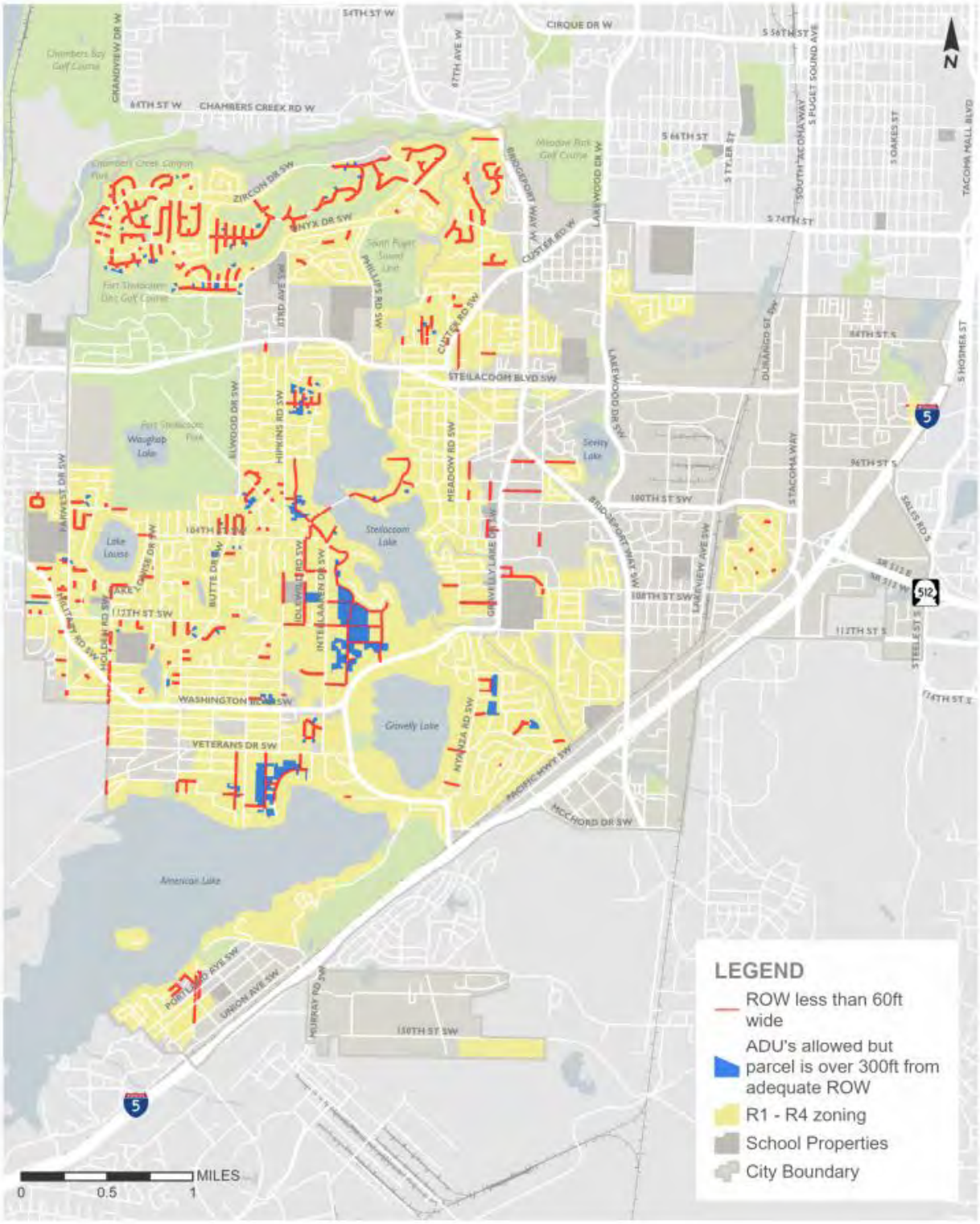
The Consultant team identified parcels where middle housing would not be allowed or would not be possible to build. The exclusion of these parcels reduced the number of parcels relevant to the parking analysis to 1,615.

Step 4: Highlight properties that have direct access to public streets that have substandard public ROW widths of under 60 feet. Assume on-street parking within 300 feet of a property is within acceptable walking distance.

This step reduced the number of parcels relevant to the parking analysis to 191. Exhibit 3-54 shows the location of the 191 parcels within the city.

The analysis highlights two neighborhoods within the city with a high concentration of parcels with potentially significant on-street parking safety issues – the Interlaken and Harts Idyllwild/Lake Holme developments. These neighborhoods include mostly low-density single-family homes. Roadways within these neighborhoods are primarily narrow and without curbs or sidewalks. The neighborhoods were designed to be accessed primarily by automobile. The historically single family area and roadway connectivity also allows for walking without the need for sidewalks since the traffic volumes are likely low and people walking have the option to walk off pavement within the public right of way. Since these roadways were not designed to accommodate higher residential densities and on-street parking, they may be appropriate areas to exempt from the HB 1110 middle housing zoning requirements. However additional evaluation may be necessary to consider other data points and information, such as equity, demographics, and practicality or risk of exempting these areas from middle housing zoning.

Exhibit 3-54. Parcels of Concern for Significant On-Street Parking Safety Issues



Source: Transpo, 2024

3.4.3 Mitigation Measures

Incorporated Plan Features

The City is updating its land use plans and associated transportation policies to meet a new horizon year of 2044 and address multimodal transportation needs.

Regulations and Commitments

Annually, the Lakewood Transportation Improvement Program identifies needed multimodal projects for a six-year period.

Lakewood adopted a Non-Motorized Transportation Plan (NMTP) in 2023. It includes a pedestrian system plan and a bicycle system plan. It includes funding needs and recommendations to implement non-motorized transportation improvements. The proposed Comprehensive Plan policies and supporting appendix material propose the addition of a multi-modal LOS that is based on the results of the Non-2023 Motorized Transportation Plan.

The City manages transportation facilities in Title 12, including:

- Chapter 12.09 – Transportation Facilities. Establishes LOS, requirements for traffic studies, and street frontage improvements.
- Chapter 12.13 – Commute Trip Reduction (CTR). Requires an employer that employs 100 or more full-time employees at a single work site to develop commute trip reduction programs to reduce VMT.
- Chapter 12.18 – Complete Streets Policy.

The City regulates parking in Title 18A.80 as well as in the Downtown and Station District Subareas' codes (LMC Titles 18B and 18C.) Persons may use parking incentives to reduce parking requirements (see 18A.80.060).

Other Potential Mitigation Measures

Roads

The roadway segments along Steilacoom Blvd SW and Washington Blvd SW which continue to operate at LOS E or worse in the Action Alternative model scenario have previously been identified by the City as segments which are unable to maintain LOS Dor better through feasible mitigation or improvements. Therefore, the analysis does not consider potential mitigations for these roadway segments since the results are similar to what had been shown in the adopted Transportation Element.

The remaining roadway segments along Pacific Highway SW and South Tacoma Way which continue to operate at LOS E or worse in the Action Alternative model scenario are considered for potential mitigations in our analysis. These two roadways directly serve the Station Area District and the increased land use intensity in the Action Alternative model scenario contributed to the worsening roadway segment LOS.

Given the City's focus on improving transit accessibility, especially for active transportation modes such as walking and biking, within the Station Area District, it is not likely feasible to mitigate the roadway segment deficiencies along Pacific Highway SW and South Tacoma Way through roadway widening improvements. In 2024, the Sound Transit Board of Directors approved funding a series of access improvements within the Station Area District which may encourage greater transit, walking, and biking use and decrease the demand for single occupancy vehicle driving on the surrounding roadway network. These improvements include:

- **15th St Ct SW trail to station** – adds a multi-use trail in Sound Transit right-of-way from the end of 115th St. Court SW to the pedestrian bridge over the railroad tracks connecting to Lakewood Station.
- **Station area curb and sidewalk improvements** – improve curbs and sidewalks within a half mile radius of the station area.
- **Pierce Transit Route 206 bus stop at Lakewood Station** – modify the intersection of Pacific Hwy. SW and Bridgeport Way to improve the bus turning radius, which makes a Pierce Transit stop at the station more feasible.

Additionally, the City of Lakewood could consider adjusting the LOS threshold for these deficient roadway segments as they have done previously for other deficient roadway segments in the city. These adjustments would further emphasize the City's focus on improving transit access, walking, and biking within the Station Area District and surrounding area.

3.4.4 Significant Unavoidable Adverse Impacts

Expected demographic and economic growth in key urban centers requires that transportation infrastructure keeps pace with development. The focus on enhancing sustainable and efficient transportation options will be crucial in managing the environmental impact and improving the quality of life for Lakewood's residents. With mitigation measures including capital investments, transportation impacts can be reduced at identified locations, except where the City has already identified lower LOS that balance investment and congestion.

The capacity of the Action Alternative to provide middle housing is greater than the No Action Alternative as described in Chapter 2. The City would allow middle housing in most residential zones, and near transit would limit parking per state requirements, with Director review of the feasibility of on-street parking. With ongoing monitoring and code allowances that provide avenues for applicants to request changes in parking with project-level information, no significant unavoidable adverse impacts are anticipated.

3.5 Public Services

This section documents existing public services provided within the City of Lakewood. It details adopted and effective level of service (LOS) standards, estimated demand for services, and projects future LOS and demand for each alternative. Public services analyzed in this EIS include fire, police, schools, and parks space. Exhibit 3-55 lists which essential public services and utilities are analyzed here and notes what service plans or capital planning documents guide those services.

Exhibit 3-55 Public Services Included in this Supplemental Environmental Impact Statement

Public Service	Provider	Guiding Documents
Fire	West Pierce Fire and Rescue	West Pierce Fire & Rescue Annual Report (2022 & 2023); West Pierce Fire & Rescue 2024 Budget
Police	Lakewood Police Department	Lakewood Police Department 2023 Annual Report
Schools	Clover Park School District	Office of Financial Management Small Area Estimates Program; Office of Superintendent of Public Instruction Clover Park Strategic Plan and Facility Condition Report
Parks, Recreation, and Open Space	Lakewood Parks & Recreation Pierce County Parks & Recreation	Lakewood Legacy Plan PROS Master Plan 2020 Parks Capital Improvement Program 2024-2029

The methodology for impacts is based on analyzing data available in the Comprehensive Plan, functional plans, provider annual reports, budgets, and other data sources, as necessary. Impacts are quantified by population and employment-based summaries and projections.

3.5.1 Affected Environment

Fire & EMS

Existing Service

West Pierce Fire & Rescue (WPFR) is responsible for providing fire services to the city. Formed in 2011, WPFR fully serves the communities of Lakewood and University Place and provides contracted services to Steilacoom. WPFR public services include fire prevention and suppression, motor vehicle collisions, medical aid calls, technical and water rescues, hazardous materials response, and other calls for service. They also provide services for building permitting and code enforcement.

In 2023, WPFR responded to 17,809 calls for service (West Pierce Fire & Rescue, 2023). This is slightly higher than 2022 calls for service at 17,721 (West Pierce Fire & Rescue, 2022). The call volume has increased 40% since its inception in 2011. Nearly 80% of total call volumes are medical in nature.

In 2023, WPFR employed 221 full-time employees. Of the full-time personnel, WPFR had 164 personnel employed for operations. District personnel are trained for medical aid with 57 emergency medical technicians and 118 paramedics.

WPFR has a service area encompassing 31 square miles, serving a population of over 100,000. The district has six fully staffed stations and is evaluating adding a seventh station. Five fire stations serve the City of Lakewood See Exhibit 3-56. Five of the six stations have a medic unit, which is staffed 24 hours a day with one Paramedic and one Emergency Medical Technician (EMT).

WPFR has 10 facilities, including six stations, a fleet/facilities maintenance shop, two boathouses, and a training tower. The facilities total approximately 105,000 square feet. The fleet personnel are responsible for 106 apparatus and vehicles, three vehicles and assorted trailers.

Exhibit 3-56. West Pierce Fire & Rescue Service Area Map

Source: West Pierce Fire and Rescue Adopted Budget, 2024

Level of Service

Lakewood has adopted policies setting LOS standards for WPFR:

- PS-1.1: Maintain a Washington Surveying and Rating Bureau (or successor agency) rating of ISO Class 3 or better; and
- PS-4.2: Provide a four-minute initial time standard for EMS calls.

- PS-4.3: Provide fire station/EMT locations that meet a 1.5-mile response distance standard

WPFR has met the PS-1.1 Rating Bureau LOS standard with a class 3 WSRB every year through 2023 since it was first rated in 2012.

A common effective LOS standard is to look at fire response personnel per 1,000 capita. This helps compare service capabilities over time and across jurisdictions. Fire suppression personnel are often trained in emergency medical services, and there is overlap in the number of full-time equivalents (FTEs) for each activity. See Exhibit 3-57.

Exhibit 3-57. Fire Services Effective Level of Services Standards

YEAR	DISTRICT POPULATION	OPERATIONS (FIREFIGHTERS / EMT/MEDICS)	FIREFIGHTERS PER 1,000 RESIDENTS
2023	100,000	164	1.6

Source: WPFR Adopted Budget, 2024.

Police

Existing Service

The City of Lakewood Police Department (LPD) provides policing and other related services. LPD services include patrol operations, criminal investigations, traffic incidents, other patrol specialty services, and other policing services. LPD operates out of one station, located across from Seeley Lake Park at 9401 Lakewood Drive SW.

The LPD is one of the largest departments in the state. Since incorporation, the LPD has prioritized its limited resources toward combating serious criminal activity such as violent crimes, gang activity, and vice rather than property and other less serious crimes.

Dispatched Calls

Dispatched calls from 2016 to 2022 were approximately 48,000 – 50,000 per year. In 2023, the department received 53,921 calls for service, a 10% increase in calls from the previous year.

Level of Service

Currently, the LPD employs approximately 100 officers, one officer for every 636 residents. With this information, an effective LOS can be calculated, resulting in approximately 1.57 officers per 1,000 residents.

Exhibit 3-58. Police Services Effective Level of Services Standards

YEAR	POPULATION	OFFICERS	OFFICERS PER 1,000 RESIDENTS
2023	63,612	100	1.57

Source: Lakewood Police Department Annual Report, 2023

Comprehensive Plan Policy P-5. 1 establishes response time objectives:

> *PS-5.1: Provide police protection with a three-minute response time for life-threatening emergencies (Priority 1), a six-minute response time for crimes in progress or just completed (Priority 2), and a routine/non-emergency response time of 20 minutes (Priority 3).*

In 2023, response to Priority 1 calls averages 4.3 minutes, while all other priority calls average 8.1 minutes. The Police Department has not met its Priority 1 and 2 response time targets. However, it is meeting its Priority 3 response time.

Schools

Existing Service

Public school services are provided by the Clover Park School District (CPSD), It operates 23 schools, including a K-12 academy. District-wide, there are 12,436 students and 833 classroom teachers as of 2023-24 school year. Saint Francis Cabrini School also provides private school services to students in pre-K to 8th grade.

Level of Service

The City of Lakewood recognizes the Clover Park Capital Facilities Master Plan and Facility Condition Report School sizes are noted in the City's Capital Facilities Element as a LOS.

Exhibit 3-59. Clover Park Public School Size

SCHOOL SIZE	# STUDENTS PER SCHOOL
K-5	450-475
Middle	650-700
High	1,500- 1,600

Source: City of Lakewood, 2016

CPSD sets LOS standards in its Clover Park Capital Facilities Master Plan. Under a 2016 Facilities Advisory Committee report, the school board recommended that the district maintain Lake City property for a possible future school site and is developing a long-term master plan which may use sequential bonds. A Facilities Advisory Committee was formed in 2023 with recommendations due in 2024. The scope of their review is to develop recommendations for addressing aged facilities, facility improvements to

promote educational goals, facility improvements to increase safety and security, and consideration of a future capital measure.

A common effective LOS standard is to review the number of students per teacher. Schools often set student/teacher ratios which can also identify the number of future classrooms needed, which may be housed in permanent or temporary portable capacity.

To estimate student generation, it is also possible to consider the number of households in the district in relation to the number of students. The number of occupied households in the Clover Park School district is 31,505 based on State of Washington Office of Financial Management (OFM) small area estimates. There are 12,436 students in the district as of 2023. Thus, the effective student per household ratio is 0.39. This ratio is a decrease from the 2016 student-to-household ratio of 0.45.

Exhibit 3-60. School Services Effective Level of Services Standards

Facility	Student count (2023-24)	Classroom teachers (2023-24)	Student to teacher ratio
Clover Park School District	**12,436**	**833**	**14.93**
Elementary Schools in Lakewood			
Custer Elementary School	316	25	12.64
Dower Elementary School	307	25	12.28
Four Heroes Elementary School	530	46	11.52
Idlewild Elementary School	436	28	15.57
Lake Louise Elementary School	503	38	13.24
Oakbrook Elementary School	279	27	10.33
Park Lodge Elementary School	355	35	10.14
Tillicum Elementary School	268	20	13.40
TyeePark Elementary School	338	32	10.56
Middle Schools in Lakewood			
Hudtloff Middle School	588	54	10.89
Lochburn Middle School	467	47	9.94
Thomas Middle School	985	69	14.28
High Schools in Lakewood			
Clover Park High School	1,144	107	10.69
Lakes High School	1,204	94	12.81
Other Schools in Lakewood			
Lakeview Hope Academy	541	46	11.76
General William H Harrison Prep School	748	48	15.58

Source: Washington Office of the Superintendent of Public Instruction, 2024, BERK, 2024.

Parks, Recreation, and Open Space

Existing Service

The City owns and operates 16 parks, with a total park acreage of more than 473 acres or roughly 4% of the city's total land area. See Exhibit 3-61 and Exhibit 3-62. In addition, nearly 1,518 acres, or 12.5% of Lakewood's land area, is classified as Open Space/Recreation Area (EDAW 1997). This includes City-owned parks and open space, Pierce County parkland, lands belonging to the State of Washington, school playgrounds and college campuses, greenbelts, and privately owned recreation facilities. There are approximately 4,590 residents per park in the City of Lakewood, as of 2019; this equates to 7.9 acres of park land per 1,000 residents (Legacy PROS Plan, 2020).

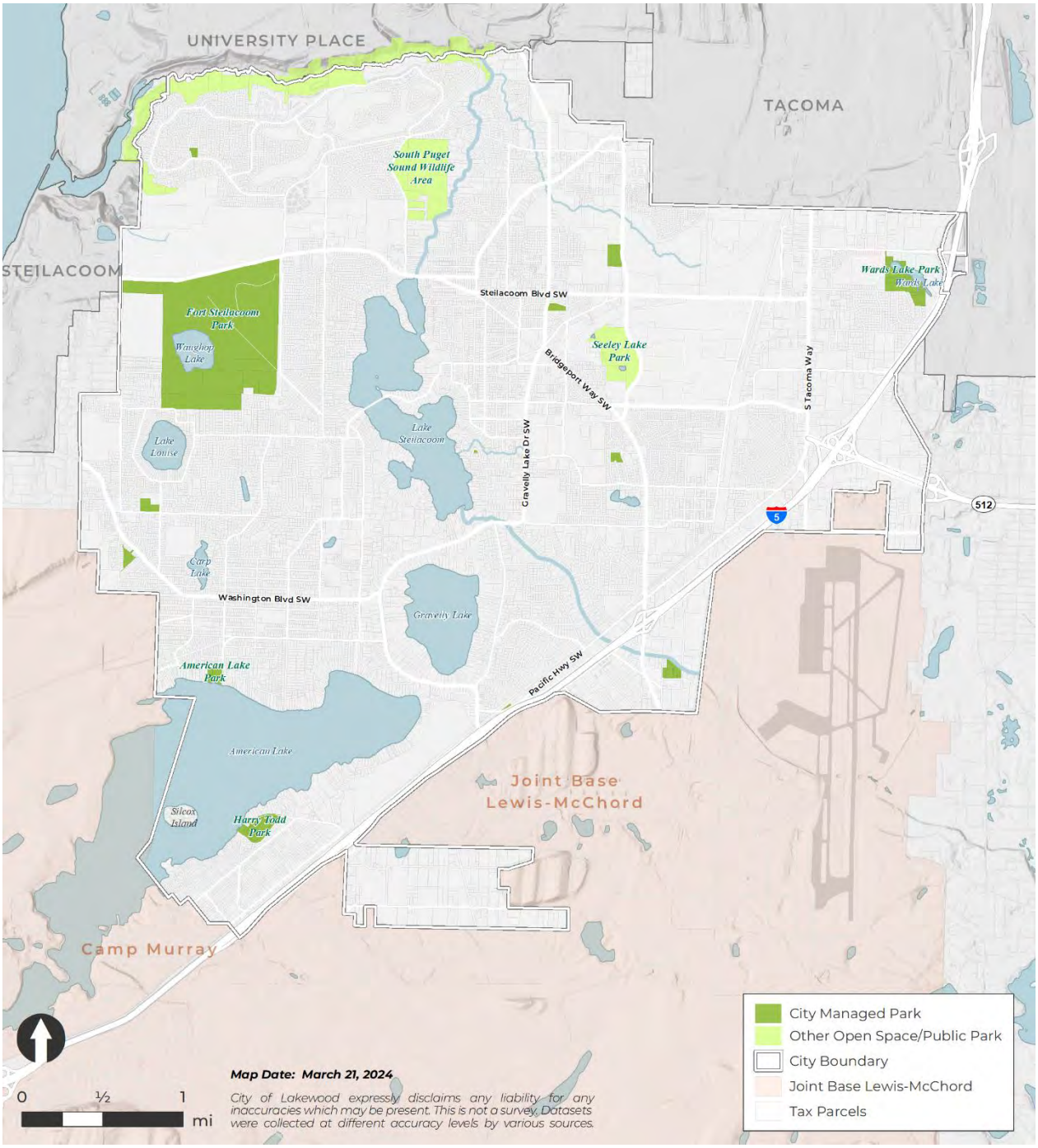
Exhibit 3-61. City of Lakewood Park Inventory, 2020

Park Type	Park	Acres	2020 PACA Quality Score	2020 PACA Diversity Score
N	Active Park	2.28	2.5	1.75
C	American Lake Park	5.5	2	2.5
NA	Blueberry Park	7.91	1.5	1
R	Chambers Creek Canyon Area	200+	1.7	1
U	Colonial Plaza	1	3	1.5
CG	Community Garden	-	-	-
N	Edgewater Park	2.83	1.5	1.25
R	Fort Steilacoom Park	309.51	2.8	2.5
U	Gravelly Lake Loop	3 miles	2.7	1
C	Harry Todd Park	16.78	1.9	2.5
N	Kiwanis Park	2.85	2.5	1.8
N	Lake Louise Elementary	4.72	2.2	1.5
S	Lakewood Senior Center	-	-	-
N	Oakbrook Park	1.55	2.3	1.3
U	Ponders Park	0.41	1.7	1
N	Primley Park	0.19	1.8	1.3
NA	Seeley Lake Park	48	1.5	1
N/CG	Springbrook Park	6.68	2.9	2.8
N	Wards Lake Park	27.79	2.4	1.8
N	Washington Park	3.64	2.3	1.8

C = Community Park | CG = community garden | NA = Natural Area | N = neighborhood park | R = Regional Park | S = Senior Center | U = Urban Park (linear or nodal)

Source: City of Lakewood Legacy PROS Plan, 2020.

Exhibit 3-62. Parks and Open Space Facilities in Lakewood



Source: City of Lakewood, 2024.

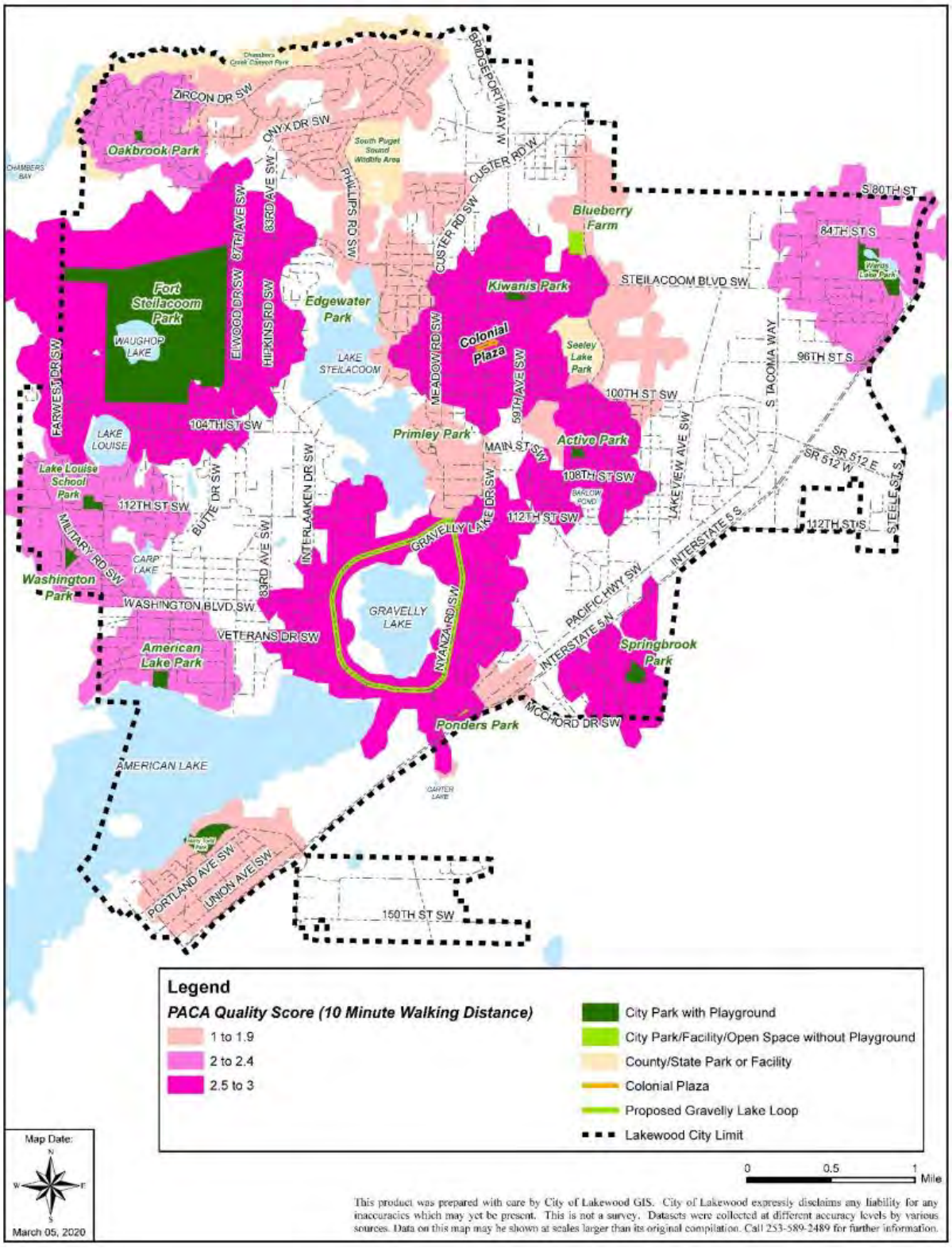
Level of Service

The City's adopted park LOS standard provides a walkshed measurement and a park amenity condition assessment measurement. The walkshed measurement is a 10-minute walking time to publicly accessible park or open space facility. See Exhibit 3-63 and Exhibit 3-64 for the neighborhoods in Lakewood that meet that LOS. The assessment measurement is that all parks and park amenities score a 2 or higher, meaning that the park quality is in "fair" condition and the park provides a "fair" diversity of amenities.

Parks with very high (2.5 and above) PACA quality scores are geographically located in central Lakewood. In the future, the City may want to consider improving the quality scores of Lakewood parks that currently scored a 2 or below. Currently, the City is actively in the process of improving American Lake Park, Wards Lake Park, and Edgewater Park. Future quality PACA scores are likely to improve for these parks with these improvements.

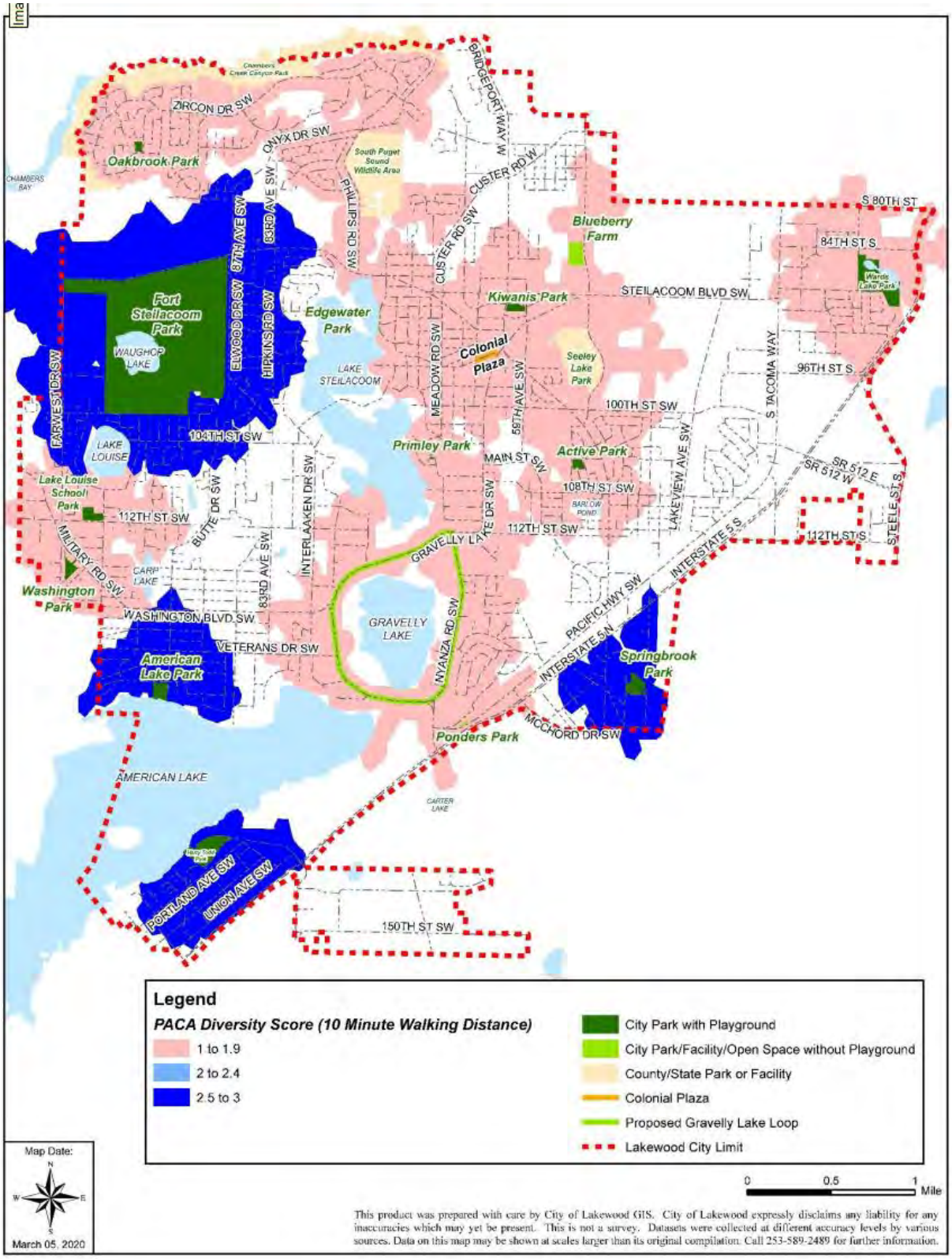
Regarding amenities, parks with a very high (2.5 and above) PACA diversity score are located in western and southern Lakewood. These parks are the City's regional and community parks. Parks with a lower (1.9 and below) PACA diversity score are concentrated in northern and central Lakewood.

Exhibit 3-63. 10-Minute Walkshed Measurement & PACA Quality Score for Lakewood Parks



Source: City of Lakewood Legacy PROS Plan, 2020

Exhibit 3-64. 10-minute Walkshed Measurement & PACA Diversity Score for Lakewood Parks



Source: City of Lakewood Legacy PROS Plan, 2020

Tillicum-Woodbrook Subarea

Fire & EMS

West Pierce Station 23 is located in the Tillicum-Woodbrook Subarea. The station provides the subarea with the 1.5-mile response distance standard.

Police

The Tillicum-Woodbrook Subarea is serviced by the LPD. The subarea is located approximately 10-15 minutes away from the LPD headquarters, which may make it challenging for police to respond to Priority 1 and 2 calls in a timely manner.

Schools

The Tillicum-Woodbrook subarea is served by the Clover Park School District. Within the subarea is the Tillicum Elementary School, which has the second-highest student-to-teacher ratio of the elementary schools in Lakewood. Its student-to-teacher ratio is 13.40. However, that ratio is below the school district ratio of 14.93.

Thomas Middle School and Clover Park High School district maps cover the subarea. Woodbrook Middle School was recently closed and replaced with Thomas Middle School. Constructed in 2020, Thomas Middle school has the highest student-to-teacher ratio of the middle schools in the district, with a ratio of 14.28. Clover Park High School has a low student-to-teacher ratio of 10.69, which is one of the lowest ratios of the schools in the school district.

Parks, Recreation and Open Space

The Tillicum-Woodbrook subarea has one park. Harry Todd Park is a 16.78-acre lakefront park with amenities including playfields, tennis, basketball courts, a playground, beach, pier, and boat docks. Its PACA Diversity Score is 2.5. However, its PACA Quality score is 1.9 and below the City's desired LOS for park quality. The City has scheduled project investment to Harry Todd Park, including improved water access, an ADA accessible pathway, restroom replacement, playground facility replacement, and construction of a fish pier and finger docks.

Currently, the Tillicum-Woodbrook subarea does not meet the 10-minute walkshed LOS. However, there is a planned Gravelly Lake Drive – Throne Lake Connector project that will provide a non-motorized shared-use path next to the Tacoma Country and Golf Club, thereby connecting the Tillicum neighborhood with the Ponders Corner neighborhoods. It is slated to be constructed from 2025-2026. With the completion of that project, the area will meet the 10-minute walkshed LOS.

3.5.2 Impacts

Thresholds of Significance

The impact analysis for each alternative applies City or District adopted LOS to projected housing, population, and employment growth:

- Negatively affect LOS for **police and/or fire and emergency medical services**;
- Increase demand for **special emergency services** beyond current operational capabilities of service providers;
- Result in increases in **students** and lack of facilities; and
- Reduce access to **park and open space facilities**.

Impacts Common to All Alternatives

Impacts are projected based on the effective LOS standards as discussed in the Affected Environment applied to projected population by alternative described in Chapter 2.

An increase in housing units and jobs in city will generate increased demand for public service providers, including additional trained firefighter / emergency medical trained staff, additional police officers, classrooms, and park facilities. The various alternatives would direct growth to different geographic areas, which would affect the precise levels of demand generated for a specific public service providers. All providers are anticipated to experience some increase in demand, which would require hiring additional staff, purchasing additional equipment, and expanding facilities to serve the future growth. See Exhibit 3-65.

Exhibit 3-65 Public Service Anticipated Impacts by Alternative

Public Service	Level of Service	Implications of No Action Alternative	Implications of Action Alternative
Fire	Maintain a WSRB rating of ISO Class 3 or better. Provide a 4-minute initial time standard for EMS calls. Provide fire station/EMT locations that meet a 1.5-mile response distance standard	Increase in calls to services throughout the city, particularly in the Downtown and Station Districts. Increased demand for facilities, staffing, and equipment.	Same as No Action Alternative Increased calls to service in low density areas due to an increase in moderate density housing infill. Increase in response times due to narrower streets in these low-density neighborhoods; however, the City is considering focusing most middle housing in proximity to transit. Off street parking is likely to remain on the narrower streets to keep access for emergency vehicles.

Public Service	Level of Service	Implications of No Action Alternative	Implications of Action Alternative
Police	3-minute response time for life-threatening emergencies (Priority 1), a 6-minute response time for crimes in progress or just completed (Priority 2), and a routine/non-emergency response time of 20 minutes (Priority 3).	Increased calls to services, including in more populated districts such as the Downtown and Station District Subareas. Increased demand for facilities, staffing, and equipment	Same as No Action Alternative. Increased calls to service in historically single family areas due to an increase in moderate density housing infill. Increase in response times due to narrower streets in these low-density neighborhoods
Schools	Effective LOS of 14.93 students-per-teacher ratio	Potential increase in student growth, resulting in increased demand for teachers, facilities, and equipment	Same as No Action Alternative.
Parks, Recreation, and Open Space	10-minute walk to park or open space facility All parks and amenities are in "fair" condition and provide a "fair" diversity of amenities.	Increased usage of current parks, resulting in increased demand for park acquisition and investment in quality and amenity factors in parks. Increased need for parks in the Downtown and Station District Subareas.	Same as No Action Alternative. Increased need for parks in low-density residential areas.

Fire & EMS

Additional trained fire fighter/emergency medical trained staff are needed under each alternative; however, the level of need differs. See Exhibit 3-66. The personnel may fulfil both duties of fire suppression and emergency medical technical services. With the increase in staffing, there may be additional needs for equipment and infrastructure to support this growth. However, the growth is expected to happen incrementally and be spread throughout the city.

Both alternatives can accommodate the 20-year growth target and would see increased growth in the Downtown and Station District Subareas, so the fire stations that service those areas may see increased demand. The Action Alternative has moderate growth spread throughout the city in middle housing. Its growth capacity, while higher, would not be expected in the 20-year period, but rather over the longer term, which would affect the precise levels of demand generated. There is likely to be an overall increase in calls for service, which may require staffing and equipment at all stations with the Action Alternative. The WPFR releases annual reports and can monitor calls over time to identify where the city growth is occurring and in greatest need of additional staffing and equipment.

Exhibit 3-66. Fire and EMS Services by Alternative

Alternative	Population Capacity	Current Effective LOS per 1,000 population	Staff Need
Fire			
Population Growth Target	23,180 (20-year target)	2.56	59.34
No Action	23,966 (full capacity)	2.56	61.27
Action Alternative	40,922 (full capacity)	2.56	104.62
EMS			
Population Growth Target	23,180 (20-year target)	1.84	42.64
No Action	23,966 (full capacity)	1.84	44.08
Action Alternative	40,922 (full capacity)	1.84	75.27

Source: BERK, 2024

Police

Exhibit 3-67 shows the police staff demands based on the anticipated population growth target and its alternatives' growth capacity. Additional police officers are also needed under each alternative to maintain the same ratio of officers per 1,000. Number of staff needed is estimated by each alternative's population. Given that the department is not meeting the current LOS response times for Priority 1 calls, the staffing need could be expanded. With the increase in officer need, there will be an increased need for infrastructure and equipment throughout the city. The population growth is anticipated to happen incrementally, allowing the police department to increase its staff and equipment needs over time. The Action Alternative full capacity is not expected in the 20-year period but over a much longer term. Both Alternatives are expected to achieve the growth target of 23,180 new residents.

Exhibit 3-67. Police Staff Demands by Alternative

Alternative	Population Net Growth Capacity	Current Effective LOS per 1,000 population	Staff Need
Population Growth Target	23,180 (20-year target)	1.57	36.39
No Action	23,966 (full capacity)	1.57	37.68
Action Alternative	40,922 (full capacity)	1.57	64.33

Source: BERK, 2024

Schools

Added residential growth throughout the city would increase households and the number of students, requiring an increased need for teachers and classrooms. Exhibit 3-68 depicts the teacher need if the students-per-household ratio remains constant.

However, the anticipated moderate density and multifamily housing may not include families with children. Therefore, the student-per-household ratio may decrease, resulting in a lower-than-anticipated

need for teachers. The School District will need to study student growth to anticipate the appropriate distribution of its teachers. The student growth that will occur is anticipated to happen incrementally, allowing the School District to respond based on need.

Exhibit 3-68. School Generation by Alternative

Alternative	Household Increase Capacity	Student per Household	Student Net Growth All Grades	Current Effective LOS	Teacher Need
Population Growth Target	9,378	0.39	3,702	14.93	248
No Action	10,242	0.39	4,043	14.93	271
Action Alternative	17,488	0.39	6,903	14.93	462

Source: BERK, 2024

Parks, Recreation, and Open Space

With additional population growth, parks and open space will see increased use, which will cause parks to experience an increased need for maintenance, amenities, and park acreage. Both alternatives will also see increased housing density in the Downtown and Station District Subareas, which have a lack parks located within a 10-minute walkshed. Therefore, existing parks like Ft. Steilacoom Park and Seeley Lake Park may see increased usage.

Growth is also anticipated to occur in low-density residential areas throughout the city due to infill. Some of these areas, such as the neighborhoods west of Gravelly Lake, show a lack of parks within a 10-minute walkshed.

Tillicum-Woodbrook Subarea

Under both alternatives, the density of land uses would be similar. However, the Action Alternative may see increased moderate housing development in historically single family areas, which will increase overall demand for public services in the area.

Given its location, road infrastructure that effectively facilitates the flow of traffic will impact response times. This could have a particular impact for police services, as police headquarters is located outside of the subarea. A reduction in traffic flow standards could reduce the reliability of police response to the subarea during peak hours.

No Action Alternative

The No Action Alternative is anticipated to have growth capacity similar to the growth target and focused in mixed use centers in the Downtown and the Station District Subareas. See discussion for Impacts Common to All Alternatives for all service providers.

Action Alternative

Fire & EMS

See discussion for Impacts Common to All Alternatives.

The Action Alternative will see increased moderate housing in historically single family areas, which may increase the calls to services in these areas. Some of these low-density areas have narrow streets, which may make it challenging for fire engines to access these areas, increasing response times. However, the City is considering focusing most middle housing in proximity to transit. Off-street parking is likely to remain on the narrower streets to keep access for emergency vehicles.

Road infrastructure that effectively facilitates the flow of traffic can help improve response times for fire and EMS. Reductions in transportation standards due to congestion could reduce the reliability of fire & EMS response during peak hours. See Section 3.4 Transportation and Parking for more information. Generally, the Action Alternative reduces vehicle miles traveled in lower density areas compared to the No Action Alternative, as it is anticipated to provide units in proximity to other modes of transportation.

Police

See discussion for Impacts Common to All Alternatives.

With the increase in moderate housing throughout the city, there may be an increase in calls to service for the police department, particularly in neighborhoods and areas that are historically single family. There may also be an increase of the proportion of calls in the Downtown and Station District Subareas due to the anticipated population and employment concentration.

Road infrastructure that effectively facilitates the flow of traffic can help improve response times for police. Reductions in transportation standards due to congestion could reduce the reliability of police response during peak hours.

Schools

See discussion for Impacts Common to All Alternatives.

With the increased moderate housing and ADUs in historically single family areas, the School District may see increased student demand throughout the city. However, these housing types may also represent smaller household types that may not have students.

Parks, Recreation, and Open Space

See discussion for Impacts Common to All Alternatives.

There will be an overall increase in park demand throughout the city, with the increase in population. The City could prioritize areas that have a lack of park space within a 10-minute walk shed, have a low diversity of amenities, and/or have a low-quality park score. These areas of the city include the north-central area, the central-east area, the central-west area near Idlewild Elementary School

Tillicum-Woodbrook Subarea

See discussion for Impacts Common to All Alternatives where the subarea is considered cumulatively.

3.5.3 Mitigation Measures

Incorporated Plan Features

Fire & EMS

Directing growth to the Downtown and Station District Subareas, as well as promoting infill in areas currently served can help promote efficient and effective service by fire and emergency service providers who are established and currently have adequate resources to these areas.

Police

Directing growth to the Downtown and Station District Subareas, as well as promoting infill in areas currently served can help promote efficient and effective service by police who are established and have adequate resources.

Schools

The Comprehensive Plan includes policies encouraging City-school district coordination.

Parks, Recreation, and Open Space

The Comprehensive Plan includes a Parks, Recreation, and Open Space (PROS) Element.

Regulations and Commitments

The City addresses public service levels of service in its Capital Facilities Plan Element. The element is updated periodically to ensure that proposed growth and change can be served.

The fire district receives three property tax levies including a regular levy, an EMS levy, and a Maintenance & Operations (M&O) levy. The M&O levy will run from 2024-2027.

The City requires private open space and recreation for new multifamily and commercial development. 18A.50.231 Specific Uses Design Standards, 18B.500, and 18C.500.

The Downtown Subarea plan anticipates a 2- to 4-acre park and additional greenspace, such as a green street loop, to create a linear park concept. The plan would also create pedestrian connections to parks outside the subarea. The Station District identifies linear park and other opportunities in the Subarea Plan.

Other Potential Mitigation Measures

- **Fire:** The fire district may request facility bonds and updates to maintenance and operations levies to support costs associated with growth. The fire district could also evaluate the feasibility of investment in more compact fire trucks.
- **Police:** The City could implement Crime Prevention through Environmental Design principles to allow for appropriate lighting, landscaping, and visibility.
- **Schools:** The school district could explore participating in an impact fee program to support financing of its schools' construction, improvements, and maintenance. School districts that participate in this program would update their Capital Facilities Plans every two years to project future enrollment and assess facility need.
- **Parks, Recreation, and Open Space:**
    - The City could more aggressively pursue grant and bond financing for parks and trails projects to aid in acquiring more land to build additional parks and improve the quality and diversity ratings of its current parks.
    - It could adopt a LOS for urban parks.
    - It could expand its existing partnerships with other public and private entities with existing open space facilities, such as schools, to expand potential park and open space opportunities.
    - It could partner with the State of Washington to expand access to large tracts of land including the Fort Steilacoom Golf and Disc Golf courses, the Historic Fort Steilacoom grounds, and a large open space area near Clover Park Technical College.

3.5.4 Significant Unavoidable Adverse Impacts

Future population growth and development will continue to increase the need for police services, fire protection, schools, and park facilities under both alternatives. Regular planning for future capital facility and staffing needs can minimize impacts and meet future demand. No significant unavoidable adverse impacts are expected.

- **Fire & EMS: No significant unavoidable adverse impacts on fire & EMS** are expected under the alternatives. Future population growth in the City of Lakewood would increase demand for fire and EMS. The costs to support station expansion, equipment acquisition, and increased hiring are anticipated to increase over time. However, regular monitoring of demand and levies helps maintain the LOS. The increased demands for fire & EMS are **not considered significant unavoidable adverse impacts.**
- **Police: No significant unavoidable adverse impacts on police** are expected under the alternatives. Population growth may increase calls to service and the overall crime level. It may also negatively affect police response times. Costs to support equipment acquisition and increased staff are anticipated to increase over time. However, growth is anticipated to occur incrementally and will occur throughout the city. Therefore, regular monitoring of calls to service and the increased demand for law enforcement could help reduce impacts to a **less-than-significant impact.**

- **Schools: No significant unavoidable adverse impacts on schools** are expected under the alternatives. Population growth may increase demand for school services. However, Clover Park School District may also experience declining enrollment. The existing schools will require maintenance and improvement, with potential construction of new schools in some areas. The costs associated with school construction and maintenance are likely to increase over time, along with the cost of land and construction materials. Regular capital facility planning, bonds, levies, and other steps could be taken to reduce impacts from growth, resulting in a **less-than-significant impact level.**
- **Parks: No significant unavoidable adverse impacts on parks** are expected under the alternatives. Future population growth in the City of Lakewood would increase demand for parks and open space. The costs to support park acquisition, development, and current park maintenance will increase over time along with the cost of land and construction materials. Land costs in Downtown and Station District are anticipated to increase, and infill development could limit new acquisition opportunities, further straining the City's financing resources to provide parks and open space in this area. However, regular planning through the PROS Plan, acquisition, and development of parks using funding and grants could reduce potential impacts to a **less-than-significant level.**

3.6 Utilities

This section documents existing utilities provided within the City of Lakewood. It details adopted and effective level of service (LOS) standards, estimated demand for services, and projects future levels of service and demand for each alternative. Utilities analyzed in this DSEIS include water, sewer, stormwater, and power lists which essential utilities are analyzed here and notes what service plans or capital planning documents guide those services. See Exhibit 3-69.

Exhibit 3-69. Utilities Included in this Supplemental Draft Environmental Impact Statement

Service	Provider	Guiding Documents
Water	Lakewood Water District	Comprehensive Water Plan 2020 2024 Capital Improvement and Replacement and Rehabilitation Project Summary Perfluorinated Compounds in Pierce County, WA Groundwater, Lakewood Water District, January 4, 2021
Sewer	Pierce County Sewer Utility	Pierce County 2010 Unified Sewer Plan Sewer Improvement Program 2024-2044 Unified Sewer Plan Update Fact Sheet, 2024
Stormwater	City of Lakewood Engineering Services Division	City of Lakewood 2022 - 2024 Stormwater Management Program (SWMP) Stormwater Management Action Plan: Receiving Water Conditions Assessment, March 2022

Service	Provider	Guiding Documents
		Stormwater Management Action Plan: Receiving Water Prioritization, June 2022 Washington Department of Ecology Stormwater Manual as amended by the Lakewood Engineering Standards Manual, 2021
Power	Lakeview Light & Power Puget Sound Energy Tacoma Power	Communication with John DeVore, General Manager at Lakeview Light & Power Department of Commerce Electric Utility Resource Planning 2020 Report Tacoma Power 2022 Integrated Resource Plan Puget Sound Energy 2023

The methodology for impacts is based on analyzing data available in the Comprehensive Plan, functional plans, provider annual reports, budgets, and other data sources, as necessary. Impacts are quantified by population and employment-based summaries and projections.

3.6.1 Affected Environment

This section addresses the potential impacts associated with the alternatives on utilities including water, wastewater, stormwater, and power. After providing information on the affected environment, the impacts analysis considers how the alternatives could affect increases in demand for utilities. Measures to address potential impacts are included.

Water

Water Service Area Facilities and Population

Water service is primarily provided to the City by the LWD. See Exhibit 3-70. Its service area include the Lakewood city limits, a portion of the City's Urban Growth Area, and a small portion of unincorporated Pierce County. Small portions of the north and northeast sections of the city are served by the City of Tacoma, the Parkland Light and Water Company, and Southeast Tacoma Mutual Water Company.

The LWD comprises an area of 18.5 square miles, with an approximate retail population of over 61,110 as of 2019. (Lakewood Water District, 2020) (Lakewood Water District, 2024). The District's total water rights are equivalent to an average day demand withdrawal of 19.323 mgd (million gallons per day) and a peak daily demand of 69.614 mgd.

The LWD has a current average daily demand of 8.9 million gallons/day across the whole system. The District has sufficient water availability for demand within its retail service area. As a result, the District provides wholesale water to the Town of Steilacoom, and sells its extra capacity to other regional Water Districts such as Rainier Water, Summit Water, and Firgrowth Water.

The District has identified medium and high growth projections planned for the year 2039. It assumes a future retail population in Lakewood of about 68,992 by 2039, which would be a net growth of 7,882 population, consistent with the medium projections.

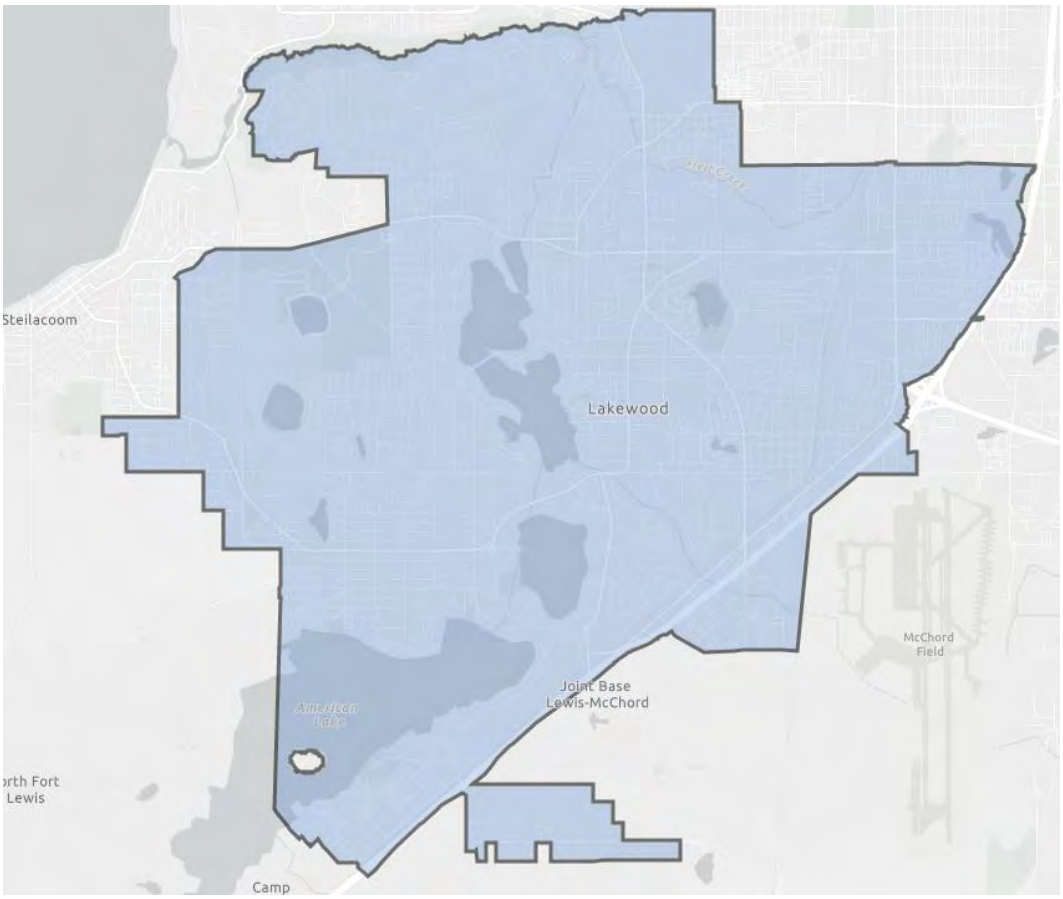
The District anticipates the growth in the city will be multifamily oriented such as in the Downtown Plan. The District has identified a future retail demand of 9.02 mgd/add by the year 2029 and 9.59 mgd/ADD by 2039 without conservation. With conservation, the 2029 projection is 8.76 mgd/add and the 2039 projection is 9.02 mgd/add. In addition to this planned capacity, the District has surplus water rights that can be accessed in case of unanticipated need beyond planned capacity. It has 30 active groundwater wells, 12 pump stations, and 3 reservoirs.

Levels of Service (LOS) and Capital Facilities

The City's current LOS is related to sufficient fire flow and current usage per capita: "Min. pressure- 40 psi. Fire flow- 1,500 gpm. Current usage: 139 gal/person/day. LWD Capital Improvement Program." Its current usage has dropped from 139 to 136 gallons per person per day as of 2018.

The District began a 35-year program of replacement and rehabilitation in 1995, with an updated 50-year repair and replacement plan in 2014 to replace 181 miles of aging water mains. The repair and replacement plan focuses on the replacement of facilities that are nearing the end of their useful life and does not account for upgrades or extensions to support new development. District policy requires the developer to pay for system improvements related to new development. Depending on the location and intensity of new development, this may include water main upgrades or line extensions to provide additional capacity or fire flow.

Exhibit 3-70. Lakewood Water District Service Area



Source: Lakewood Water District, 2024

Exhibit 3-71. Lakewood Water District Capital Projects (2024)

Location	Project Type	Project Status
39th Avenue	Replacement and Rehabilitation	Completed
39th Avenue, Phase 2	Replacement and Rehabilitation	Approved and Under Construction
39th Avenue, Phase 3	Replacement and Rehabilitation	Approved and Under Construction
Front/96th Street	Replacement and Rehabilitation	Under Review
Gravelly Lake Drive	Replacement and Rehabilitation	Approved and Under Construction
112th Street Pac Hwy to South Tacoma Way	Capital Project	Completed
Nyanza Tank Replacement Project	Capital Project	Completed
Spanaway Water Wholesale Pipeline	Capital Project	Under Construction

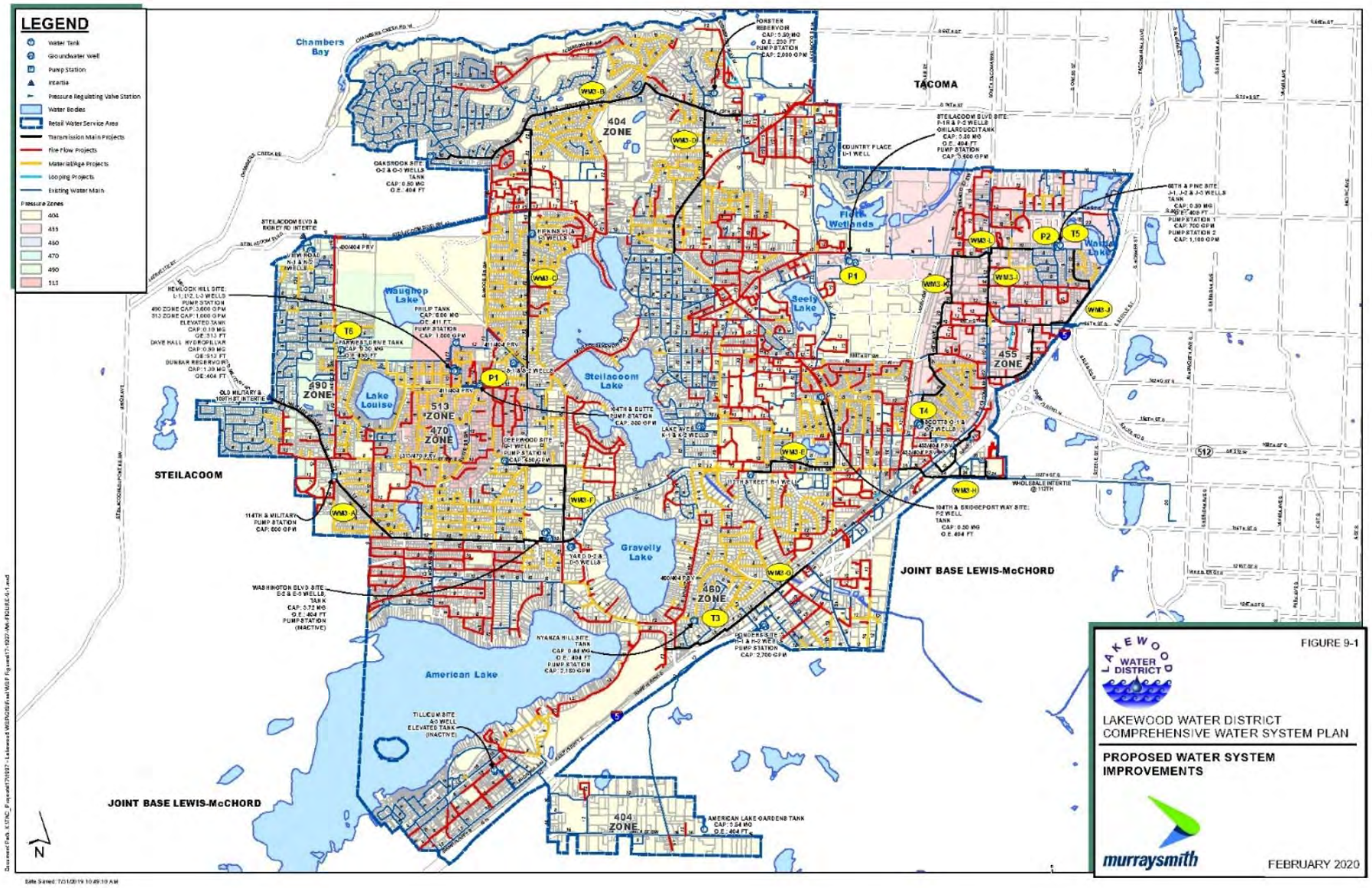
Source: (Lakewood Water District, 2024)

Proposed water system improvements include fire flow, system loops, and material/age projects; see Exhibit 3-72. The areas with priorities for water system improvements are identified in Exhibit 3-73.

Water Quality Monitoring

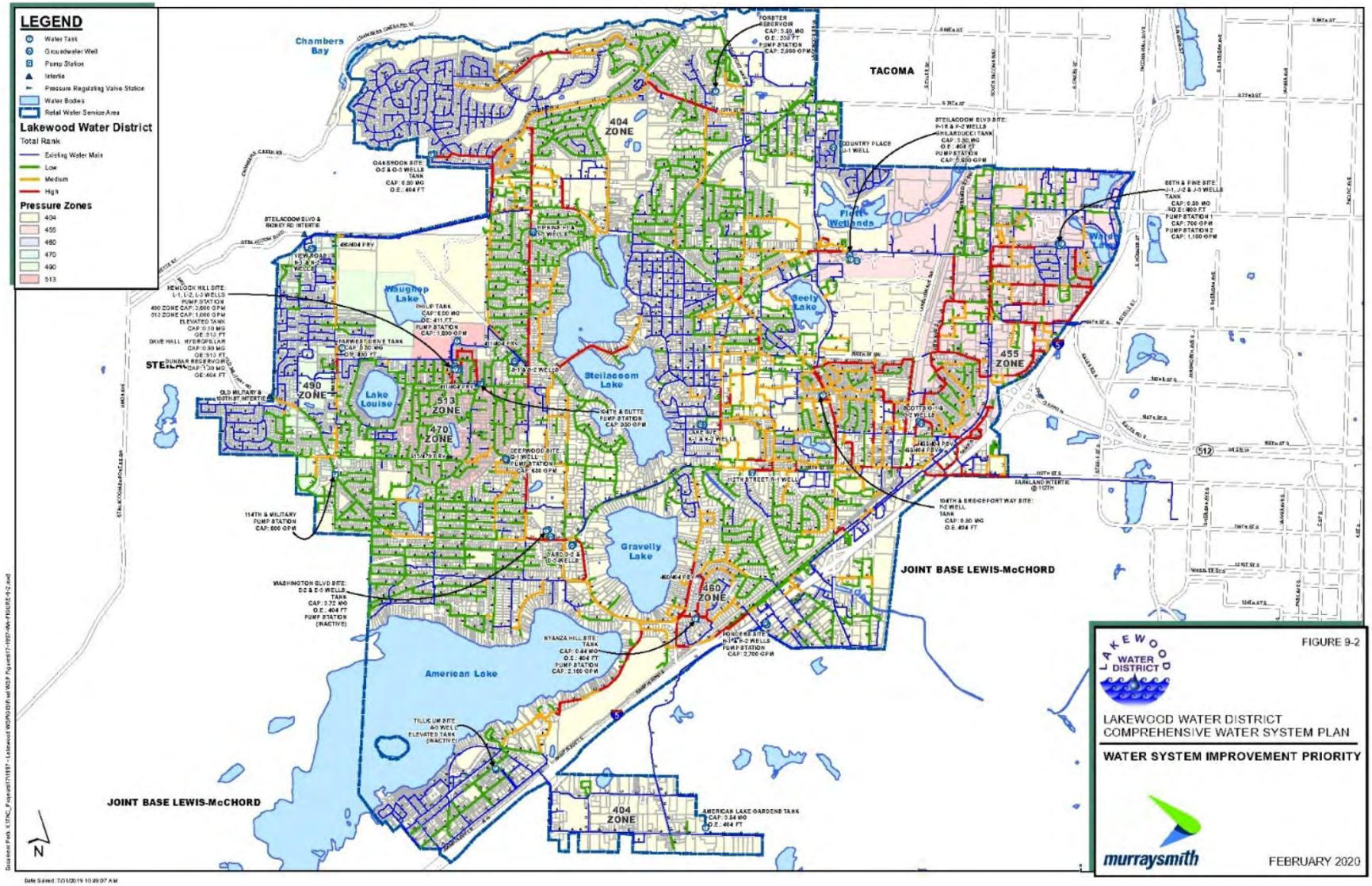
The District has been monitoring the drinking water they supply to protect public health. For example, per- and polyfluoroalkyl substances (PFAS) are a type of synthetic chemicals that are in many products and materials such as stain repellants, firefighting foam, and non-stick cookware, and they do not break down, making them a concern for human health and the environment. The district tested every well and found either no PFAS detected, or the PFAS detected is below the EPA's long term Health Advisory Levels of 70 parts per trillion. The only exception to this is LWD's well G-2 which was turned off in September 2018. (Lakewood Water District, 2021)

Exhibit 3-72. Proposed Water System Improvements 2020



Source: (Lakewood Water District, 2020)

Exhibit 3-73. Priority Water System Improvements



Source: (Lakewood Water District, 2020)

Sewer

Sewer service is provided by Pierce County Sewer Utility. It consists of domestic and commercial wastes generated by the residents and businesses in the City of Lakewood. Its primary drainage basin is Chamber-Clover Creek drainage basin, which includes the bulk of the County's wastewater infrastructure. Generally, the sewer infrastructure is considered in good condition with plenty of remaining service life and no current need for large-scale line replacements or upgrades. Exhibit 3-74 depicts a layout of the sanitary sewer main lines in the city.

The City's current LOS is:

- 220 gallons per day equals one residential equivalent (RE). Flow projections assume 0.83 RE for multifamily units. Pierce County Consolidated Sewer Plan Section 2.6.3. (City of Lakewood, 2016)

The County's most recent system plan is the 2010 Unified Sewer Plan, adopted in 2012. In March 2020, Pierce County launched the 2040 Unified Sewer Plan update project, which is anticipated to be finalized and adopted in 2025 after the periodic updates. This update provides an opportunity to plan for future development in Lakewood.

The County's 2010 Unified Sewer Plan anticipated a population of 72,000 within Lakewood by 2022, which the City has not yet met. The Chambers Creek Wastewater Treatment Plant considers regional growth projections through 2040.

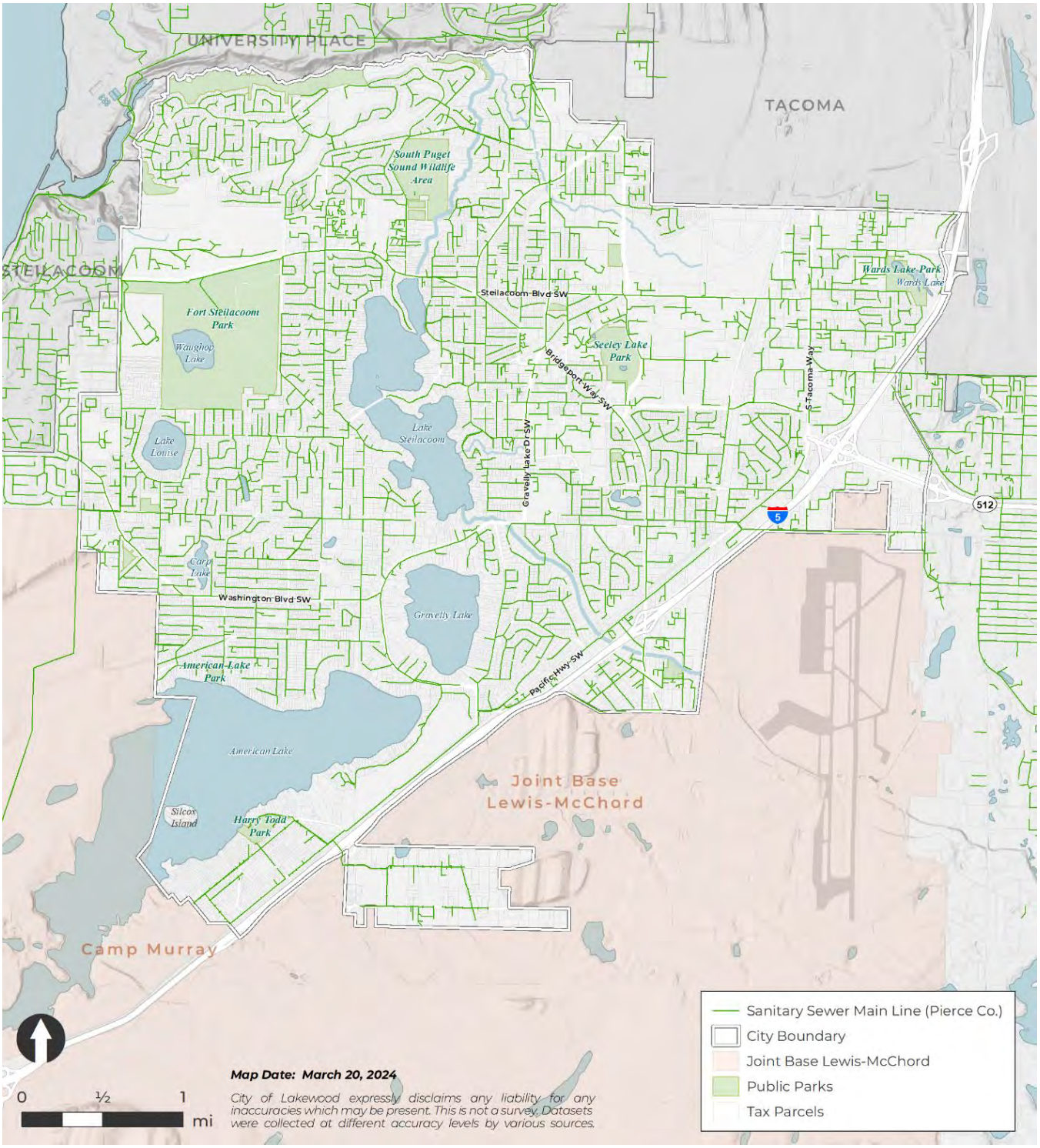
The more recent 2024-2044 Sewer Improvement Program identifies a bypass sewer interceptor in the Lakewood city limits projected for implementation in a period of 2027-2033 for a total cost of $81.1M.

> *Sewer Improvement Program 2024-2044 Bypass Interceptor Project Description: Construct a 72-inch, 19,000-foot pipeline will serve the sewer service sub-basins to the east of Interstate-5 as well as the existing portion of the Lakewood East Sub-basin. The project will provide future relief to the southern part of the Bridgeport Interceptor as well as the Steilacoom Boulevard Interceptor. The Bypass Interceptor will consist of an expansion of several existing interceptors coupled with new interceptor segments.*

Other planned improvements in Lakewood or serving the city between 6 and 20 years, include: Public Station Generator Replacements, DuPont-Lakewood Bypass Pump Station, DuPont-Lakewood Bypass Force Main, and Chambers Creek Regional Wastewater Treatment Plant Tunnel Expansion Phase 1.

Pierce County coordinates quarterly with the City of Lakewood to discuss upcoming and future projects. A Sewer Improvement Plan (SIP) was adopted in September 2021, addressing capital facility planning from 2022-2042 and identifying funding for the next six years of capital facility improvements.

Exhibit 3-74. Sanitary Sewer Main Lines in the City of Lakewood



Source: City of Lakewood, 2024.

Stormwater

Stormwater Conditions and Plans

Lakewood manages manmade and natural surface water systems; the current condition of the stormwater system as it relates to the natural environment and application of standards to development is covered in Section 3-1 Natural Environment. This section describes operations of the City's municipal stormwater utility.

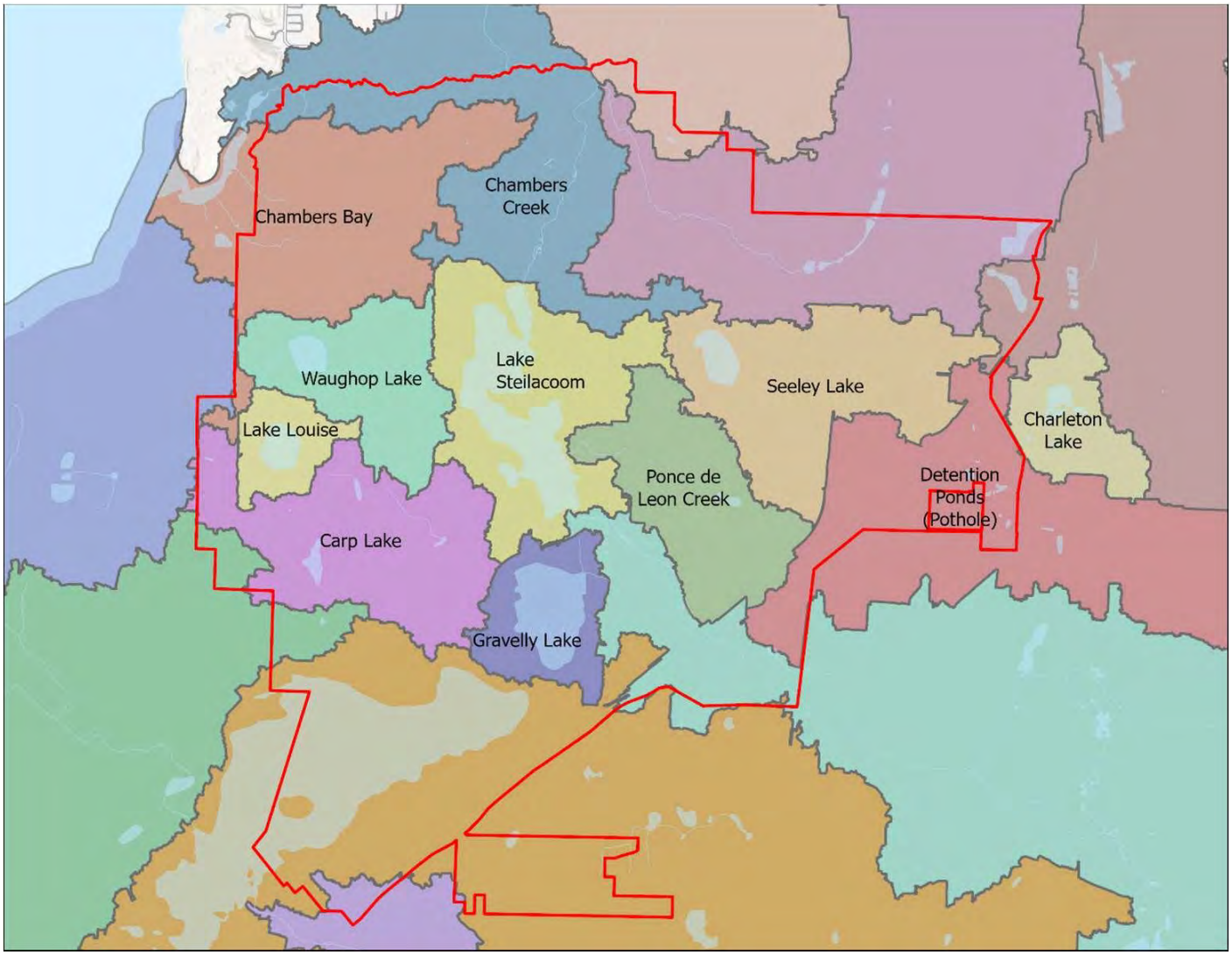
The City of Lakewood is located in the Chambers-Clover watershed, a small lowland watershed situated between two major rivers: the Puyallup to the northeast and the Nisqually to the southwest. he main stem of the network, Clover Creek, originates east of Lakewood, with headwaters and tributaries located in the unincorporated communities of Parkland and Spanaway and on Joint Base Lewis-McChord (JBLM). The creek flows under McChord Field and Interstate 5 and through southeast Lakewood before emptying into the south end of Lake Steilacoom. The stream channel leading to this inlet was created for flood control in the first half of the nineteenth century; the original course of the creek was located to the northeast and now holds a much smaller inlet stream known as Ponce de Leon Creek. The lake itself is also manmade, impounded behind a dam located at the north end of the lake.

The watershed also contains the American Lake system. American Lake is fed by Murray Creek, which originates on JBLM to the southeast. Although the inlet and outlet streams of the American Lake system are located outside Lakewood, roughly half of the lake itself is inside city limits.

Lakewood also contains a number of small, isolated wetlands and pothole lakes (lakes that do not have a surface outlet). These include Gravelly Lake, Lake Louise, Waughop Lake, Carp Lake, and Charleton Lake (which is located outside city limits but has some watershed area in the city). Seeley Lake and Wards Lake, located on the east side of the city, might be natural potholes, but they are used for stormwater detention and have manmade outlets to Flett Creek.

Although the two stream networks and the individual pothole lakes are, in a sense, separate features, they are all linked by an extensive groundwater system.

Exhibit 3-75. Stormwater Basins in Lakewood



Source: (City of Lakewood Public Works and Engineering, 2022)

All of Lakewood's identified receiving waters are designated "core summer salmonid habitat," although the City notes in its Receiving Water Conditions Assessment (2022) salmon runs are not possible in the city's pothole lakes. In addition to aquatic uses, all of Lakewood's water bodies have other designated uses including primary contact recreation, which corresponds to limits on bacteria levels. The water quality status is included in Exhibit 3-76.

Exhibit 3-76. Lakewood Water Quality Summary

Receiving Water	Desired Uses	Desired Uses Being Met?	Other Issues Affecting Downstream Waters	Impaired?
Chambers Bay	Estuarine habitat Salmon habitat	Yes – Estuary is in generally good condition	-	No
Chambers Creek	Salmon habitat Recreation	Somewhat – Exceedance of water quality standards for copper Unknown	-	Yes
Flett Creek	Salmon habitat Wetland habitat	Somewhat – Some issues with dissolved oxygen and pH Unknown	Issues with fecal coliform may affect recreation in Chambers Creek	Yes
Seeley Lake	Wetland habitat	No – Wetland receives industrial stormwater, which presumably degrades water quality	-	Yes
Lake Steilacoom	Salmon habitat Recreation	Unknown Somewhat – High phosphorus levels cause regular algae blooms	Sediments are source of copper in Chambers Creek	Yes
Ponce de Leon Creek	Salmon habitat	No – Dissolved oxygen and pH standards are consistently not met	Primary surface input of phosphorus to Lake Steilacoom	Yes
American Lake	Salmon habitat Recreation	Unknown Somewhat – Occasional bacteria and algae impairments	-	Yes
Carp Lake	Wetland habitat	Unknown	-	No
Gravelly Lake	Recreation	Yes – Lake is generally clear and free of algae in summer	-	No
Lake Louise	Recreation	Yes – Lake is generally clear and free of algae in summer	-	No
Waughop Lake	Recreation	No – High phosphorus levels cause algae blooms which make swimming and fishing inadvisable	-	Yes

Source: (City of Lakewood Public Works and Engineering, 2022)

The City implements a stormwater operations and maintenance program addressing the stormwater system. Activities include:

- All City-owned catch basins are inspected and cleaned as needed once every two years. The City has responsibility for numerous water quality vaults; these are inspected annually and cleaned as needed;
- The City contracts for vactoring and street sweeping. Vactoring and street sweeping are done by private contractors. The vactor contractor inspects storm lines and structures;
- The City performs spot checks of stormwater facilities after major storm events; and
- Work performed by City maintenance staff includes shoulder, ditch, and pond maintenance, vegetation management, infiltration system installation, sidewalk maintenance, asphalt patching, and snow and ice removal..

In addition, the City has developed a Stormwater Management Action Plan (SMAP), and identified priorities. Additional SMAP planning is anticipated for prioritized basins: Lake Steilacoom is considered to be of high importance and high opportunity. Given the size of the Lake Steilacoom watershed a sub-basin that could receive further SMAP planning was the Ponce de Leon Creek sub-basin. (City of Lakewood Public Works and Engineering, 2022)

Exhibit 3-77. Guiding Questions for Basin Prioritization

Receiving Water	Importance for Salmon	Percent of Basin in Lakewood	Impairments Might Be Addressed Through Stormwater?	Pollutant Sources of Concern Contributing to Direct Stormwater Discharge
Chambers Bay	High	11%	No1	• Intensive land use: 1 acre • High traffic roads: 18 acres
Chambers Creek	High	10%	No	• Intensive land use: 16 acres • High traffic roads: 23 acres
Flett Creek	High	24%	Yes	• Intensive land use: 14 acres • High traffic roads: 35 acres
Seeley Lake	None	100%	Yes	• Intensive land use: 121 acres • High traffic roads: 28 acres
Lake Steilacoom	Medium	5%	No	• Intensive land use: none • High traffic roads: 10 acres
Ponce de Leon Creek	High	100%	Yes	• • Intensive land use: 49 acres High traffic roads: 14 acres
American Lake	Low	11%	Yes	• Intensive land use: none • High traffic roads: none
Carp Lake	None	98%	No1	• Intensive land use: none • High traffic roads: 11 acres

1 No impairments identified
Source: (City of Lakewood Public Works and Engineering, 2022)

Stormwater Regulations

Stormwater is regulated through LMC 12.11. The City of Lakewood updates its Stormwater Management Program regularly in compliance with the Western Washington Phase II Municipal Stormwater Permit. The City's requirements include:

- Washington Department of Ecology Stormwater Manual as amended by the Lakewood Engineering Standards Manual, 2021

The Comprehensive Plan LOS for stormwater states: On-site infiltration expected. Treatment As required by DOE Stormwater manual.

The stormwater system currently has limited areas of filtration or water quality treatment; the City's stormwater system would be supported by the City's application of its stormwater standards.

City manuals require implementation of low impact development / green stormwater infrastructure techniques.

Development is also subject to development regulations in the zoning code, which has impervious surface limits as well as landscaping, tree protection, and critical area protection. See Exhibit 3-78. Thus, while some zones allow 100% impervious surfaces there is also a requirement for landscaping and trees that would result in less than absolute 100% pavement. As well the stormwater manuals and requirements would require stormwater treatment and stormwater controls including low impact development as noted above.

Exhibit 3-78. Impervious Area and Landscaping, Open Space, and Environmental Protection

Zone	Impervious surface limit	Landscaping Standards	Common Open Space Standards	Tree Protection Standards	Critical Area Protection
R1	45%	No	No	Yes	Yes
R2	45%	No	No	Yes	Yes
R3	60%	No	No	Yes	Yes
R4	70%	No	No	Yes	Yes
MR1	70%	Yes	Yes	Yes	Yes
MR2	75%	Yes	Yes	Yes	Yes
MF1	70%	Yes	Yes	Yes	Yes
MF2	70%	Yes	Yes	Yes	Yes
MF3	70%	Yes	Yes	Yes	Yes
ARC	60%	Yes	Yes	Yes	Yes
NC1	80%	Yes	Yes	Yes	Yes
NC2	90%	Yes	Yes	Yes	Yes
TOC	100%	Yes	Yes	Yes	Yes
CBD	100%	Yes	Yes	Yes	Yes

Zone	Impervious surface limit	Landscaping Standards	Common Open Space Standards	Tree Protection Standards	Critical Area Protection
C1	100%	Yes	No	Yes	Yes
C2	100%	Yes	No	Yes	Yes
C3	100%	Yes	No	Yes	Yes

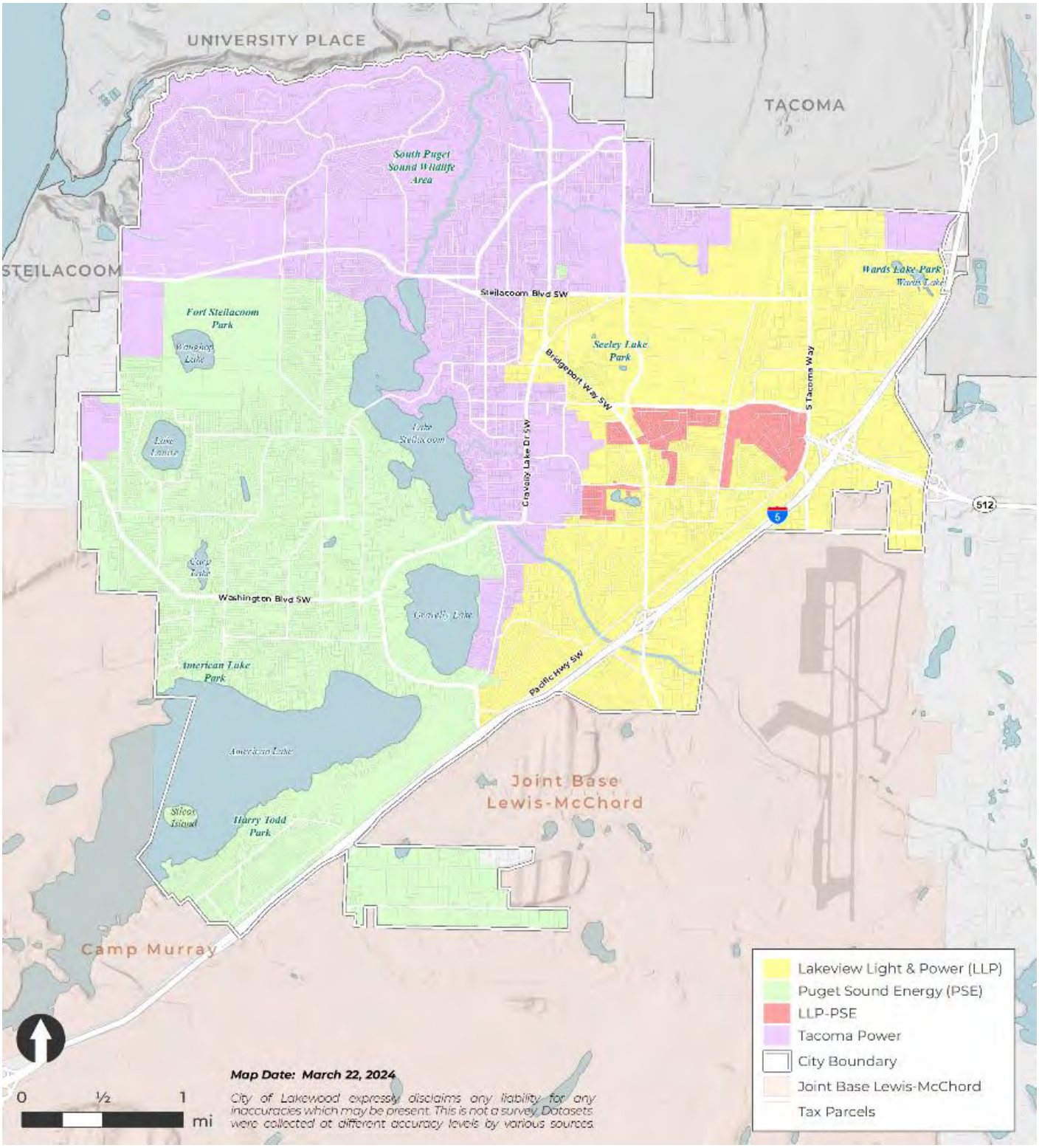
Source: Lakewood Municipal Code, 2024

Power

Lakewood's electricity is provided by three electric utilities — Tacoma Power, Puget Sound Energy (PSE), and Lakeview Light and Power (LLP). See Exhibit 3-79. These utility providers supply customers throughout the city and project future load growth based on information from the PSRC and local municipalities. As larger providers, Tacoma Power and PSE are required to have Integrated Resource Plans (IRP); LLP is a smaller provider and is not required to have a Resource Plan.

Tacoma Power generates its own power, with 89% of its power from hydroelectric energy (Tacoma Public Utilities, 2024). PSE is the largest energy utility in the state and generates 43% of its electricity from hydroelectric and wind power, with other fuel generation sources from coal and natural gas (Puget Sound Energy, n.d.). LLP is a provider of power supplied from the federal Bonneville Power Administration.

Exhibit 3-79. Electrical Service Areas by Providers Map



Source: City of Lakewood, 2024

For electric utility providers, an effective LOS standard is power resources available for existing and planned customers. As of 2022, Tacoma Power served over 181,000 customers and provided an average household load of 11,761 kilowatt-hours per year. Lakeview served over 11,000 customers while providing an average winter load of 36.9 megawatts and an average summer load of 25.5 megawatts. PSE serves over 4 million customers with a 2,864 annual megawatt load.

Electric power is supplied to utility customers, either through providers generating their own power, or through contracts with other resource generating providers such as the Bonneville Power Administration.

Exhibit 3-80. Power Services Effective Level of Services Standards

Provider	Customers	Annual megawatt load	Total resources Megawatts
Tacoma Power	181,630	572	660.34
Lakeview Light and Power	11,434	25.5-36.9f	
Puget Sound Energy (PSE)	1.2 million electric power customers in Puget Sound (129,180, Pierce County, 2023)	2,864 (nameplate capacity 6,566)	2,911

Sources: Washington Department of Commerce Electric Utility Resource Planning Report, 2020; Personal communication with John DeVore at LLP; (Puget Sound Energy, 2023)

Lakeview Light and Power

LLP serves the eastern section of the city. It is a winter peaking utility, with an average winter load of 36.9 megawatts (MW) and an average summer load of 25.5 MW. It has sufficient capacity to meet the City's growth plan for the area that it services, including the complete electrification of Pierce Transit's bus and vanpool fleet.

As part of LLP's capital infrastructure replacement plan, the utility is in the process of replacing all four of its substations. The Tyee (2020) and Roy Miller 2 (2022) substations have had all of their components replaced and designs upgraded. The remaining two substations, Roy Miller 1 and Lake Grove are planned to undergo similar work in 2024 and 2027 respectively. In addition, LLP will add a fifth substation, which will be solely devoted to the electrification of the South Transit locomotives.

Puget Sound Energy

Puget Sound Energy (PSE) provides energy to the western section of the city. It also serves parts of the Lakewood Towne Center not served by LLP. In Pierce County it serves 129,180 customers with electric power, most of which are residential. In the county it has 31 substations with 942 miles overhead miles and 1,592 miles of underground cables. It also provides gas service to 169,374 customers in the county, with 2,989 miles of gas main. In Lakewood, a recent project included replacing 359 feet of gas main along 96th Street Southwest in Lakewood. (Puget Sound Energy, 2023)

PSE has an integrated resource plan to help the entity meet the Clean Energy Transformation Act (CETA): 80% renewable target by 2030; 100% renewable target by 2045. Its current sources of electric power is 27% hydroelectric, 23% coal, 23%natural gas, 16% wind, 1% solar, 1% nuclear, and 11% other/unspecified. (Puget Sound Energy, 2023)

Tacoma Power

Tacoma Power serves the northern section and parts of the central section of the city. On average across its service territories, it expects load forecasts to remain relatively flat. However, Tacoma Power is also exploring small area forecasts. Across its infrastructure, Tacoma Power has 4 main / transmission substations, 5 switching stations, 49 distribution substations, 14 dedicated distribution substations, 23 Bonneville Power Administration customer substations, and 8 generation switchyards. Its total service area is 183 square miles and extends to the City of Tacoma and eastern Pierce County.

Tacoma Power currently develops a 10-year Capital Improvement Plans to budget for asset replacements and system capacity improvements as needed on a biennial basis. The ratemaking authority for Tacoma Power lies with the Tacoma Public Utility Board and Tacoma City Council.

As the city grows, Tacoma Power will extend service to new development projects that fall within its service territory. At this time, Tacoma Power has not identified a need to expand capacity. The cost for extending Tacoma Power's electrical system to serve new development projects is the responsibility of those development projects.

Tillicum-Woodbrook Subarea

Water: The subarea is served with water supply and distribution infrastructure by the LWD. Proposed water system improvements identified include fire flow projects and materials/age projects, which are low or medium priorities. See Exhibit 3-72 and Exhibit 3-73.

Sewer: Pierce County Sewer Division provides sewer service to the subarea. In the near term, no planned improvements are identified in the 2024-2044 improvement program.

Stormwater: The City of Lakewood provides stormwater utility services. American Lake has some impaired water quality. The City has identified that stormwater requirements can address impairments.

Power: The subarea is served by Puget Sound Energy.

3.6.2 Impacts

The impact analysis for each alternative applies City or District adopted LOS to projected housing, population, and employment growth:

Impacts on utilities would be significant under one or more of the following thresholds:

- **Water, Sewer, Stormwater:** Inconsistency with utility system planned growth and capital plans.

- **Power:** Potential to require major new projects or initiatives for energy system upgrades to accommodate redevelopment.

Under all alternatives there would be increases in development and increases in population and employment density. The development would be incremental. Lakewood, as well as the utilities, are regularly updating plans to accommodate growth and maintain utilities.

Exhibit 3-81. Summary Comparison of Utility Implications – No Action and Action Alternatives

Utility	Level of Service - Current	Impacts Common to All Alternatives	Implications of No Action Alternative	Implications of Action Alternative
Population	Target 2044: 23,180		23,966 (full capacity)	40,922 (full capacity)
Water	136 gallons per person per day	LWD has planned for about 7,882 more population between 2019-2039. This would be net 5,380 people 2020-2039. This is 23% of the 2044 growth target. The current plan does not address the new target. However, the District has additional water rights.	The No Action Alternative has capacity to meet the 2044 growth target for population. The District would need to update its plans to address 2044 growth targets. Most growth is in centers, and less in historically single family neighborhoods.	The Action Alternative has much greater capacity for growth that would occur beyond the 20-year target. In the 20-year period, the target growth would exceed District projections. There would be more growth distributed in historically single family historically single family neighborhoods as well as in centers.
Sewer	220 gallons per person per day, single family 182.6 gallons per person per day, multifamily Most growth under all alternatives would consist of multifamily or attached single family dwellings.	The Pierce County Sewer Division is preparing a sewer plan update after the Comprehensive Plan periodic update. The current 2010 sewer plan assumes net 8,388 people, 2020-2044. This is a lower population than the 2044 population.	Similar to Water above.	Similar to Water above.
Stormwater	Infiltration, and application of stormwater manual.	All alternatives will add growth in a largely urban area. New development and infrastructure projects may add new impervious surfaces	The No Action Alternative would apply most growth in the Downtown and Station District Subareas and would require stormwater	The Action Alternative would apply most growth in the Downtown and Station District Subareas but also result in growth in

Utility	Level of Service - Current	Impacts Common to All Alternatives	Implications of No Action Alternative	Implications of Action Alternative
		and improve stormwater management of existing impervious areas.	standards of new development.	historically single family areas, which may increase impervious areas. Lakewood's stormwater standards would apply.
Power	None adopted.	All alternatives would allow for growth and an increase in demand for power. The power providers would all work toward new state requirements under the Clean Energy Transformation Act.	The No Action Alternative would focus growth in the Downtown and Station District Subareas and greater power demand is expected in Lakeview Light and Power in the Downtown and Station District Subareas.	The Action Alternative would focus growth in the Downtown and Station District Subareas as well as in historically single family areas, and all power providers would see an increase in demand.

Impacts Common to All Alternatives

As growth occurs in the city, there would be an increase in development and increases in population and employment density.

Water

Demand for water will increase under both alternatives. While the distribution of growth and the location of increased water demand will vary under the No Action Alternative versus Action Alternative, the net volume of the water increase will be proportional to the total increase in population. While both alternatives would result in an increase in water demand, use of higher efficiency and low-flow fixtures could reduce per-capita demand.

Exhibit 3-82 depicts the anticipated net increase in water demand for each alternatives. The LWD has planned for a net annual retail demand increase of 570 million gallons of water usage. Each alternative has an annual net demand increase of 1,150 to 2,031 million gallons of water usage. The whole system's net increase is 3,418 million gallons and could accommodate the annual net need of each alternative. However, the District may need to change the amount of wholesale or partner agreements to accommodate this increased demand.

Exhibit 3-83 shows the total water usage by each alternative based on average daily demand. The LWD planned for an average daily demand of 9.59 million gallons of water usage / day (mgd) by year 2039 without conservation. The alternatives anticipate a higher daily average water need of 11.8 – 14.2 mgd. As of 2020, the LWD has water rights of 19.323 mgd average day demand withdrawal. That exceeds all the

alternatives and capacity estimates. However, it may change the amount of wholesale or partner agreements if conservation efforts are not applied

The Water System Plan is updated on a 6-year cycle to address aging infrastructure, expansion to accommodate new development, and recommended improvements. These improvements and developer investment in higher efficiency water fixtures could decrease overall water demand to meet incremental increases in water demand.

Exhibit 3-82. Additional Water Usage by Alternative

Alternative	Population Capacity	Effective LOS (gal/person/day)	Net Need (gal/day) (mgd)	Annual Net Demand (mg)	Annual Retail Demand Net 2039 (mg)	Whole System Net 2039 (mg)
Population Growth Target (2044)	23,180	136	3.2	1,150.7	570	3,418
No Action (full capacity)	23,966	136	3.3	1,189.7	570	3,418
Action Alternative (full capacity)	40,922	136	5.7	2,031.4	570	3,418

Source: BERK, 2024

Exhibit 3-83. Total Increased Water Usage by Alternative

Alternative	Total Population	Effective LOS (gal/person/day)	Total Need (gal/day) (mgd)	Projected Retail Demand (AAD) Gross 2039 Without WUE (mgd)	Projected Wholesale Demand (ADD) Gross 2039 Without WUE (mgd)	Whole System Demand (ADD) Gross 2039 (mgd)
Population Growth Target (2044)	86,792	136	11.8	9.59	9.76	19.32
No Action (full capacity)	87,578	136	11.9	9.59	9.76	19.32
Action Alternative (full capacity)	104,534	136	14.2	9.59	9.76	19.32

Note: WUE (Water Use Efficiency) Program
Source: BERK, 2024

Sewer

Sewer impacts are similar to water impacts. As growth occurs in the city, sewer usage will increase under all alternatives. While the distribution of growth and the location of increased sewer usage will vary, the net volume of the sewer increase will be proportional to the total increase in population.

Exhibit 3-84. Net Growth and Sewer Demand

Alternative	Population Capacity	Effective LOS (gal/person/day)	Need (gal/day)
Population Growth Target 2044	23,180	182.6	4,232,668
No Action (full capacity)	23,966	182.6	4,376,192
Action Alternative (full capacity)	40,922	182.6	7,472,357

Source: BERK, 2024

Exhibit 3-85. Total Population and Sewer Demand

Alternative	Population Capacity	Effective LOS (gal/person/day)	Need (gal/day)
Population Growth Target 2044	86,792	182.6	15,848,219
No Action (full capacity)	87,578	182.6	15,991,743
Action Alternative (full capacity)	104,534	182.6	19,087,908

Source: BERK, 2024

Stormwater

Both alternatives would increase growth and could add impervious area but would also be subject to landscaping, tree protection, and critical area protection regulations.

Comparing growth by zone, the alternatives would have the most growth in the Downtown zone. The No Action Alternative would focus growth more in multifamily and mixed use zones, whereas the Action Alternative would focus growth in historically single family areas where there are lower limits on impervious areas. In all cases the City stormwater standards would apply. See Exhibit 3-86.

Exhibit 3-86. Capacity by Zone and Impervious Limits

Zone	Impervious Limits in Zoning Code	No Action Capacity	Action Alternative Capacity
ARC	60%	1%	1%
CBD	100%	25%	21%
MF1	70%	12%	7%
MF2	70%	15%	9%
MF3	70%	11%	8%
MR1	70%	1%	4%
MR2	75%	5%	9%
NC1	80%	1%	0%
NC2	90%	4%	3%
R1	45%	0%	2%

Zone	Impervious Limits in Zoning Code	No Action Capacity	Action Alternative Capacity
R2	45%	1%	3%
R2T	45%	0%	<1%
R3	60%	8%	20%
R3T	60%	0%	2%
R4	70%	3%	7%
R4T	70%	0%	1%
TOC	100%	13%	4%
Total		**10,242**	**17, 488**

Source: Lakewood Municipal Code, 2024; BERK 2024.

Power

Based on a 2020 evaluation, the three power providers have identified their likely annual loads between 2019-2029. See Exhibit 3-87. The three providers have identified different growth rates.

Exhibit 3-87. Power – Annual Loads (Mwa)

	Base Year 2019	5-Year Estimate 2024	10-Year Estimate 2029	Growth Rate
Lakeview Light and Power Co	30.11	31.1	31.86	0.6%
Tacoma Power	554.93	571.75	571.7	0.3%
Puget Sound Energy*	2,681.00	2,864.00	3,036.00	1.3%
Lakewood 2020-2044 Population Target Annual Growth Rate				1.3%

* Base Year 2018, 5-Year 2023, 10-Year 2028

If the population growth target is achieved by 2044, the citywide growth rate between 2020-2044 is 1.3%. Puget Sound Energy anticipates that rate of growth. The alternatives have different growth capacities but the planning target is the same for both alternatives.

The Lakeview Light and Power Company shows a 0.6% rate through 2029. However, as noted in the Affected Environment, the District has planned capacity to meet the City's growth plan, for those areas that it provides services for, including the complete electrification of Pierce Transits bus and vanpool fleet. The District will eventually have a fifth substation which will be solely devoted to the electrification of the Sound Transit locomotives.

Tillicum-Woodbrook Subarea

The Tillicum-Woodbrook Subarea would develop consistent with the plans and codes under each alternative. Under the No Action Alternative, the policies and investments would be based on the 2011 plan whereas under the Action Alternative, the policies and investments would reflect community input

and create greater community connectivity and housing options. Utilities and investments would improve the quality of life for the community, such as stormwater improvements and American Lake water quality, and water system improvements for fire flow and other replacement needs.

No Action Alternative

Water

See Impacts Common to All Alternatives

Demand for water will increase under the No Action Alternative, with most growth in the Downtown and Station District Subareas and less in historically single family neighborhoods. While the distribution of growth and the location of increased water demand will vary between the two alternatives, the net volume of the water increase will be proportional to the total increase in population.

The District would need to update its plans to address the City's 2044 growth targets. Its current plan does not address the new target. However, the No Action Alternative has capacity to meet the 2044 growth target.

Sewer

See Impacts Common to All Alternatives

As growth occurs in the city, the volume of sewer usage will increase proportional to the total increase in population. However, distribution of growth and the location of increased sewer usage will vary between the two alternatives. Similar to the impacts identified in Water, the No Action Alternative will see the volume of sewer usage increase in the Downtown and Station District Subareas and less in historically single family neighborhoods.

Stormwater

See Impacts Common to All Alternatives

Increased growth under the No Action Alternative could add impervious area. However, It would also be subject to landscaping, tree protection, and critical area protection regulations. The No Action Alternative would apply most employment growth and much housing growth in centers and would require stormwater standards of new development.

Power

See Impacts Common to All Alternatives

Increased growth under the No Action Alternative will result in increased power usage, with growth more focused in the Downtown and Station District Subarea. LLP has planned capacity to meet the City's growth plan within its service area, including the complete electrification of the Pierce Transit bus

and vanpool fleet, replacement of its substations, and the construction of a fifth substation to support Sound Transit electrification.

Tillicum-Woodbrook Subarea

See Impacts Common to All Alternatives

The Tillicum-Woodbrook Subarea would develop consistent with the plans and codes. Under the No Action Alternative, the policies and investments would be based on the 2011 Tillicum Neighborhood Plan.

Action Alternative

Water

See Impacts Common to All Alternatives

The Action Alternative has much greater capacity for growth that would occur beyond the 20-year target. In the 20-year period, the target growth would exceed District projections. There would be more growth distributed in historically single family neighborhoods as well as in the Downtown and Station District Subareas.

The District would need to update its plans to address the new growth target, as the current plan does not. However, the District has water capacity to address the new growth target. The District may need to change the amount of wholesale or partner agreements to accommodate this increased demand.

Sewer

See Impacts Common to All Alternatives

The Action Alternative sees an increased volume of sewer usage proportional to the total increase in population, with distribution of the growth and location of increased sewer usage varying. The Action Alternative would see increased volume of sewer usage in historically single family neighborhoods as well as in the Downtown and Station District Subareas. With most growth in multifamily and attached single-family dwellings, the LOS is lower per person than those in single family.

The Pierce County Sewer Division is preparing a Unified Sewer Plan update by 2029, and the City is providing information regarding planned 2044 growth target patterns as the USP is drafted.

Stormwater

See Impacts Common to All Alternatives

Increased growth under the Action Alternative could increase impervious area. However, it would also be subject to landscaping, tree protection, and critical area protection regulations. The Action Alternative would apply much employment growth and much housing growth in the Downtown and Station

District Subareas as well as in historically single-family residential areas. Lakewood's stormwater standards would apply and it may require stormwater standards of new development.

Power

See Impacts Common to All Alternatives

Anticipated growth under the Action Alternative will result in increased power usage, with growth more focused in the Downtown and Station District Subareas and historically single family neighborhoods. All power providers would see an increase in demand and would update plans and capacity in their service areas to meet the City's growth plan.

Tillicum-Woodbrook Subarea

See Impacts Common to All Alternatives

The Tillicum-Woodbrook Subarea would develop consistent with the plans and codes under each alternative. Under the Action Alternative, the policies and investments would reflect community input and create greater community connectivity and housing options. Utilities and investments would improve the quality of life for the community, such as stormwater improvements and American Lake water quality, and water system improvements for fire flow and other replacement needs.

3.6.3 Mitigation Measures

Incorporated Plan Features

The Action Alternative would update the Capital Facilities and Utilities Element policies, and incorporate by reference current utility provider plans.

Regulations and Commitments

- The Lakewood Municipal Code includes standards for water, sewer, and stormwater infrastructure for new development. (LMC Title 12)
- The Lakewood Municipal Code requires application of the international energy code as required by the State of Washington (LMC Chapter 15A.25).
- Ongoing updates to Comprehensive Water System Plan by the LWD and the Unified Sewer Plan by Pierce County would address the increases in density in the City and ensure services are in place to meet the growing demand.
- Power service providers conduct integrated resource planning to address service demand and conservation.

- The City implements the Ecology Stormwater Manual, Stormwater Management Action Plan, and Engineering Standards addressing stormwater management and promoting low impact development.
- The Zoning Code sets forth impervious surface limits and standards for landscaping, tree protection, and critical area protection.

Other Potential Mitigation Measures

- Developments may reduce water demand by using new technologies that would reduce per-capita water use (and therefore wastewater service demand) by using newer, low- or no-flow plumbing fixtures and equipment.
- Implementation of sustainable requirements including the construction and operation of LEED-compliant (or similar ranking system) buildings could reduce the increase required in power systems.
- Implementation of conservation efforts and renewable energy sources to conserve electricity in new developments, including energy efficient equipment (i.e., light bulbs, appliances, and heating and air conditioning), could reduce energy consumption.

3.6.4 Significant Unavoidable Adverse Impacts

Additional population, employment, and industrial/commercial growth throughout the City's service area would result in increased demands on water services, sanitary sewer facilities, stormwater, and power. The growth planned for the city would be incremental. Advance planning for sewer/water system and capital facility improvements should minimize the possibility of unavoidable impacts, ensuring the utilities can accommodate growth. **No significant unavoidable adverse impacts are expected for utilities.**

4 Acronyms and References

4.1 Acronyms

ADU – Accessory Dwelling Unit

City – City of Lakewood

CPPs – Countywide Planning Policies

CTR – commute trip reduction

DNR – Washington State Department of Natural Resources

DNS – determination of non-significance

Ecology – Washington State Department of Ecology

EIS – environmental impact statement

EMS – emergency medical services

EPA – U.S. Environmental Protection Agency

ESA – federal Endangered Species Act

FCC – Federal Communications Commission

FEMA – Federal Emergency Management Agency

FHWA – Federal Highway Administration

FTE – full-time equivalent

GC – General Commercial

GHG – greenhouse gas

GMA – Washington State Growth Management Act

gpd – gallons per day

gpm – gallons per minute

LMC – Lakewood Municipal Code

LID – low impact development

LOS – level of service

MFTE – multifamily tax exemption

mg – million gallons

mgd – million gallons per day

mph – miles per hour

NFIP – National Flood Insurance Program

OFM – Washington State Office of Financial Management

PSCAA – Puget Sound Clean Air Agency

PSE – Puget Sound Energy, Inc.

PSH – Permanent Supportive Housing

PSRC – Puget Sound Regional Council

RCW – Revised Code of Washington

RRH – Rapid Re-housing

SEPA – State Environmental Policy Act

SMAP – Stormwater Management Action Plan

SR – state route

TAZs – transportation analysis zones

TDM – transportation demand management

TH – Transitional Housing

TIP – transportation improvement plan

UGA – urban growth area

VMT – vehicle miles traveled

WAC – Washington Administrative Code

WDFW – Washington Department of Fish and Wildlife

WRIA – water resource inventory area

WSDOT – Washington State Department of Transportation

4.2 References

AHBL, Otak, Herrera. (2019). *Shoreline Restoration Plan Component of the Shoreline Master Program for the City of Lakewood.* Retrieved from https://cityoflakewood.us/: https://cityoflakewood.us/wp-content/uploads/2022/02/091919-Lakewood-Restoration-Plan-w-ECY-recommended-edits.pdf

Brown and Caldwell. (2023, February). *Clover Creek Flood Study Engineering Report* . Retrieved from https://cityoflakewood.us/: https://cityoflakewood.us/wp-content/uploads/2023/03/Clover-Creek-Flood-Study_Engineering-Report_Final.pdf

Brown and Caldwell, Adolfson Associates, Sweet Edwards, Robinson & Noble, and Triangle Associates. (1990). *Draft Clover/Chambers Creek Basin Groundwater Management Program and Environmental Impact Statement Technical Appendices prepared for Clover/Chambers Creek Basin Ground Water Advisory Committee Tacoma-Pierce County Health Department,.* Retrieved from Washington Department of Ecology: https://fortress.wa.gov/ecy/publications/documents/1203201.pdf

Cascadia Consulting Group. (2022, August). *Pierce County Communitywide Geographic Greenhouse Gas Emissions.* Retrieved from https://www.piercecountywa.gov/DocumentCenter/View/118357/2022_GeographicInventory_Report_FINAL

Chambers-Clover Creek Watershed Council. (ND). *Welcome to Eyes on the Watershed: Chambers-Clover.* Retrieved from https://wsuniv.maps.arcgis.com/apps/MapJournal/index.html?appid=8297096d62924e9ab60aea9f42410f82

City of Lakewood. (2018, February 5). *About Us.* Retrieved from City of Lakewood Police Department: https://www.cityoflakewood.us/police/about-us

City of Lakewood. (2020, May 18). *Legacy Plan Parks Recreation & Open Space Master Plan.* Retrieved from https://cityoflakewood.us/wp-content/uploads/2020/05/FINAL-Legacy-Plan-2020-w-pg-numbers-flattened.pdf

City of Lakewood. (2021, 09). *Energy and Climate Change Chapter.* Retrieved from https://www.cityoflakewood.us/wp-content/uploads/2021/09/070621-Energy-and-Climate-Change-Chapter.pdf

City of Lakewood. (2022). *2022 City Tree Code and Urban Forestry Program.* Retrieved from https://cityoflakewood.us/trees/

City of Lakewood. (2022). *2022 Stormwater Management Manual.* Retrieved from https://cityoflakewood.us/wp-content/uploads/2022/01/City-of-Lakewood-Draft-SWMP-2022-for-Comment.pdf

City of Lakewood. (2023). *About Lakewood.* Retrieved from https://cityoflakewood.us: https://cityoflakewood.us/about-lakewood/#

City of Lakewood. (2024). *Lakewood Downtown Subarea Plan*. Retrieved from https://cityoflakewood.us/downtown-plan/

City of Lakewood Public Works and Engineering. (2022, March). *Stormwater Management Action Plan.* Retrieved from Receiving Water Conditions Assessment: https://cityoflakewood.us/public_works_engineering/engineering-services/

City of Lakewood Public Works and Engineering. (2022, March). *Stormwater Management Action Plan: Receiving Water Conditions Assessment.* Retrieved from https://cityoflakewood.us/public_works_engineering/engineering-services/

City of Lakewood Public Works and Engineering. (2022, June). *Stormwater Management Action Plan: Receiving Water Prioritization.* Retrieved from https://cityoflakewood.us/wp-content/uploads/2023/02/RWP-Final.pdf

Environmental Science Associates and BERK Consulting. (2023, June). *Pierce County Climate Vulnerability Assessment.* Retrieved from https://www.piercecountywa.gov/: https://www.piercecountywa.gov/DocumentCenter/View/129238/CVAandAdaptationStrategies_FINALdocx?bidId=

Google . (2024, April 11). *Environmental Insights Explorer (EIE); Lakewood city limits*. Retrieved from https://insights.sustainability.google/places/ChIJWxEhNw8RkVQRDidE5DOPfNQ?hl=en-US

Green, R., Bates, L. K., & Smyth, A. (2007). Impediments to recovery in New Orleans' Upper and Lower Ninth Ward: one year after Hurricane Katrina . *Disasters 31*, 311-335.

Lakewood Water District. (2020). *Comprehensive Water System Plan.* Retrieved from https://www.lakewoodwater.org/: https://www.lakewoodwater.org/lwd/page/water-system-plans

Lakewood Water District. (2021, January 4). *Perfluorinated Compounds in Pierce County, WA Groundwater.* Retrieved from https://storymaps.arcgis.com/stories/2a06bb2518df44b39d497eb397b4fb4c

Lakewood Water District. (2024). *About Us: Our History.* Retrieved from https://www.lakewoodwater.org/lwd

Lakewood Water District. (2024). *District Projects.* Retrieved from https://www.lakewoodwater.org/projects?term_node_tid_depth=All&field_project_status_value=All&field_project_type_tid=36&keys=

Lakewood Water District. (2024, April 5). *Source of Your Water*. Retrieved from Lakewood Water District: https://www.lakewoodwater.org/pwt/page/source-your-water

MSRC. (2023, March 27). *For More Equitable and Livable Cities, Consider Trees*. Retrieved from MSRC Insights: https://mrsc.org/stay-informed/mrsc-insight/march-2023/trees-for-equitable-and-livable-cities

PIerce County. (2022, 11 11). *Buildable Lands.* Retrieved from Final Inventory (2020 parcel base, updated 11/11/2022): https://www.piercecountywa.gov/923/Buildable-Lands

Pierce County. (2022-2023). *Countywide Planning Policies Appendix A Adopted 2044 Population/Housing/Employment for Pierce County and its Cities and Towns.* Retrieved from https://www.piercecountywa.gov/: https://www.piercecountywa.gov/DocumentCenter/View/23902/Appendix-A-CPPs

Pierce County. (2023, June). *Pierce County Climate Vulnerability Assessment.* Retrieved from https://www.piercecountywa.gov/DocumentCenter/View/129238/CVAandAdaptationStrategies_FINALdocx?bidId=

Pierce County. (2024, January). *Pierce County Comprehensive Plan Periodic Review and Update Draft Environmental Impact Statement (EIS).* Retrieved from https://www.piercecountywa.gov/DocumentCenter/View/133454/SEPA-Draft-EIS

Puget Sound Energy. (2023). *About Us: 2023 Profiles.* Retrieved from Pierce County: https://www.pse.com/en/about-us

Puget Sound Energy. (2023). *Electricity Supply.* Retrieved from Published by the Washington Department of Commerce, Dec. 2023, with data reported by PSE in August 2023: https://www.pse.com/en/pages/energy-supply/electric-supply

Puget Sound Energy. (n.d.). *Energy Supply > Electricity Supply.* Retrieved from PSE: https://www.pse.com/en/pages/energy-supply/electric-supply

Puget Sound Regional Council. (2020, March). *VISION 2050 Final Supplemental Environmental Impact Statement.* Retrieved from https://www.psrc.org/: https://www.psrc.org/sites/default/files/2022-02/v2050finalseis-march2020.pdf

Tacoma Public Utilities. (2024). *About Tacoma Power.* Retrieved from Tacoma Power Utilities: https://www.mytpu.org/about-tpu/services/power/about-tacoma-power/

U.S. Environmental Protection Agency (EPA). (2024, April 15). *Urban Heat Islands.* Retrieved from https://www.epa.gov/heatislands

U.S. EPA. (2024, April 15). *Sources of Greenhouse Gas Emissions.* Retrieved from https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions

US Environmental Protection Agency. (2024, April 11). *Overview of Greenhouse Gases.* Retrieved from https://www.epa.gov/: https://www.epa.gov/ghgemissions/overview-greenhouse-gases

US Fish and Wildlife Service. (Accessed 2024). *National Wetlands Inventory.* Retrieved from https://www.fws.gov/program/national-wetlands-inventory

Washington Department of Commerce. (2023, December). *Climate Element Planning Guidance Intermediate Version* . Retrieved from https://www.commerce.wa.gov/: https://www.commerce.wa.gov/serving-communities/growth-management/growth-management-topics/climate-change-2/

Washington Department of Ecology. (2023). *PFAS at cleanup sites.* Retrieved from https://ecology.wa.gov/: https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/addressing-priority-toxic-chemicals/pfas/cleanup-sites

Washington Department of Ecology. (2023, January 25). *Saving Washington's salmon from toxic tire dust.* Retrieved from https://ecology.wa.gov/: https://ecology.wa.gov/blog/january-2023/saving-washington-s-salmon-from-toxic-tire-dust

Washington Department of Natural Resources. (2024). *Geologic Hazard Maps.* Retrieved from https://www.dnr.wa.gov: https://www.dnr.wa.gov/programs-and-services/geology/geologic-hazards/geologic-hazard-maps

Zoraster, R. M. (2010). Vulnerable populations: Hurricane Katrina as a case study. *Prehospital and Diaster Medicine 25 (1)*, 74-78. doi:10.1017/S1049023X00007718.

5 Appendices

A. Scoping Notice

DETERMINATION OF SIGNIFICANCE (DS) AND REQUEST FOR COMMENTS ON SCOPE OF NON-PROJECT ENVIRONMENTAL IMPACT STATEMENT (EIS)

Proposal Name: Lakewood 2024 Comprehensive Plan Periodic Review

Lead Agency/Proponent: City of Lakewood Community & Economic Development Department

Date of Issuance: February 8, 2023

Agency Contact: Tiffany Speir, Long Range & Strategic Planning Manager
(253) 983-7702 | tspeir@cityoflakewood.us

Application Number: N/A

Location: City of Lakewood, WA

Background and Purpose
The City of Lakewood is preparing for a periodic review and update to its Comprehensive Plan. The Comprehensive Plan is the 20-year plan for land use and growth based on the community's vision of the future. It guides City decisions about where housing and jobs should be located, and how public investments are made in things like transportation, utilities, parks, and other assets.

The Comprehensive Plan fits into a state, regional, and local planning framework, and must be consistent with the Growth Management Act (GMA), the Puget Sound Regional Council's Vision 2050 Plan (V2050), and the Pierce County Countywide Planning Policies (CPPs.) Vision 2050 includes multicounty planning policies (MPPs) and the regional growth strategy for the central Puget Sound region, including King, Kitsap, Pierce, and Snohomish counties. The CPPs are a set of policies addressing a similar set of issues that apply to Pierce County and the cities and towns within the county.

Through Ordinance 2022-46s, the Pierce County Council adopted 20-year growth targets (to 2044), which are distributed in the following way for the City of Lakewood:

2044 Population Target	2044 Housing Unit Target	2044 Employment Target
86,792	36,713	39,735

The Environmental Impact Statement (EIS) is an informational document that provides the County, members of the public, and other groups and entities with information to inform the decision-making process. An EIS is required under the State Environmental Policy Act (SEPA) for many major actions. The EIS focuses on identifying and avoiding adverse impacts and can also identify potential beneficial outcomes. The EIS evaluation and mitigation measures will help inform the development of the proposal "Lakewood 2024 Comprehensive Plan Periodic Review."

Proposal Description
The proposal will include the following:

- Necessary updates to City of Lakewood Comprehensive Plan Text and Maps, including goals, policies, and objectives, to comply with the GMA, Vision 2050, and the Countywide Planning Policies.
- A consolidated capital facilities plan for investing in transportation systems, utilities, public facilities, and services to serve the 20-year growth in the City of Lakewood.
- Necessary updates to development regulations to comply with the GMA, Vision 2050, and the Countywide Planning Policies.
- Updated regulations for critical areas based on an assessment of best available science.

Policy area updates expected to be included in the proposal:

- Land use and zoning changes.
- Policies related to racial and historically disadvantaged community equity.
- Housing policy updates to better support affordability and implement housing targets by income band.
- Policies to support a multi-modal level of service standard for transportation.
- Integration of policies from the 2020 Legacy Plan, the City's Parks, Recreation, and Open Space Plan.
- Policies related to climate change adaptation, mitigation, and resiliency, including policies to meet a 45% reduction in GHG emissions.
- Consideration of health and equity.
- Enhanced coordination policies with Tribes, adjacent jurisdictions, military installations, and special purpose districts.
- Protection of environmentally sensitive areas.
- Strategies to prevent failing water systems.
- Policies to support access to broadband service.
- Design guidance for transit facilities.
- Economic vitality policies.

Determination
The Lakewood Community & Economic Development Department has determined that this proposal is likely to have a significant adverse impact on the environment. An environmental impact statement (EIS) is required under RCW 43.21C.030 (2)(c) and will be prepared. The EIS will analyze impacts and alternatives broadly and at the level of detail appropriate for this non-project proposal in accordance with WAC 197-11-442 and WAC 197-11-443. The City's 2000 and 2015 Comprehensive Plan EIS documents, the 2018 Downtown Subarea EIS document, and the 2021 Lakewood Station District Subarea Expanded SEPA Checklist will all inform the process to review the 2024 Comprehnive Plan Periodic Review.

Appeal
There is no administrative appeal of this threshold determination. Lakewood Municipal Code Section 18A.20.070 and State statute RCW 36.70A.280 provide for SEPA appeals of City of Lakewood GMA legislative actions. Once the City Council takes legislative action on the

Comprehensive Plan Periodic Review and Update, the EIS may be appealed to the Growth Management Hearings Board (GMHB) within 60 days following publication in the City paper of record for the underlying governmental action pursuant to RCW 36.70.290(2) and WAC 242-03-200. Review *Practicing Before the Growth Management Hearings Board Handbook* for additional information on the appeal process. In some cases, the SEPA appeal must be combined with any appeal of the underlying governmental action pursuant to RCW 43.21C.075(2)(a).

Significant Impacts (Preliminary Alternatives)
An EIS is required to identify and analyze alternative approaches to meeting the goals of a proposal and are the basis for environmental analysis. Analyzing and comparing different alternatives provides information for the public and assists decision-makers in selecting a preferred course of action.

The alternatives will include a **No Action Alternative.** The no action alternative will integrate the 2044 growth targets into the Comprehensive Plan with no changes to current plans, policies, or regulations.

The City will also study **at least one additional alternative** that will be drawn from the concepts below. The City is seeking input on the development of these alternatives.

- **Compliance updates.** Legally required updates to achieve minimum consistency with laws, regulations, and policies.
- **Land use changes.** The range of alternatives may include: increasing densities and/or expanding allowed use types in residential zones; increasing densities in high capacity transit areas; updating environmental protection and climate change policies; and/or or other land use changes.
- **Transportation.** The range of alternatives may include approaches to reducing traffic by: integrating multi-modal transportation options such as transit, pedestrian, and bicycle options, transportation demand management, strategies to reduce vehicle miles traveled (VMT), or other changes.
- **Capital facilities and services.** The range of alternatives may include reducing or changing level of service standards for utilities, facilities, services, or parks and open space.
- **Critical areas.** This will include updated regulation of critical areas such as wetlands, riparian areas or stream corridors, geological hazards, critical aquifer recharge areas, and wildlife habitat areas based on the best available science.
- **Climate.** The range of alternatives may include: strategies to achieve a 45% reduction in GHG emissions that go beyond the recommendations of Sustainability 2030, strategies to increase open space and support carbon sequestration, different approaches to mitigation and resiliency, or other changes.

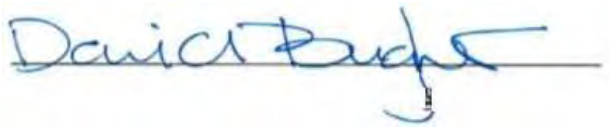
Scoping
Scoping comments are due no later than March 15, 2023 and may be submitted:
- Via e-mail at: tspeir@cityoflakewood.us
- Online at https://lakewoodwaspeaks.org/projects/2024-comprehensive-plan-periodic-review
- In writing to:
  City of Lakewood 2024 Periodic Review

Attn: Tiffany Speir
6000 Main St SW
Lakewood, WA 98499

Scoping provides an opportunity for the public to learn about the proposal and to provide comments on the project as it begins. Agencies, tribes, and members of the public are invited to comment on the scope of the EIS including alternatives, probable significant adverse impacts, possible mitigation measures, and licenses or other approvals that may be required. Feedback on these issues is particularly important as it will inform the analysis in the EIS. Based on the input received during scoping, the lead agency will refine the alternatives, probable significant impacts, and mitigation measures that will be included in the EIS.

Get Involved
To learn more about the proposal and share your feedback, please visit and subscribe to the project website https://lakewoodwaspeaks.org/projects/2024-comprehensive-plan-periodic-review. The website will also list the dates and times of events as they are set.

Responsible Official: **Date**: February 8, 2023



Dave Bugher, Assistant City Manager
for Development Services,
SEPA Responsible Official

B. Housing Affordability Workbook

HB 1220 Affordability Evaluation

No Action Current Plan and Action Alternative | March 2024 | Prepared by BERK Consulting, Inc.

This appendix summarizes the City of Lakewood Growth Targets with a focus on housing and affordable housing targets. Following the presentation of the targets, the tables identify key steps in determining capacity, dwelling types allowed, relationship to affordability levels, and resulting achievement or gaps in meeting targets.

Growth Targets

Targets: https://www.piercecountywa.gov/DocumentCenter/View/23902/Appendix-A-CPPs

	2020	Growth 2020-2044	2044 Total
Population	63,612	23,180	86,792
Jobs	29,872	9,863	39,735
Housing	26,999	9,378	36,377

Housing by Affordability Level: https://online.co.pierce.wa.us/cfapps/council/model/otDocDownload.cfm

Year	Total	0-30% Non-PSH	0-30% PSH	>30-50%	>50-80%	>80-100%	>100-120%	>120%	Emergency Housing
2020	26,999	588	101	4,565	11,699	4,347	2,250	3,449	8
2020-2044	9,378	1,212	1,637	1,739	1,375	592	536	2,287	574

PSH = Permanent Supportive Housing

Consolidation of Housing Targets by Area Median Income (AMI)

Income AMI	Units
0-80%	5,963
80-120%	1,128
120% +	2,287
Total	**9,378**

Commerce HB 1220 Steps and Results

Commerce Guidebook: Guidance for Updating your Housing Element (Book 2)

Step 1 – Land Capacity by Zone

Exhibit 9. Example summary table of development capacity by zone

Development capacity by zone

Zone	Net developable land (acres)	Assumed density (units/acre)	Gross residential capacity (units)	Existing housing on developable land (units)	Net residential capacity (units)
Single Family Residential (R-4)	2,924	2.5 units/acre	7,310	310	7,000
Medium Density Residential (R-8)	1,201	6 units/acre	7,206	206	7,000
Multifamily Residential (R-12)	611	10 units/acre	6,110	110	6,000
Multifamily Residential (R-30)	267	25 units/acre	6,675	75	6,600

ADU Capacity (all zones)

Lots available for ADUs	Participation factor	Potential ADU lots	Average ADUs per lot	Total ADU capacity
4,000	10%	400	1.25	500

Buildable Lands 2021 – Lakewood

Zone	Adjusted Vac + UU Acres	Assumed Density	Gross Capacity	Displaced Units	Net Residential Capacity
AC1	-	-	-	-	-
AC2	-	-	-	-	-
ARC	13.23	15	198	41	127
C1	-	-	-	19	(12)
C2	-	-	-	3	(2)
C3	-	-	-	-	-
CBD	39.83	80	3,186	86	2,590
CZ	-	-	-	-	-
I1	-	-	-	7	(5)
I2	-	-	-	-	-
IBP	-	-	-	28	(18)
MF1	81.83	22	1,800	279	1,181
MF2	55.92	35	1,957	137	1,514
MF3	31.57	54	1,705	233	1,131
ML	-	-	-	-	-
MR1	24.50	8	196	39	117
MR2	63.52	14	889	195	532
NC1	1.08	22	24	11	54
NC2	17.75	35	621	132	421
OSR1	-	-	-	-	-
OSR2	-	-	-	-	-
PI	-	-	-	1	(1)
R1	21.21	2	42	8	45
R2	68.11	2	136	21	148
R3	231.45	5	1,157	233	850
R4	56.44	6	339	69	287
ROW	-	-	-	-	-
TOC	13.35	54	721	130	1,283
Grand Total	**719.79**		**12,973**	**1,672**	**10,242**

Step 2 – Categorize Zones

Exhibit 11. Example of classifying land use zones using example zone categories

Land use zone	Housing types allowed	Max density level allowed	Assigned zone category
Single-Family Residential (R-4)	Detached single-family homes	4 units/acre	Low Density
Medium Density Residential (R-8)	Detached single-family homes, duplexes	8 units/acre	Low Density
Multifamily Residential (R-12)	Detached single-family homes, townhomes, duplexes, triplexes, quadplexes, 6-plexes	12 units/acre	Moderate Density
Multifamily Residential (R-30)	Apartments, townhomes	30 units/acre	Low-Rise Multifamily

Categorized Zones – Lakewood

Zone	Density Category (BLR)	Building Height (ft)	Assumed Density (du/ac)	Zone Category	Housing Types Allowed
AC1	Very Low		0	n/a	
AC2	Very Low		0	n/a	
ARC	Medium Low	40	15	Moderate Density	SF, Duplex,Triplex, Multifamily
C1	Very Low	60	0	n/a	
C2	Very Low	60	0	n/a	
C3	Very Low	60	0	n/a	
CBD	High	90	80	Mid-rise Multifamily	Multifamily, Mixed Use
CZ	Very Low		0		
I1	Very Low	60	0	n/a	
I2	Very Low	60	0	n/a	
IBP	Very Low	60	0	n/a	
MF1	Medium Low	45	22	Low-rise Multifamily	ADU, Duplex,Triplex, Multifamily
MF2	Medium High	65	35	Mid-rise Multifamily	ADU, Duplex,Triplex, Multifamily
MF3	High	80	54	Mid-rise Multifamily	Multifamily (Station District also Duplex,Triplex,Townhomes, Multifamily)
ML	Very Low		0		
MR1	Low	35	8	Moderate Density	SF, ADU, Duplex,Triplex-CUP
MR2	Medium Low	50	14	Moderate Density	SF, ADU, Duplex,Triplex-CUP
NC1	Medium Low	50	22	Low-rise Multifamily	Duplex,Triplex, Multifamily, Mixed Use
NC2	Medium High	60	35	Mid-rise Multifamily	Duplex,Triplex, Multifamily, Mixed Use
OSR1	Very Low		0		
OSR2	Very Low		0		
PI	Very Low		0	n/a	
R1	Very Low	35	2	Low Density	SF, ADU
R2	Very Low	35	2	Low Density	SF, ADU
R3	Low	35	5	Low Density	SF, ADU
R4	Low	35	6	Low Density	SF, ADU
ROW	Very Low		0		
TOC	High	90	54	Mid-rise Multifamily	ADU, Multifamily, Mixed Use

ADU – Accessory Dwelling Unit, SF – Single Family

Step 3 – Zones and Incomes

Exhibit 12. Example of relating zone categories to housing types and income levels served in moderate-cost communities

Zone category	Typical housing types allowed	Lowest potential income level served		Assumed affordability level for capacity analysis
		Market rate	With subsidies and/or incentives	
Low Density	Detached single family homes	Higher income (>120% AMI)	Not typically feasible at scale*	Higher income (>120% AMI)
Moderate Density	Townhomes, duplex, triplex, quadplex	Moderate income (>80-120% AMI)	Not typically feasible at scale*	Moderate income (>80-120% AMI)
Low-Rise Multifamily	Walk-up apartments, condominiums (2-3-floors)	Low income (>50-80% AMI)	Extremely low and Very low income (0-50% AMI)	Low income (0-80% AMI) and PSH
Mid-Rise Multifamily	Apartments, condominiums	Low income (>50-80% AMI)	Extremely low and Very low income (0-50% AMI)	Low income (0-80% AMI) and PSH
ADUs (all zones)	Accessory Dwelling Units on developed residential lots	Low income (>50-80% AMI)	N/A	Low income (>50-80% AMI) – Group with Low-Rise and/or Mid-Rise Multifamily

Lakewood Zones and Income Levels

Zone	Zone Category	Housing Types Allowed	Building Height (ft)	Assumed Density (du/ac)	Density Category (BLR)	AMI Bracket by Density Category (Market Rate Commerce)	Total Housing Unit Capacity
AC1	n/a			0	Very Low		0
AC2	n/a			0	Very Low		0
ARC	Moderate Density	SF, Duplex,Triplex, Multifamily	40	15	Medium Low	Moderate Income (80-100% AMI)	127
C1	n/a		60	0	Very Low		-12
C2	n/a		60	0	Very Low		-2
C3	n/a		60	0	Very Low		0
CBD	Mid-rise Multifamily	Multifamily, Mixed Use	90	80	High	Low Income (>50-80%) AMI	2,590
CZ				0	Very Low		0
I1	n/a		60	0	Very Low		-5
I2	n/a		60	0	Very Low		0
IBP	n/a		60	0	Very Low		-18
MF1	Low-rise Multifamily	ADU, Duplex,Triplex, Multifamily	45	22	Medium Low	Low Income (>50-80%) AMI	1,181
MF2	Mid-rise Multifamily	ADU, Duplex,Triplex, Multifamily	65	35	Medium High	Low Income (>50-80%) AMI	1,514
MF3	Mid-rise Multifamily	Multifamily (Station District also Duplex,Triplex,Townhomes, Multifamily)	80	54	High	Low Income (>50-80%) AMI	1,131
ML				0	Very Low		0
MR1	Moderate Density	SF, ADU, Duplex,Triplex-CUP	35	8	Low	Moderate Income (80-100% AMI)	117
MR2	Moderate Density	SF, ADU, Duplex,Triplex-CUP	50	14	Medium Low	Moderate Income (80-100% AMI)	532
NC1	Low-rise Multifamily	Duplex,Triplex, Multifamily, Mixed Use	50	22	Medium Low	Low Income (>50-80%) AMI	54
NC2	Mid-rise Multifamily	Duplex,Triplex, Multifamily, Mixed Use	60	35	Medium High	Low Income (>50-80%) AMI	421
OSR1				0	Very Low		0
OSR2				0	Very Low		0
PI	n/a			0	Very Low		-1
R1	Low Density	SF, ADU	35	2	Very Low	Higher Income (>120% AMI)	45
R2	Low Density	SF, ADU	35	2	Very Low	Higher Income (>120% AMI)	148
R3	Low Density	SF, ADU	35	5	Low	Higher Income (>120% AMI)	850
R4	Low Density	SF, ADU	35	6	Low	Higher Income (>120% AMI)	287
ROW				0	Very Low		0
TOC	Mid-rise Multifamily	ADU, Multifamily, Mixed Use	90	54	High	Low Income (>50-80%) AMI	1,283
							10,242

Step 4 – Capacity by Income

Lakewood Zone Capacity by Income Levels

			No Action	Action				
Zone	Zone Category	AMI Bracket by Density Category (Market Rate Commerce)	Total Housing Unit Capacity	SFR	Middle	MFR	ADU	Total Housing Unit Capacity
AC1	n/a		0	0	0	0	0	0
AC2	n/a		0	0	0	0	0	0
ARC	Moderate Density	Moderate Income (80-100% AMI)	127	0	151	0	0	151
C1	n/a	Low Income (>50-80%) AMI	-12	0	0	0	0	0
C2	n/a	Low Income (>50-80%) AMI	-2	0	0	0	0	0
C3	n/a	Low Income (>50-80%) AMI	0	0	0	0	0	0
CBD	Mid-rise Multifamily	Low Income (>50-80%) AMI	2,590	-23	-3	3,607	0	3,580
CZ			0	0	0	0	0	0
I1	n/a	Low Income (>50-80%) AMI	-5	0	0	0	0	0
I2	n/a	Low Income (>50-80%) AMI	0	0	0	0	0	0
IBP	n/a	Low Income (>50-80%) AMI	-18	0	0	0	0	0
MF1	Low-rise Multifamily	Low Income (>50-80%) AMI	1,181	0	1,294	0	0	1,294
MF2	Mid-rise Multifamily	Low Income (>50-80%) AMI	1,514	-2	1,609	-5	0	1,602
MF3	Mid-rise Multifamily	Low Income (>50-80%) AMI	1,131	-1	0	1,315	0	1,314
ML			0	0	0	0	0	0
MR1	Moderate Density	Moderate Income (80-100% AMI)	117	-192	-1	953	0	760
MR2	Moderate Density	Moderate Income (80-100% AMI)	532	-188	-80	1,790	0	1,523
NC1	Low-rise Multifamily	Low Income (>50-80%) AMI	54	0	0	18	0	18
NC2	Mid-rise Multifamily	Low Income (>50-80%) AMI	421	-3	0	480	0	477
OSR1			0	0	0	0	0	0
OSR2			0	0	0	0	0	0
PI	n/a	Low Income (>50-80%) AMI	-1	0	0	0	0	0
R1	Low Density	Higher Income (>120% AMI)	45	55	215	0	36	306
R2	Low Density	Higher Income (>120% AMI)	148	229	296	0	46	570
R2T	Moderate Density	Moderate Income (80-100% AMI)		15	0	0	1	16
R3	Low Density	Higher Income (>120% AMI)	850	-176	3,462	-19	164	3,431
R3T	Moderate Density	Moderate Income (80-100% AMI)		-115	-21	433	4	302
R4	Low Density	Higher Income (>120% AMI)	287	-456	1,571	-32	65	1,148
R4T	Moderate Density	Moderate Income (80-100% AMI)		-111	-21	350	1	218
ROW			0	0	0	0	0	0
TOC	Mid-rise Multifamily	Low Income (>50-80%) AMI	1,283	-6	-3	788	0	779
			10,242	**-977**	**8,470**	**9,679**	**316**	**17,488**

Summary

	No Action	Action
Low Income (>50-80%) AMI	8,136	9,064
Moderate Income (80-100% AMI)	776	2,969
Higher Income (>120% AMI)	1,330	5,455
Total	**10,242**	**17,488** *

*Unadjusted for Loss in Non-Residential Zones. By removing lost dwellings in zones that do not allow residential uses (C1, C2, C3, I1, I2, IBP) there would be -38 units.

Step 5 – Comparison of Projected Housing Needs to Capacity

Exhibit 16. Example comparison of projected housing needs to capacity

Income level (% AMI)	Projected housing need	Zone categories serving these needs	Aggregated housing needs	Total capacity (From Exhibit 15)	Capacity surplus or deficit
0-30% PSH	2,000	Low-Rise Multifamily + ADUs	13,000	7,100	-5,900
0-30% Other	4,000				
>30-50%	3,000				
>50-80%	4,000				
>80-100%	2,000	Moderate Density	5,000	6,000	1,000
>100-120%	3,000				
>120%	6,000	Low Density	6,000	14,000	8,000
Total	24,000		24,000	27,100	3,100

No Action (Current Plan) – Capacity and Need

Income	Projected Housing Need	Zoning Categories Serving Needs	Aggregated Housing Needs	Total Capacity	Capacity Surplus/Deficit
0-30% Non-PSH	1,212	Low-Rise Multifamily + ADUs	5,963	8,136	2,173
0-30% PSH	1,637				
>30-50%	1,739				
>50-80%	1,375				
>80-100%	592	Moderate Density	1,128	776	(352)
>100-120%	536				
>120%	2,287	Low Density	2,287	1,330	(957)
Total	**9,378**		**9,378**	**10,242**	**864**

Action Alternative – Commerce Zone Based Approach

Income	Projected Housing Need	Zoning Categories Serving Needs	Aggregated Housing Needs	Total Capacity	Capacity Surplus/Deficit
0-30% Non-PSH	1,212	Low-Rise Multifamily + ADUs	5,963	9,064	3,101
0-30% PSH	1,637				
>30-50%	1,739				
>50-80%	1,375				
>80-100%	592	Moderate Density	1,128	2,969	1,841
>100-120%	536				
>120%	2,287	Low Density	2,287	5,455	3,168
Total	**9,378**		**9,378**	**17,488**	**8,110**

Action Alternative – Unit Capacity Based Approach

Income	Projected Housing Need	Zoning Categories Serving Needs	Aggregated Housing Needs	Total Capacity	Capacity Surplus/Deficit
0-30% Non-PSH	1,212				
0-30% PSH	1,637	Low-Rise			
>30-50%	1,739	Multifamily +			
>50-80%	1,375	ADUs	5,963	9,995	4,032
>80-100%	592				
>100-120%	536	Moderate Density	1,128	2,117	989
>120%	2,287	Low Density	2,287	5,376	3,089
Total	**9,378**		**9,378**	**17,488**	**8,110**

C. Transpo Memoranda and 1-5 Volumes

transpogroup
WHAT TRANSPORTATION CAN BE.

MEMORANDUM

Date:	April 26, 2024	**TG:**	1.22324.00
To:	Andrew Bjorn, BERK		
From:	Jon Pascal, PE, Transpo Group John Lewis, Transpo Group Jonathan DenHaan, Transpo Group Drew Heckathorn, Transpo Group		
cc:	Tiffany Speir, City of Lakewood		
Subject:	Lakewood Comprehensive Plan Update: Transportation Element Review		

Introduction

The City of Lakewood is currently updating its Comprehensive Plan to comply with the latest State of Washington GMA requirements, PSRC certification standards, and prepare for housing and job growth targets through the year 2044. A previous technical memorandum provided a high-level description of the extent of the effort required to update the Transportation Element portion of the Comprehensive Plan. This memorandum provides a more detailed analysis of components of the Transportation Element which need to be updated as part of the overall Comprehensive Plan update.

Specifically, the analysis described in this memorandum includes the development of travel forecasts for two future scenarios – 2044 Baseline and 2044 Plan. The adopted Roadway Level of Service (LOS) has been updated to show the results for selected corridors for both future scenarios. For any deficiencies identified beyond those described in the adopted Transportation Element, this memorandum provides a potential list of mitigation strategies. Additionally, this memorandum describes a parking analysis conducted to prepare for recent State legislation regarding zoning for middle housing. The results of these analyses will help inform the necessary updates to the Transportation Element.

Travel Forecasts

This section provides an overview of the potential roadway deficiencies of the 2044 Plan scenario and any mitigation necessary to accommodate the City's housing and job growth targets. To do this, we conducted a travel demand model comparison between the 2044 Baseline and 2044 Plan land use scenarios.

The travel demand model used for this analysis was derived from the previous Lakewood Model that was prepared as part of the last Comprehensive Plan update and more recent Subarea Plans. This model can be utilized to forecast travel demand based on the City's housing and job growth targets. The land use assumptions included in this analysis are consistent with work being performed in updating the Land Use Plan and are intended for planning purposes only and in no way are meant to restrict or require specific land use actions.

2044 Baseline Scenario

The 2044 Baseline scenario model builds upon the 2030 Plan scenario model used in the previous Transportation Element update and incorporates more recent land use planning efforts, such as the Downtown Plan and Station Area Plan. Additionally, the 2044 Baseline scenario model

includes one minor roadway improvement – the widening of Murray Road north of 146th SW to two lanes in each direction. This scenario is used as a future baseline to consider only approved land use capacity and roadway improvements.

2044 Plan Scenario Model

The 2044 Plan scenario model builds upon the 2044 Baseline scenario model by adding the City's housing and job growth targets through the year 2044. The two models are otherwise identical, allowing for a measurement of the traffic volume effects of the additional housing and job growth.

Land Use Changes

The housing and job growth targets incorporated into the 2044 Plan scenario model were informed by other components of the Comprehensive Plan update. Land use data for this scenario model were provided by the prime consultant (BERK) who is working with the City in updating the Comprehensive Plan.

Table 1 shows a comparison of total occupied households and employees for the 2044 Baseline and 2044 Plan scenarios for the City overall and within specific districts. For reference, **Figure 1** shows the analysis districts included in this analysis. Land uses outside of the City of Lakewood were assumed to be unchanged in both future scenarios in order to compare and contrast the transportation impacts of the land use changes internal to the City.

Table 1. Land Use Assumptions

	Downtown District	Station Area District	Other Lakewood District[1]	City of Lakewood Total
Occupied Households				
2044 Baseline	2,688	2,553	31,727	36,968
2044 Plan	2,915	2,564	30,151	35,630
Difference	*227*	*11*	*(1,576)*	*(1,338)*
% Difference	*8.4%*	*0.4%*	*(5.0%)*	*(3.6%)*
Employees				
2044 Baseline	13,498	3,145	24,407	41,050
2044 Plan	14,739	4,998	20,007	39,744
Difference	*1,241*	*1,853*	*(4,400)*	*(1,306)*
% Difference	*9.2%*	*58.9%*	*(18.0%)*	*(3.2%)*

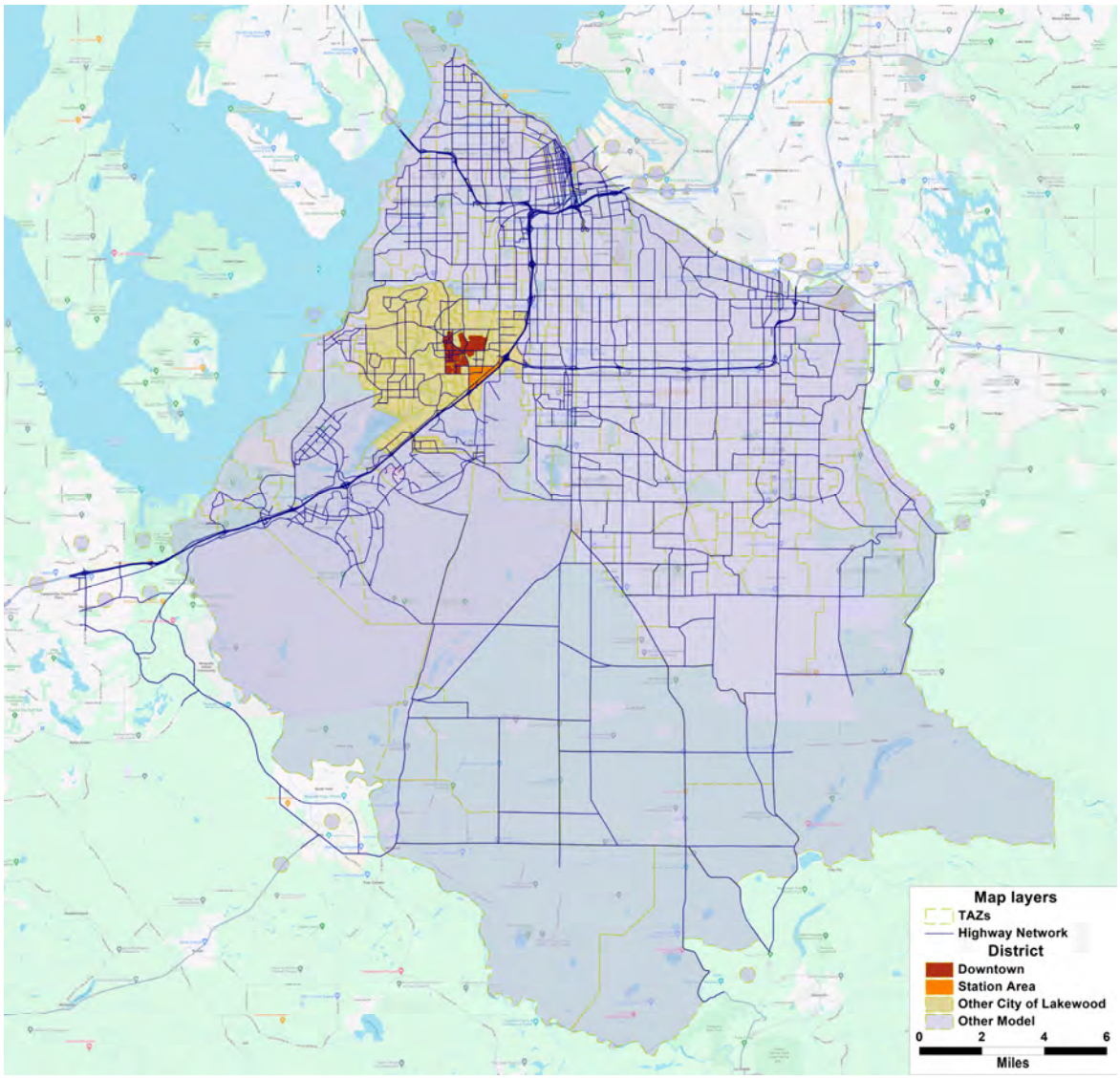
1. All other areas in the City outside the Downtown and Station Area Districts.

Key Findings

- Under the 2044 Plan scenario, there is a slight decrease in households and employees citywide compared to the 2044 Baseline scenario.
  - The 2044 Plan scenario shifts household growth to concentrate more within the Downtown (+227) and Station Area (+11) districts and less outside of these areas (-1,576).
  - The 2044 Plan scenario also shifts employee growth to concentrate more within the Downtown (+1,241) and Station Area (+1,853) districts and less outside of these areas (-4,400).

These land use changes for the 2044 Plan scenario are intended to increase density in areas of the City with greater access to transit and other active transportation modes such as walking and biking.

Figure 1. Analysis Districts



Vehicle Miles Travelled

Vehicle Miles Travelled (VMT) measures the total number of miles travelled by all vehicles leaving, arriving, and/or passing through a geographic region. **Table 2** shows the VMT results for the two future scenarios overall and by analysis district.

Table 2. Vehicle Miles Travelled Analysis Results

	Downtown District	Station Area District	Other Lakewood Districts	City of Lakewood Total	Other Model
2044 Baseline	11,630	8,539	55,243	75,412	1,207,587
2044 Plan	12,339	9,489	52,668	74,496	1,218,125
Difference	*709*	*950*	*(2,575)*	*(916)*	*10,538*
% Difference	*6.1%*	*11.1%*	*(4.7%)*	*(1.2%)*	*0.9%*

Key Findings

- Both the Downtown and Station Area districts show VMT increases of 6.1% and 11.1% respectively in the 2044 Plan scenario. These increases are consistent with the changes in land use for this scenario.
- Other areas of the City of Lakewood are projected to produce less VMT (-4.7%) in the 2044 Plan scenario, also consistent with the changes in land use for this scenario.
- VMT within the City of Lakewood overall is projected to decrease slightly (-1.2%) under the 2044 Plan scenario.
- VMT outside of the City of Lakewood is projected to increase slightly (0.9%) under the 2044 Plan scenario.

Level of Service Analysis

The travel demand model was utilized to model both land use scenarios outlined previously. Traffic volumes, roadway volume-to-capacity (v/c) ratios, and level of service (LOS) were then calculated for mid-block arterial roadway segments throughout the City of Lakewood. The v/c and LOS calculations are based on the Highway Capacity Manual (HCM) methodology and the PM peak hour traffic volumes from the two model scenarios. The LOS is consistent with the methodologies adopted in the existing Comprehensive Plan. **Table 3** shows the results from this analysis.

Table 3. 2044 Weekday PM Peak Hour Roadway Traffic Operations Summary

Intersection	2044 Baseline LOS[12]	2044 Baseline V/C (NB/EB)	2044 Baseline V/C (SB/WB)	2044 Plan LOS	2044 Plan V/C (NB/EB)	2044 Plan V/C (SB/WB)
Ardmore Dr SW						
Southeast of Steilacoom Blvd SW	D	0.74	0.83	C	0.68	0.71
Northwest of Whitman Ave SW	B	0.40	0.63	A	0.36	0.55
Bridgeport Way W						
North of 75th St W	C	0.79	0.69	C	0.80	0.66
North of Custer Rd W	B	0.66	0.62	B	0.69	0.60
South of Custer Rd W	C	0.71	0.63	C	0.76	0.62
North of Gravelly Lake Dr SW	A	0.56	0.54	A	0.59	0.51
South of Gravelly Lake Dr SW	A	0.39	0.43	A	0.42	0.40
North of 100th St SW	A	0.50	0.52	A	0.53	0.53
South of 100th St SW	A	0.26	0.23	A	0.30	0.25
South of Lakewood Dr SW	A	0.51	0.56	A	0.58	0.60
North of 112th St SW	A	0.52	0.58	A	0.59	0.58
North of Pacific Highway SW	C	0.67	0.78	C	0.78	0.78
South of Pacific Highway SW	D	0.79	0.85	D	0.78	0.84
I-5 Overcrossing	B	0.58	0.62	B	0.54	0.65
At Clover Creek Bridge South of I-5	A	0.44	0.31	A	0.44	0.33
Custer Rd SW/W						
Northeast of Bridgeport Way SW	C	0.62	0.75	C	0.64	0.75
Southwest of Bridgeport Way SW	C	0.52	0.72	B	0.52	0.70
North of 88th St SW	B	0.47	0.66	B	0.47	0.64
South of 88th St SW	A	0.55	0.04	A	0.51	0.03
Far West Dr SW						
South of Steilacoom Blvd SW	A	0.12	0.16	A	0.25	0.18
Gravelly Lake Dr SW						
Southwest of Steilacoom Blvd SW	A	0.30	0.56	A	0.34	0.59
Northeast of Bridgeport Way SW	A	0.15	0.37	A	0.19	0.39
Southwest of Bridgeport Way SW	A	0.25	0.29	A	0.26	0.29
South of Mount Tacoma Dr SW	A	0.26	0.19	A	0.29	0.22
South of 100th St SW	A	0.39	0.41	A	0.43	0.45
South of Alfaretta St SW	A	0.26	0.30	A	0.29	0.33
North of Wildaire Rd SW	A	0.48	0.50	A	0.45	0.49
North of 112th St SW	A	0.45	0.45	A	0.45	0.50
West of 112th St SW	B	0.50	0.65	B	0.48	0.62
West of Nyanza Rd SW/S	E	0.89	0.97	D	0.75	0.87
North of Pacific Highway SW	B	0.70	0.54	B	0.67	0.47
South of Pacific Highway SW	B	0.68	0.55	B	0.65	0.51
I-5 Overcrossing	A	0.47	0.33	A	0.45	0.32
Hipkins Rd SW						
South of Steilacoom Blvd SW	A	0.33	0.43	A	0.26	0.36
Lakeview Ave SW						
South of 100th St SW	A	0.24	0.39	A	0.27	0.43
South of Steilacoom Blvd SW	A	0.34	0.26	A	0.44	0.28

Lakewood Dr SW						
North of 74th St W	D	0.66	0.86	D	0.72	0.88
South of 74th St W	D	0.66	0.81	D	0.72	0.82
North of Steilacoom Blvd SW	C	0.67	0.79	C	0.74	0.80
South of Steilacoom Blvd SW	A	0.54	0.51	A	0.60	0.51
North of 100th St SW	A	0.40	0.48	A	0.48	0.54
Military Rd SW						
South of 112th St SW	A	0.39	0.34	A	0.37	0.39
Northwest of 112th St SW	A	0.19	0.16	A	0.17	0.14
Mount Tacoma Dr SW						
West of Bridgeport Way	A	0.15	0.19	A	0.25	0.22
West of Gravelly Lake Dr	A	0.18	0.28	A	0.16	0.26
Murray Rd SW						
North of 146th St SW	A	0.58	0.50	A	0.55	0.45
North Thorne Ln SW						
Southeast of Union Ave SW	B	0.66	0.67	B	0.56	0.65
Nyanza Rd SW						
North of Gravelly Lake Dr SW	A	0.55	0.28	A	0.57	0.26
South of Gravelly Lake Dr SW	A	0.55	0.30	A	0.57	0.30
Pacific Highway SW						
North of 108th St SW	C	0.76	0.69	E	0.94	0.72
Southwest of 108th St SW	A	0.47	0.39	B	0.69	0.48
Northeast of Bridgeport Way SW	A	0.48	0.45	B	0.59	0.68
Southwest of Bridgeport Way SW	B	0.58	0.63	C	0.66	0.71
East of Gravelly Lake Dr SW	B	0.54	0.64	B	0.47	0.63
Phillips Rd SW						
North of Steilacoom Blvd SW	C	0.71	0.35	A	0.58	0.31
South Tacoma Way						
North of 84th St SW	D	0.64	0.89	D	0.65	0.90
North of Steilacoom Blvd SW	D	0.75	0.87	D	0.78	0.87
South of Steilacoom Blvd SW	C	0.72	0.77	D	0.72	0.83
North of 96th St S	C	0.65	0.75	C	0.68	0.80
North of 100th St SW	D	0.89	0.62	E	0.93	0.62
South of SR 512	C	0.79	0.67	E	0.92	0.67
Southeast of Pacific Highway SW	A	0.30	0.29	A	0.30	0.31
Steilacoom Blvd SW						
East of Farwest Dr SW	A	0.39	0.49	A	0.48	0.47
West of 87th Ave SW	A	0.56	0.52	A	0.48	0.47
West of 83rd Ave SW/Hipkins Rd SW	A	0.52	0.51	A	0.46	0.50
West of Phillips Rd SW	F	0.84	1.02	E	0.72	0.94
East of Phillips Rd SW	F	0.84	1.12	F	0.73	1.01
Southeast of 88th St SW	C	0.78	0.68	B	0.66	0.60
West of Bridgeport Way SW	B	0.38	0.65	A	0.31	0.57
East of Bridgeport Way SW	A	0.33	0.53	A	0.28	0.49
West of Gravelly Lake Dr SW	A	0.32	0.47	A	0.28	0.43
East of Lakewood Dr SW	A	0.35	0.47	A	0.34	0.44
West of Lakeview Ave SW	A	0.35	0.49	A	0.34	0.46

West of South Tacoma Way	A	0.48	0.54	A	0.55	0.53
Union Ave SW						
Northeast of Berkeley St SW	A	0.16	0.21	A	0.13	0.16
Southwest of North Thorne Ln SW	A	0.37	0.31	A	0.28	0.29
Washington Blvd SW						
West of Gravelly Lake Dr SW	E	0.66	0.99	E	0.65	0.96
Whitman Ave SW						
South of Ardmore Dr SW	A	0.13	0.14	A	0.13	0.13
40th Ave SW						
North of 100th St SW	B	0.32	0.62	B	0.37	0.66
74th St S						
West of Lakewood Dr SW	C	0.56	0.71	A	0.57	0.71
83rd Ave SW						
North of Steilacoom Blvd SW	A	0.56	0.33	A	0.39	0.26
84th St S						
East of South Tacoma Way	A	0.39	0.25	A	0.41	0.26
87th Ave SW						
South of Steilacoom Blvd SW	A	0.09	0.09	A	0.03	0.03
North of Steilacoom Blvd SW	A	0.36	0.28	A	0.30	0.14
88th St SW						
East of Steilacoom Blvd SW	A	0.17	0.58	A	0.15	0.53
93rd St SW						
East of Whitman Ave SW	A	0.46	0.34	A	0.39	0.32
96th St S						
West of South Tacoma Way	C	0.61	0.77	C	0.52	0.73
East of South Tacoma Way	D	0.81	0.45	D	0.81	0.44
100th St SW						
West of South Tacoma Way	C	0.72	0.53	C	0.78	0.53
East of Lakeview Dr SW	D	0.83	0.82	D	0.90	0.83
West of Lakeview Dr SW	C	0.74	0.63	C	0.80	0.63
East of Lakewood Dr SW	C	0.73	0.68	C	0.75	0.67
East of Bridgeport Way SW	B	0.64	0.63	B	0.69	0.65
East of Gravelly Lake Dr SW	A	0.13	0.19	A	0.16	0.21
108th St SW						
West of Pacific Highway SW	C	0.71	0.74	D	0.82	0.80
East of Bridgeport Way SW	A	0.57	0.42	A	0.60	0.45
West of Bridgeport Way SW	A	0.45	0.31	A	0.46	0.28
East of Davisson Rd SW	A	0.48	0.34	A	0.47	0.30
112th St SW/S						
Between Military Rd SW & Farwest Dr S	A	0.25	0.35	A	0.26	0.48
East of Gravelly Lake Dr SW	B	0.31	0.61	A	0.32	0.49
East of Bridgeport Way SW	B	0.54	0.66	A	0.56	0.56
West of Bridgeport Way SW	B	0.49	0.68	B	0.57	0.61
150th St SW						
East of Woodbrook Rd SW	F	1.05	0.75	C	0.80	0.57

1. Level of service, based on Highway Capacity Manual, 7th Edition methodology.
2. Level of service reported for worst performing direction of travel.

Key Findings

Our analysis of the two model scenarios focuses on roadway segments which operate at LOS E or worse (v/c > 0.90) since the general concurrency threshold for the City of Lakewood is to maintain LOS D or better along all arterial roadways. However, as discussed in greater detail below, the City has previously identified some roadway segments that are unable to maintain LOS D or better through feasible mitigation or improvements in the future. For these roadway segments, the City has established either a LOS E or LOS F threshold, depending on the roadway segment.

The following two lists summarize the roadway segments projected to operate at LOS E or worse in either the 2044 Baseline or the 2044 Plan model scenarios. The first list shows roadway segments projected to operate better in the 2044 Plan than the 2044 Baseline model scenario. The second list shows roadway segments projected to operate worse in the 2044 Plan than the 2044 Baseline model scenario.

1. Roadway operating conditions are projected to improve under the 2044 Plan model scenario for the following segments:
    a. Gravelly Lake Dr SW west of the end of Nyanza Rd SW from LOS E (v/c 0.97) to LOS D (V/C 0.87)
    b. Steilacoom Blvd SW west of Phillips Rd SW from LOS F (v/c 1.02) to LOS E (v/c 0.94)
    c. Steilacoom Blvd SW east of Phillips Rd SW from LOS F (v/c 1.12) to LOS F (v/c 1.01)
    d. Washington Blvd SW west of Gravelly Lake Dr SW from LOS E (v/c 0.99) to LOS E (v/c 0.96)
    e. 150th St SW east of Woodbrook Rd SW from LOS F (v/c 1.05) to LOS C (v/c 0.80)
2. Roadway operating conditions are projected to worsen under the 2044 Plan model scenario for the following segments:
    a. Pacific Highway SW north of 108th St SW from LOS D (v/c 0.76) to LOS E (v/c 0.94)
    b. South Tacoma Way north of 100th St SW from LOS D (v/c 0.89) to LOS E (v/c 0.93)
    c. South Tacoma Way south of SR 512 from LOS D (v/c 0.79) to LOS E (v/c 0.92)

Potential Mitigations

The roadway segments along Steilacoom Blvd SW and Washington Blvd SW which continue to operate at LOS E or worse in the 2044 Plan model scenario have previously been identified by the City as segments which are unable to maintain LOS D or better through feasible mitigation or improvements. Therefore, our analysis does not consider potential mitigations for these roadway segments since the results are similar to what had been shown in the adopted Transportation Element.

The remaining roadway segments along Pacific Highway SW and South Tacoma Way which continue to operate at LOS E or worse in the 2044 Plan model scenario are considered for potential mitigations in our analysis. These two roadways directly serve the Station Area District and the increased land use intensity in the 2044 Plan model scenario contributed to the worsening roadway segment LOS.

Given the City's focus on improving transit accessibility, especially for active transportation modes such as walking and biking, within the Station Area District, it is not likely feasible to mitigate the roadway segment deficiencies along Pacific Highway SW and South Tacoma Way through roadway widening improvements. However, the Sound Transit Board of Directors approved a series of improvements within the Station Area District which may encourage greater transit,

walking, and biking use and decrease the demand for driving on the surrounding roadway network. These improvements include:

1. **115th St Ct SW trail to station** – adds a multi-use trail in Sound Transit right-of-way from the end of 115th St. Court SW to the pedestrian bridge over the railroad tracks connecting to Lakewood Station.
2. **Station area curb and sidewalk improvements** – improve curbs and sidewalks within a half mile radius of the station area.
3. **Pierce Transit Route 206 bus stop at Lakewood Station** – modify the intersection of Pacific Hwy. SW and Bridgeport Way to improve the bus turning radius, which makes a Pierce Transit stop at the station more feasible.

Additionally, the City of Lakewood could consider adjusting the LOS threshold for these deficient roadway segments as they've done previously for other deficient roadway segments in the City. These adjustments would further emphasize the City's focus on improving transit access, walking, and biking within the Station Area District and surrounding area.

Parking Analysis

This section describes the analysis conducted by both BERK and Transpo Group to evaluate and identify areas within the City of Lakewood where a potential increase in on-street parking demand due to middle housing developments allowed under the State of Washington HB 1110 might cause significant safety issues. The State plans to provide guidance to local jurisdictions on how to evaluate significant safety issues related to HB 1110. However, prior to the issuance of this guidance, our analysis provides a methodology for evaluating significant safety issues that can be applied consistently to all roadway segments in the City related to parking impacts.

Our analysis assumes that significant safety issues stemming from increased on-street parking could arise on roadways that were not originally designed for on-street parking. In the context of residential areas within the City of Lakewood, this would typically include narrow local roads without curbs. On-street parked vehicles on these roadways may contribute to significant safety issues, such as reduced sight distances, increased risk of dooring collisions for people biking, or preventing adequate space for two-way travel.

Data and Assumptions

The City of Lakewood provided the data used in this study. GIS data layers used included:

1. **Travelways**: a line layer showing the edge of pavement for the entire City. This layer also shows driveway access to/from all parcels.
2. **ROW under 60:** a line layer showing areas of the City where the public right of way is less than 60 feet wide.
3. **Arterials:** a line layer showing all roads in the City.
4. **Parcels:** a polygon layer showing parcels in the City.

These GIS data layers were utilized to identify narrow roadway segments throughout the City of Lakewood. However, it's important to note that since our analysis relies on the "ROWunder60" layer to identify narrow roadway segments, it's possible that this excludes other roadway segments that might have significant safety issues related to on-street parking. For example, a roadway segment with adequate public ROW but the pavement width is still narrow or missing curbs. The City should consider if further study is necessary to evaluate safety in these areas.

Once parcels along narrow roadway segments were identified, our analysis excluded parcels that were within 300 feet walking distance from a roadway segment with adequate public ROW. The

assumption here is that a person living at one of these parcels could park their vehicle along the roadway segment with adequate public ROW and conveniently walk to their residence.

Methodology to Identify Inadequate On-Street Parking

The following steps were conducted to identify roadway segments with potentially significant safety issues related to on-street parking.

Step 1: *Identify where HB 1110 land uses would initially be allowed absent other data. Utilize the existing low-density residential zoning GIS layer for R1-R4 designated areas. Remove areas with lot sizes below a minimum threshold or lot size.*

> This step was completed by BERK and the filtered dataset was then provided to Transpo Group for further analysis. This filtered dataset included 8,983 parcels.

Step 2: *Remove properties within ½ mile walking distance of a major transit stop. A major transit stop provides daily service frequency of 30 minutes or greater.*

> This step was also completed by BERK. Major transit stops within the City included stops with either future bus rapid transit or commuter rail service. Excluding parcels within a ½ mile walking distance of major transit stops reduced the number of parcels relevant to the parking analysis to 2,300.

Step 3: *Utilize estimates of potential development capacity, such as number of additional units that could be added, to highlight areas with higher likelihood of off-site parking needs.*

> BERK identified parcels where middle housing would not be allowed or would not be possible to build. The exclusion of these parcels reduced the number of parcels relevant to the parking analysis to 1,615.

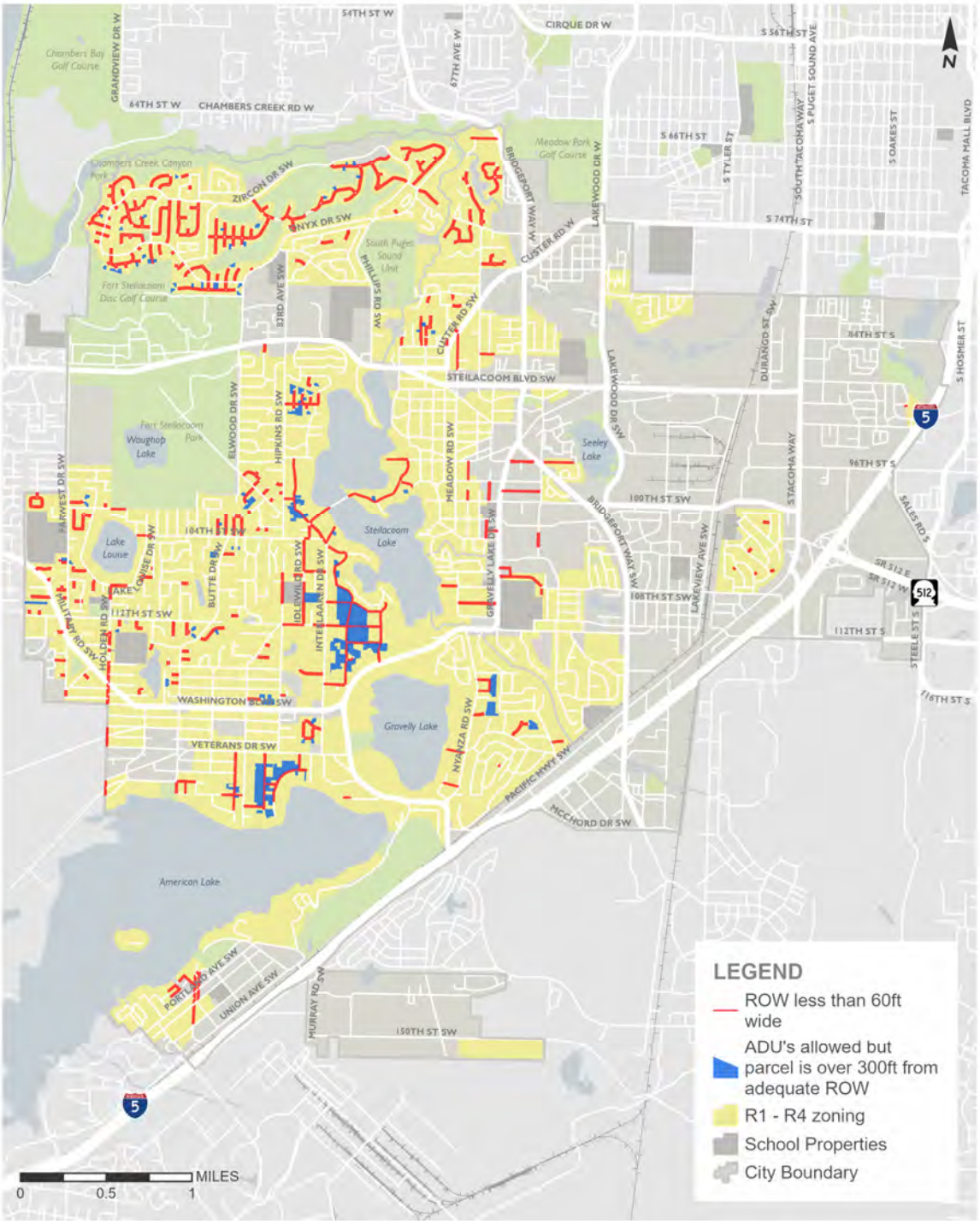
Step 4: *Highlight properties that have direct access to public streets that have substandard public ROW widths of under 60 feet. Assume on-street parking within 300 feet of a property is within acceptable walking distance.*

> This step was completed by Transpo Group and reduced the number of parcels relevant to the parking analysis to 191. **Figure 2** shows the location of the 191 parcels within the City.

Key Findings

Our analysis highlights two neighborhoods within the City with a high concentration of parcels with potentially significant on-street parking safety issues – the Interlaken and Harts Idyllwild/Lake Holme developments. These neighborhoods include mostly low-density single-family homes. Roadways within these neighborhoods are primarily narrow and without curbs or sidewalks. The neighborhoods were designed to be accessed primarily by automobile. The low density and roadway connectivity also allows for walking without the need for sidewalks since the traffic volumes are likely low and people walking have the option to walk off pavement within the public right of way. Since these roadways were not designed to accommodate higher residential densities and on-street parking, they may be appropriate areas to exempt from the HB 1110 middle housing zoning requirements. However additional evaluation may be necessary to consider other data points and information, such as equity, demographics, and practicality or risk of exempting these areas from middle housing zoning.

Figure 2. Parcels of Concern for Significant On-Street Parking Safety Issues



From: Jon Pascal <jon.pascal@transpogroup.com>
Sent: Friday, May 24, 2024 11:50
To: Andrew Bjorn <Andrew@Berkconsulting.com>
Cc: Drew Heckathorn <drew.heckathorn@transpogroup.com>; John Lewis <john.lewis@transpogroup.com>
Subject: RE: Transportation Element Review for Lakewood

Andrew,
Attached is a spreadsheet with the I-5 volumes from the model. As expected, the Planned Action volumes are slightly lower in general compared to baseline or No Action. Let us know if you need anything else. Thanks and have a good weekend.

Jon Pascal PE | Managing Principal
425-896-5230 206-890-3868

Northbound I-5

Interchange		Baseline	Planned Action	% Diff
Berkeley Ave	Mainline	15,588	15,373	-1.4%
	Off Ramp	922	830	-10.0%
	On Ramp	3,603	3,552	-1.4%
Thorne Lane	Mainline	18,270	18,095	-1.0%
	Off Ramp	882	1,045	18.5%
	On Ramp	3,371	3,178	-5.7%
Gravelly Lake Drive	Mainline	20,759	20,229	-2.6%
	Off Ramp	2,200	2,134	-3.0%
	On Ramp	1,426	1,371	-3.9%
Bridgeport Way	Mainline	19,984	19,466	-2.6%
	Off Ramp	1,931	1,925	-0.3%
	On Ramp	2,661	3,035	14.1%
SR 512	Mainline	20,715	20,576	-0.7%
	Off Ramp	5,510	5,444	-1.2%
	On Ramp	5,238	5,299	1.2%
S. 84th St	Mainline	20,442	20,431	-0.1%
	Off Ramp	1,928	1,816	-5.8%
	Mainline	18,514	18,614	0.5%
S. 74th Street	Off Ramp	1,845	1,782	-3.4%
	On Ramp	3,671	3,668	-0.1%
	Mainline	20,340	20,500	0.8%
Total	On Ramps	19,970	20,103	0.7%
	Off Ramps	15,218	14,976	-1.6%
	Mainline	154,612	153,284	-0.9%
	All Links	189,800	188,363	-0.8%

Southbound I-5

Interchange		Baseline	Planned Action	% Diff
S. 74th Street	Mainline	25,155	25,144	0.0%
	Off Ramp	4,967	4,977	0.2%
	On Ramp	987	1,013	2.6%
S. 84th St	Mainline	21,175	21,180	0.0%
	On Ramp	1,081	1,049	-3.0%
SR 512	Mainline	22,256	22,230	-0.1%
	Off Ramp	6,386	6,161	-3.5%
	On Ramp	4,918	4,602	-6.4%
Bridgeport Way	Mainline	20,787	20,671	-0.6%
	Off Ramp	2,502	2,850	13.9%
	On Ramp	2,651	2,505	-5.5%
Gravelly Lake Drive	Mainline	20,936	20,326	-2.9%
	Off Ramp	1,851	1,874	1.2%
	On Ramp	2,049	1,791	-12.6%
Thorne Lane	Mainline	21,134	20,243	-4.2%
	Off Ramp	2,955	2,310	-21.8%
	On Ramp	839	871	3.8%
Berkeley Ave	Mainline	19,017	18,805	-1.1%
	Off Ramp	2,100	1,912	-9.0%
	On Ramp	395	381	-3.5%
	Mainline	17,313	17,274	-0.2%
	On Ramps	12,920	12,212	-5.5%
	Off Ramps	20,761	20,084	-3.3%
	Mainline	167,773	165,873	-1.1%
	All Links	201,454	198,169	-1.6%

Rounded & Balanced

Northbound I-5

Interchange		Baseline	Planned Action	% Diff
Berkeley Ave	Mainline	15,590	15,370	-1.4%
	Off Ramp	920	830	-9.8%
	On Ramp	3,600	3,550	-1.4%
Thorne Lane	Mainline	18,270	18,090	-1.0%
	Off Ramp	880	1,040	18.2%
	On Ramp	3,370	3,180	-5.6%
Gravelly Lake Drive	Mainline	20,760	20,230	-2.6%
	Off Ramp	2,200	2,130	-3.2%
	On Ramp	1,430	1,370	-4.2%
Bridgeport Way	Mainline	19,990	19,470	-2.6%
	Off Ramp	1,930	1,930	0.0%
	On Ramp	2,660	3,040	14.3%
SR 512	Mainline	20,720	20,580	-0.7%
	Off Ramp	5,510	5,450	-1.1%
	On Ramp	5,230	5,300	1.3%
S. 84th St	Mainline	20,440	20,430	0.0%
	Off Ramp	1,930	1,820	-5.7%
	Mainline	18,510	18,610	0.5%
S. 74th Street	Off Ramp	1,840	1,780	-3.3%
	On Ramp	3,670	3,670	0.0%
	Mainline	20,340	20,500	0.8%

Southbound I-5

Interchange		Baseline	Planned Action	% Diff
S. 74th Street	Mainline	25,160	25,140	-0.1%
	Off Ramp	4,970	4,970	0.0%
	On Ramp	990	1,010	2.0%
S. 84th St	Mainline	21,180	21,180	0.0%
	On Ramp	1,080	1,050	-2.8%
SR 512	Mainline	22,260	22,230	-0.1%
	Off Ramp	6,390	6,160	-3.6%
	On Ramp	4,920	4,600	-6.5%
Bridgeport Way	Mainline	20,790	20,670	-0.6%
	Off Ramp	2,500	2,850	14.0%
	On Ramp	2,650	2,510	-5.3%
Gravelly Lake Drive	Mainline	20,940	20,330	-2.9%
	Off Ramp	1,850	1,880	1.6%
	On Ramp	2,050	1,790	-12.7%
Thorne Lane	Mainline	21,140	20,240	-4.3%
	Off Ramp	2,960	2,310	-22.0%
	On Ramp	840	870	3.6%
Berkeley Ave	Mainline	19,020	18,800	-1.2%
	Off Ramp	2,100	1,910	-9.0%
	On Ramp	390	380	-2.6%
	Mainline	17,310	17,270	-0.2%

18028 Baseline

18270 Planned Action

18028 Baseline

18270 Planned Action

18028 Baseline

18270 Planned Action

18028 Baseline

18270 Planned Action

18028 Baseline

18270 Planned Action

18028 Baseline

18270 Planned Action

18028 Baseline

18270 Planned Action

D. FACET NW, Inc. Gap Analysis

/ Formerly DCG Watershed

CRITICAL AREAS ORDINANCE GAP ANALYSIS

City of Lakewood

Prepared for:

City of Lakewood
Department of Community Development
6000 Main St. SW
Lakewood, WA 98499

Prepared by:

October 2023

DCG/Watershed Reference Number:
230320

Cite this document as:
DCG/Watershed. June 2023. City of Lakewood Critical Areas Ordinance Gap Analysis.

TABLE OF CONTENTS

Page #

LIST OF TABLES

CRITICAL AREAS ORDINANCE GAP ANALYSIS
CITY OF LAKEWOOD

1 INTRODUCTION

With passage of the Growth Management Act (GMA), local jurisdictions throughout Washington State, including the City of Lakewood (City), were required to develop policies and regulations to designate and protect critical areas. Critical areas, as defined by the GMA (Revised Code of Washington [RCW] 36.70A.030(5)), include wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas.

An ongoing requirement of the GMA is for local jurisdictions to periodically review and evaluate their adopted critical areas policies and regulations. In accordance with the GMA, the City adopted a Critical Areas Ordinance (Ordinance No. 362) in 2004 and sections of this ordinance were updated and adopted in Ordinance No. 630 in 2015. The City is now considering further updates to its critical area policies and regulations to be consistent with recent updates to the best available science (BAS). Any deviations from science-based recommendations should be identified, assessed, and explained (Washington Administrative Code [WAC] 365-195-915). In addition, jurisdictions are to give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

The City's critical areas regulations are currently codified in Chapters 14.02 through 14.165 of the Lakewood Municipal Code (LMC or Code) (Lakewood, 2023).

This gap analysis provides a review of the current critical areas regulations, noting gaps where existing policies or regulations may not be consistent with BAS or the GMA. It also documents where revisions could be made to aid in clarity and general usability of the code based on a review and use of the code by DCG/Watershed and City staff. The primary intention of this gap analysis is to help guide the update of the City's critical areas regulations.

1.1 GMA Regulatory Process

The City of Lakewood is conducting a substantive review and revision of its Critical Areas Ordinance (Lakewood Municipal Code Title 14, Chapter 14.02). The Growth Management Act (GMA) requires all cities and counties in Washington to adopt regulations protecting critical areas to preserve the natural

environment, wildlife habitats, and sources of fresh drinking water. Critical areas regulation also encourages public safety by limiting development in areas prone to natural hazards like floods and landslides. All jurisdictions are required to review, evaluate, and, if necessary, revise their critical areas ordinances according to an update schedule. Furthermore, the GMA, under RCW 36.70A.172 requires all counties and cities to "include the best available science in developing policies and development regulation to protect the functions and values of critical areas."

1.2 Document Organization

Recommendations for updating the City's existing critical areas regulations are provided in Sections 2 through 7. Section 2 addresses the general provisions that are applicable to all critical areas and Sections 3 through 7 address the different types of critical areas covered by the GMA. To highlight findings of the gap analysis, a Code review summary table is provided at the beginning of each section. Where a potential gap is identified, subsections provide further discussion.

2 GENERAL PROVISIONS – LMC 14.142

Code sections 14.142.010 through 14.142.200 contain general provisions that are applicable to all types of critical areas. While overall the general provisions contained in these sections are strong, some refinements could be made to further align these sections with the GMA and BAS. Table 1 (general provisions review summary) below provides a summary of recommendations that are described in detail in this section.

Table 1. General provisions review summary.

Code Section	Title	Review Comment / Recommendations*
14.142.010-14.142.200	General Provisions	• Add a section for best available science • Add allowed activities section
14.142.010	Authority and title	None
14.142.020	Intent	None
14.142.030	Interpretation	None
14.142.040	Applicability and Mapping	Create City-owned critical area maps or add reference to BAS map resources in individual sections
14.142.050	Permitted Uses	None
14.142.060	Regulated uses/activities	None
14.142.070	Exemptions	• Specify requirements for demonstrating project exemption • Add reference to Pierce County Noxious Weed Control Board species list

Code Section	Title	Review Comment / Recommendations*
14.142.080	Reasonable use exception	• Update reasonable use exceptions
14.142.090	Reasonable use exception and modification of critical requirements for individual single-family residences	None
14.142.100	Process	• Add requirement in subsection (B), requiring staff to confirm no net loss of ecological function for each project application, pursuant to WAC 365-196-830(4). • Add general language on impact avoidance and mitigation sequencing.
14.142.110	Variances	None
14.142.120	Current use assessment	None
14.142.130	Compliance provisions	None
14.142.140	Appeal procedures	None
14.142.160	Fees	None
14.142.170	Title and pat notification	Correct spelling of "plat"
14.142.180	Nonconforming uses	• Recommend breaking section into subsections for Nonconforming use, nonconforming structure, and nonconforming lots • Recommend adding definitions for new items to Section 14.165
14.142.190	Administrative procedures and technical criteria	None
14.142.200	Severability	None
14.165	Definitions	Review and consider revisions

***** See discussion of comments/recommendations in the subparts below this table.

2.1 General Provisions (LMC 14.142.010- 14.124.200, LMC 14.165)

2.1.1 Add a section for best available science

RCW 36.70A.172(1) requires the inclusion of best available science (BAS) in critical area regulations. The application of BAS is not discussed in the current CAO. Such a section could identify criteria for what qualifies as BAS, identify the process to be followed in absence of valid scientific information, and how BAS will be used to preserve or enhance anadromous fisheries (a special consideration required by Chapter 365-195 WAC).

2.1.2 Add allowed activities section

Some jurisdictions have expressed an interest in adding an allowed uses section which lists activities allowed in critical areas. Creation of such a section should involve review of the existing exemptions section of the code and reconcile and clarify which activities are considered exempt and which are allowed and what the difference is. As the code is currently written, it appears exempt uses do not require submittal of a critical areas report, or mitigation. Allowed uses should still be required to provide mitigation if activities would result in a loss of the function and values of the critical area.

2.2 Applicability and Mapping (LMC 14.142.040)

2.2.1 Add City maps or map resources

The current CAO defines/designates regulated critical areas according to guidelines, however there are no reference maps or resources which applicants can use to identify potential critical areas in their project area. The City should either add a reference to publicly available resources for critical areas identification or create City maps containing those designations that are updated regularly.

2.3 Exemptions (LMC 14.142.070)

2.3.1 Specify requirements for proving project exemption

This section lists actions which are exempt from the critical areas code. However, it does not specify what the responsibilities of a project proponent are in proposing such an action. The City should consider adding language clarifying what, if any, approval is needed prior to engaging in an exempt activity. To promote protection of critical areas even from exempt activities, language similar to the following is recommended for insertion at the beginning of this section:

> *All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. To be exempt from this Chapter does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense (CTED 2007).*

2.3.2 Add reference to Pierce County Noxious Weed Control Board species list

Regulation R of this section references the state noxious weed list allowed to be removed under the stated exemption. To include the coverage of more weeds, the City should consider adding a reference to include all weeds listed

on the Noxious Weeds Designated for Control or Eradication in Pierce County by the Pierce County Noxious Weed Control Board annual list.

2.4 Reasonable Use Exceptions (LMC 14.142.080)

The LMC currently allows for "reasonable use" if the CAO would otherwise deny all reasonable use of a property. The code does not currently contain provisions for establishing legal lot status, which can cause issues with review of reasonable use exceptions. The city should consider revisions to this section that incorporate determination of lot status.

2.5 Process (LMC 14.142.100)

2.5.1 Add requirement in subsection (B), requiring staff to confirm no net loss of ecological function for each project application, pursuant to WAC 365-196-830(4).

Pursuant to WAC 365-196-830(4), Counties and Cities are required to ensure no-net-loss of critical area functions for any proposed development. Although counties and cities may protect critical areas in different ways or may allow some localized impacts to critical areas, or even the potential loss of some critical areas, development regulations must preserve the existing functions and values of critical areas. Avoidance is the most effective way to protect critical areas. If development regulations allow harm to critical areas, they must require compensatory mitigation of the harm. Development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas.

2.5.2 Add general language on impact avoidance and mitigation sequencing.

Pursuant to WAC 197-11-768, mitigation consists of a specific sequence which includes: avoidance, minimization, rectification, reduction, and compensatory mitigation. We recommend adding general language on impact avoidance and each step of the mitigation sequence.

2.6 Title and Pat Notification (14.142.170)

2.6.1 Correct spelling of "plat".

2.7 Nonconforming Uses (LMC 14.142.180)

2.7.1 Recommend breaking section into subsections for nonconforming use, nonconforming structure, and nonconforming lots

The Lakewood Shoreline Master Program (SMP) adopted in 2019 incorporates the Department of Ecology recommended changes listed in WAC 173-27-080,

which separates "nonconforming uses and development" into "nonconforming uses", "nonconforming structures", and "nonconforming lots". These updates are only required for SMPs, however we recommend updating the CAO sections with similar verbiage to be consistent with the SMP as well as provide clarity on "nonconforming" regulations. We also recommend adding the new definitions to Section 14.165.

2.8 Definitions (LMC 14.165)

2.8.1 Review and consider revisions

The City should conduct a thorough review of the definitions section and remove or modify redundant definitions, those which are not used in the code, and those which may require revisions as a result of other code amendments.

3 GEOLOGICALLY HAZARDOUS AREAS – LMC 14.146

The goal of geologic hazard regulations is to classify and designate areas on which development should be prohibited, restricted, or otherwise controlled because of danger from geological hazards. Geologically hazardous areas addressed in the Code include erosion and landslide hazard areas and seismic hazard areas. The Code does not designate mine, volcanic or tsunami hazard areas as geologically hazardous areas.

Table 2. Geologically hazardous areas review summary

Code Section	Title	Review Comment / Recommendations*
14.146.010-14.146.050	Geologically Hazardous Areas	Consider updating definition to match RCW definition
14.146.010	Purpose	Update types of hazards included
14.146.020	Designation of erosion and landslide hazard areas	Update classification criteria consistent with WAC 365-190-120 Update list of mapping resources
14.146.030	Protection standards for erosion and landslide hazard areas	None
14.146.040	Designation of seismic hazard areas	Update definition of seismic hazard areas
14.146.050	Protection standards in seismic hazard areas	None

***** See discussion of comments/recommendations in the subparts below this table.

3.1 Geologically Hazardous Areas (LMC 14.146.010-14.146.050).

3.1.1 Consider adding RCW definition

The LMC contains a definition of geologically hazardous areas, however the language differs slightly from the RCW definition. The City should consider adding the definition of geologically hazardous areas consistent with RCW 36.70A.030(9) to the definitions section in 14.165.

3.1.2 Consider adding a section for designation of Mine Hazard Areas

The LMC does not address volcanic or mine hazard areas. Based on the DNR Geologic Information Portal there are no volcanic vents in the area around Lakewood however there are surface mines within the City limits such as the Miles Sand and Gravel Company. Areas such as this should be addressed in the CAO to address future development of these areas.

3.2 Purpose (LMC 14.146.010).

3.2.1 Consider adding further explanation for areas that are considered geologically hazardous.

This section specifies geologically hazardous areas to include erosion and landslide hazard areas and seismic hazard areas. The City should consider adding the following language "For purposes of this title, geologically hazardous areas include the following: erosion, landslide and seismic hazard areas*, and other hazard areas subject to other geological events such as coal mine hazards and volcanic hazards including mass wasting, debris flow, rock falls, and differential settlement*" to align with WAC-190-120.

3.3 Designation of erosion and landslide hazard areas (LMC 14.146.020).

3.3.1 Consider adding further explanation for areas that are considered geologically hazardous.

The classification criteria included in this section are not complete and lack criteria for landslide hazard areas. This list should be updated consistent with WAC 365-190-120 6.(a-i).

3.3.2 Consider updating map resources

The LMC contains a list of sources that may be used to delineate geologically hazardous areas. These sources may be out of date and/or other sources that are considered BAS may be available. For example, the Soil Survey of Pierce County Area listed in this section is from 1979.

3.4 Designation of seismic hazard areas (LMC 14.146.040).

3.4.1 General

The LMC contains a list of areas considered seismic hazard areas, however the language differs slightly from the RCW designation. The City should consider adding the complete list of seismic hazard areas consistent with WAC 365-190-120 (7).

3.4.2 Mapping

The Lakewood code references two sources for mapping of seismic hazard areas, both of which were published in 2003. The Washington Department of Commerce recommends the following source: Geologic Hazards and the Environment | WA - DNR.

4 Critical Aquifer Recharge Areas – LMC 14.150

Critical Aquifer Recharge Areas (CARA) are defined in Lakewood Municipal Code (LMC 14.150) and designated in LMC 14.150.020. LMC 14.150.040 lists the requirements for hydrogeological assessments when required through the permitting process. The current regulations appear generally consistent with the CARA guidance provided by the Department of Ecology. The following subsections are suggestions for improving the level of aquifer protection and general clarification of regulations to implement the plan.

4.1 Consider adding maps of CARAs (LMC 14.150)

The LMC designates CARAs based on DRASTIC zones seen in the Pierce County Map of Groundwater Pollution Potential and the Clover/Chambers Creek Aquifer Basin boundary, as identified in the Draft Clover/Cambers Creek Basin Ground Water Management Program. However, there are no listed resources for applicants to see if their project site is within a regulated CARA. We recommend either listing resource map links (such as those mentioned in LMC 14.150.020(B)(1) or for the City to consider creating its own CARA map for applicants to utilize as a reference during project development.

4.2 Create an inventory of potential contaminant sources (LMC 14.150)

Aquifer vulnerability analyses based on susceptibility assessments benefit from updated inventories of potential contaminant sources and their pathways. A monitoring well program (resource protection wells) with piezometers above and below the aquitards can provide early detection of changes in groundwater levels or water quality in specific aquifers, as well as long-term monitoring of water level trends and aquifer recharge. An inventory of existing wells in the CARA,

particularly smaller domestic water supply wells, can be used to assess hazards from spills and contamination affecting municipal water supplies. An inventory of existing wells in the CARA can provide information for implementing a well abandonment program to prevent abandoned wells or open casings from causing contamination of groundwater supplies in the future.

5 FISH AND WILDLIFE HABITAT AREAS – LMC 14.154

Code sections 14.154.010 through 14.154.090 contain provisions that are applicable to all Fish and Wildlife Habitat Areas. The City's habitat conservation areas regulations require some modifications to align with BAS and to clarify applicability and facilitate ease of use. The following subsections are suggestions for improving the level of Fish and Wildlife Habitat protection and general clarification of regulations to implement the plan.

Table 3. Fish and wildlife habitat areas review summary.

Code Section	Title	Review Comment / Recommendations*
14.154.010-14.154.090	Fish and Wildlife Habitat Areas	• Update title of chapter • Update definition in 14.165 • Include designation and protection of waters of the State
14.154.010	Purpose and intent	None
14.154.020	Designation of critical fish and wildlife habitat areas	• Provisions of this title apply to both public and private lands • Add identification information consistent with WAC 365-190-030 • Update map resources • Update identification consistence with WAC-365-190-130 • Include anadromous fisheries
14.154.030	Habitat protection standards	• Add BAS to section B • Expand on the sources and methods of identifying critical fish and wildlife habitat areas
14.154.040	Title and plat notification	None
14.154.050	Habitat protection for rivers and streams	• Update stream protection buffers to ensure consistency with BAS • Add language for "no-net-loss" of ecological function
14.154.060	Habitat protection for lakes	• Update the buffer requirements for lakes that are urban in character
14.154.070	Habitat protection ponds	• Add buffer requirements for naturally occurring ponds under 20-acres in size

Code Section	Title	Review Comment / Recommendations*
14.154.080	Provisions for priority Oregon white oak trees and woodlands	None
14.154.090	Provisions for fish and wildlife, habitat buffers, where required	None

***** See discussion of comments/recommendations in the subparts below this table.

5.1 Fish and Wildlife Habitat Areas (LMC 14.154.010-14.154.090).

5.1.1 Update title of chapter

Chapter 14.154 of the LMC is currently titled Fish and Wildlife Habitat Areas, the RCW 36.70A.030(6) references these areas as Fish and Wildlife Habitat Conservation Areas. For clarity, the City could consider revising the chapter title and applicable language throughout the chapter to be consistent with the title "Fish and Wildlife Habitat Conservation Areas".

5.1.2 Update definition in 14.165

Concurrently with the update suggested in 5.1.1, we recommend updating the definition for "Fish and Wildlife Habitat Areas" in Section 14.165 to be consistent.

5.1.3 Include designation and protection of waters of the State

RCW 90.48.020 defines waters of the State, which include all surface waters, salt waters, groundwater, and all other water courses in Washington. Per WAC 365-190-1300(2) all waters of the state should be designated as fish and wildlife habitat conservation areas. The City should add a definition for "waters of the state" as well as designating them under this chapter.

5.2 Designation of critical fish and wildlife habitat areas (LMC 14.154.020).

5.2.1 Provisions of this title apply to both public and private lands

Chapter 14.154 currently states that this chapter applies to proposed regulated activities within critical fish and wildlife habitat areas. For the purpose of adding clarity to the document it is recommended that the City add language stating that this chapter applies to proposed regulated activities within critical fish and wildlife habitat areas *on all public and private lands*.

5.2.2 Add identification information consistent with WAC 365-190-030

Section A of this chapter includes areas currently identified as critical fish and wildlife species and habitats are referenced by CFR and WAC sections. Language stating "and which, if altered, may reduce the likelihood that the species will ~~maintain and reproduce~~ *persist* over the long term" should be retained.

5.2.3 Update map resources

The LMC references four resources for information on critical fish and wildlife habitat areas. This section lists both the Washington Department of Wildlife and the Washington Department of Fisheries. This section should be updated with the BAS as well as updating these two departments to the single entity of the Washington Department of Fish and Wildlife.

5.2.4 Update identification consistence with WAC-365-190-130

Section B of this chapter should expand on the sources and methods of identifying critical fish and wildlife habitat areas as outlined in WAC-365-190-130(4)(a-i).

WAC 365-190-130(4)(i) recommends sources and methods for protecting fish and wildlife habitat conservation areas, including salmonid habitat. BAS is available from the US Department of Fish and Wildlife Service, the State Recreation and Conservation Office, and the Puget Sound Partnership and the City should consider recommendations found in the regional and watershed specific salmon recovery plan (Governor's Salmon Recovery Office - Recreation and Conservation Office (wa.gov).

5.3 Habitat Protection Standards (LMC 14.154.030).

5.3.1 Add BAS to Section B

Section B of this chapter references existing codes and policies, both state and local, that are used to implement Habitat Protection Standards. This list should include BAS as set forth in RCW 36.70A.172. in addition to the WDFW's Priority Habitat and Species webpage (Priority Habitats and Species (PHS) | Washington Department of Fish & Wildlife) as required by WAC 365-190-130 (4).

5.3.2 Expand on the sources and methods of identifying critical fish and wildlife habitat areas

The City should consider listing publicly available resources to help applicants identify critical fish and wildlife habitat areas. At minimum the City should list the WDFW's Priority Habitat and Species webpage (Priority Habitats and Species (PHS) | Washington Department of Fish & Wildlife) as required by WAC 365-190-130 (4).

5.4 Habitat protection for rivers and streams (LMC 14.154.050).

5.4.1 Update stream protection buffers to ensure consistency with BAS

The current standards set forth in 14.154.050 for river and stream buffers have not been updated since 2015 (Ordinance No. 630). In 2020, the Washington Department of Fish and Wildlife (WDFW) came out with new guidance ((Rentz et al. 2020)) for protection of riparian areas that heavily emphasizes a shift in terminology from the concept of "stream buffers" to "riparian management zones" (RMZs). An RMZ is defined as "…a scientifically based description of the area adjacent to rivers and streams that has the potential to provide full function based on the SPTH [site potential tree height] conceptual framework." This differs from the use of "buffer(s)," as an RMZ is by definition wide enough to potentially provide full riparian function. Stream buffers are established through policy decisions and are clearly intended to protect streams but may or may not be intended to provide full riparian function or a close approximation of it. The guidance recommends that a RMZ be delineated on a site-specific basis and be measured from the outer channel migration zone.

The City could consider requiring site specific RMZs, rather than set buffer widths. However, this approach is difficult to implement, and many jurisdictions are choosing to continue with set buffer widths, while taking into consideration the range of widths that the custom RMZ mapping would produce. The 200-foot set buffer width currently recommended for Type F streams is on the larger end of what is seen in many jurisdictions and should be adequate to protect most stream and stream buffer function.

5.4.2 Add language for "no-net-loss" of ecological function

Section D of this chapter currently states that "new development shall not reduce the effective flood storage volume of the regulatory floodplain". The current recommended language states that there shall be "no-net-loss of ecologic function". This language should be added to this section per WAC 365-196-830(4).

5.5 Habitat protection for lakes (LMC 14.154.060).

5.5.1 Regulated activities

Regulated activities proposed on lakes that are urban in nature are currently exempt from buffering requirements of this chapter. However, the lakes in the City of Lakewood fall under the jurisdiction of the Shoreline Master Program. We recommend adding a clarifying statement to this section such as:

All activities within 200 ft. of regulated shorelines are subject to the regulations in the Shoreline Master Program (SMP). Applicants should consult the Lakewood SMP for setback/buffer requirements.

5.6 Habitat protection for ponds (LMC 14.154.070).

5.6.1 Regulated activities

Naturally occurring ponds under 20-acres and their submerged aquatic beds that provide fish or wildlife habitat are considered Fish and Wildlife Habitat Conservation Areas per WAC 365-190-130. The state code also states that "naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farmponds, temporary construction ponds (of less than three years duration) and landscape amenities. However, naturally occurring ponds may include those artificial ponds intentionally created from dry areas in order to mitigate conversion of ponds, if permitted by a regulatory authority." It is recommended that the City update this section to provide clear buffer requirements for ponds under 20-acres in size.

6 FLOOD HAZARD AREAS – LMC 14.158

The existing Code includes restrictions on development within floodplains, which are outlined in LMC 18A.50 – Article 1. Flood Hazard Overlay (FHO). Existing regulations could be enhanced by providing specific critical area special study and/or habitat assessment requirements as detailed below.

Table 4. Flood hazard areas review summary

Code Section	Title	Review Comment / Recommendations*
14.158.010 - 14.158.030	Flood Hazard Areas	• Consider revising chapter title to "frequently flooded areas", consistent with GMA language • Specific critical area report requirements for floodplains not included—consider including • Require a habitat assessment (FEMA Biological Opinion process) for development in the floodway or floodplain
14.158.010	Purpose	Consider updating this section to be consistent with referenced LMC 18A.50 (Article 1)
14.158.020	Designation	Consider adding links to FEMA resource maps
14.158.030	Protection	None

6.1 Flood Hazard Areas (LMC 14.158.010-14.158.030)

6.1.1 Consider revising chapter title to "frequently flooded areas"

RCW 36.70A.030 defines the five types of critical areas which are required to be protected, including "frequently flooded areas". "Frequently flooded areas" are lands in the floodplain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater (WAC 365-190-030). Section 14.158.020 of the Flood Hazard Areas chapter specifies that the chapter applies to all "areas of special flood hazard". A "Flood Hazard areas" definition is included in 14.165, which we recommend be updated to be consistent with the GMA definition in WAC 365-190-030. For clarity, the City could consider revising the chapter title and applicable language throughout the chapter to be consistent with the "frequently flooded area" term.

6.1.2 Consider including critical area report requirements for frequently flooded areas

The Flood Hazard Area chapter does not have a critical area report section specifying requirements for a critical area report specific to frequently flooded areas, nor does the linked Overlay District chapter (LMC 18A.50 – Article 1). The City should consider adding specific requirements for a floodplain critical area report or study to ensure no-net-loss of floodplain function.

6.1.3 Require a habitat assessment (FEMA BiOp process) for development in the floodway or floodplain

As a result of the 2008 National Marine Fisheries Service (NMFS) Biological Opinion (BiOp) on the implementation of the National Flood Insurance Program (NFIP) in the Puget Sound region, the City is required to adopt one of the three following approaches (or "doors") to managing development within the floodplain:

1. Adopt the model ordinance;

2. Develop floodplain regulations that protect floodplain functions on a programmatic basis; or

3. Require the completion of a floodplain habitat assessment for any development within the floodplain. Habitat assessments must evaluate impacts to stormwater, floodplain capacity, and vegetative habitat.

It is our understanding that the City has not adopted the model ordinance (Door 1) nor has customized floodplain regulations that have been reviewed and approved by FEMA (Door 2), therefore Door 3 is the default requirement. Door 1, the model ordinance, would likely represent the most conservative

approach to protecting floodplain functions, but it also would also be expected to be the most restrictive option in terms of future development and provide the least flexibility in implementation. Door 2 allows local jurisdictions to establish regulations that recognize local conditions and may incorporate programs that enhance floodplain functions into the evaluation of how floodplain functions are maintained. However, FEMA must approve any Door 2 approach before it is implemented. The timing to get approval for Door 2 depends on the approach and detail in the application submittal. If Door 3 is the desired approach, a regulation should be added to this section specifying when a habitat assessment is required and the minimum content requirements.

6.2 Purpose

6.2.1 Consider updating section to be consistent with referenced LMC 18A.50 (Article 1)

The protection standards for "flood hazard areas" are listed via the City's Cite Development Regulations and Chapter 18A.50 of the LMC (Article 1). These standards list the purpose of that section, which mirrors the purpose listed in this section. For consistency as well as highlighting the importance of maintaining no-net-loss standards (pursuant to WAC 365-196-830), recommend updating this section to match LMC 18A.50.010(A)-(L).

6.3 Designation

6.3.1 Consider adding links to FEMA resource maps

The designation of flood hazard areas is identified by the Federal Insurance Administration in a report entitled "The Flood Insurance Study for Pierce County and Incorporated Areas" dated March 7, 2017. We understand that the City will update the designated flood hazard areas upon receiving revisions to this report, however we recommend referencing the FEMA floodplain map as an additional resource. The FEMA online floodplain map is updated regularly and is considered a resource for incorporating best available science into local regulations.

7 WETLANDS AREAS – LMC 14.162

The wetland sections are extensive, but they could be updated to be consistent with BAS related to habitat score ranges, buffer functionality and mitigation sequencing.

Table 5. Wetlands areas review summary

Code Section	Title	Review Comment / Recommendations*
14.162.070	Delineation, and wetland analysis requirements	• Update Critical Areas Atlas to include BAS resources • Consider establishing a requirement for a qualified wetland professional to complete any needed wetland report • Consider listing requirements of a wetland analysis report
14.152-080	Protection standards – Establishing buffers	• Update habitat score ranges to reflect Ecology recommendations • Consider adding provision to end buffer where there is a functional disconnection • Protection of wetland buffer widths
14.162.100	Mitigation	1. Update mitigation ratio table to reflect Ecology recommendations 2. Add additional information for required mitigation steps 3. Add requirement for monitoring when a project requires on-site mitigation

7.1 Delineation, and Wetland Analysis Requirements (LMC 14.162.070)

7.1.1 Update Critical Areas Atlas to include BAS resources

The LMC Code 14.162.070(A) refers to a Critical Area Atlas which is a City Wetland Inventory map which provides an indication of where potential wetlands are located within the county. This resource does not include the source of its information; therefore it is unknown if it is incorporating BAS as a part of its designation. We recommend either 1) listing resources utilized to create the Critical Areas Atlas and how often it is updated with assurances that BAS is used during the review process; or 2) switching to listed public resources which use BAS and are updating frequently (for example the National Wetland Inventory, Web Soil Survey, WDFW PHS, etc).

7.1.2 Consider establishing a requirement for a qualified wetland professional to complete any needed wetland report

When a wetland analysis report is required by the Department, we recommend listing a requirement which states that such reports must be completed by a qualified professional. Wetlands are complex ecosystems, and to be delineated/classified accurately requires extensive training and experience. The City can refer to the Pierce County approved consultant list or outline specific requirements for certifications and experience.

7.1.3 Consider listing requirements for a wetland analysis report

The City currently has two wetland reports listed in LMC 14.165 – Wetland Verification Report and Wetland Analysis Report. However, neither section lists the requirements for said reports. The City should consider outlining requirements for each report, including (but not limited to) wetland delineation and rating documentation required by the methods referenced in 14.162.020 and 14.162.030, specifically wetland data sheets, and Ecology 2014 rating form(s) and figures.

7.2 Protection Standards – Establishing Buffers (LMC 14.152-080)

7.2.1 Update habitat score ranges to reflect Ecology recommendations

Effective wetland buffer widths vary depending on the targeted wetland functions, intensity of surrounding land use, and buffer characteristics. The Code's existing buffer widths are based on wetland category and habitat score. In July of 2018 Ecology released updated guidance modifying the habitat ranges in their wetland buffer tables (Granger, 2018). In previous Ecology wetland buffer tables, low habitat function was represented by a habitat score of 3 or 4 points and moderate habitat function by a score of 5 to 7 points. The new guidance re-categorizes a habitat score of 5 as part of the low category. Using the Code's existing buffer system, this change would result in a reduction in the buffer width for wetlands with a habitat score of 5. Therefore, the habitat score ranges and buffer widths used in the current buffer system must be updated to match the revised Ecology guidance. The buffer width table in the current Code, updated to reflect the July 2018 Ecology guidance, is shown below.

Table 6. Current wetland buffer table, updated with July 2018 Ecology changes. Existing buffer widths included in () for comparison.

	Buffer Width according to Habitat Score[1]			
Wetland Category[1]	**(3-4) 3-5 points**	**(5 points)**	**6-7 points**	**8-9 points**
Category I: Based on total score	75 ft	(105 ft)	(165 ft) 110 ft	(225 ft) 225 ft
Category I: Bogs and wetlands with a High Conservation Value	190 ft			225 ft
Category I: Coastal lagoons	(150 ft) 150 ft (buffer with not based on habitat scores)		(165 ft)	(225 ft) 225 ft
Category I: Interdunal	(225 ft) 225 ft (buffer width not based on habitat scores)			(225 ft) 225 ft

Wetland Category[1]	Buffer Width according to Habitat Score[1]			
	(3-4) 3-5 points	(5 points)	6-7 points	8-9 points
Category I: Forested	(75 ft) 75 ft	(105 ft)	(165 ft) 225 ft	(225 ft) 225 ft
Category I: Estuarine	150 ft (buffer with not based on habitat scores)			
Category II: Based on score	75 ft	(105 ft)	(165 ft) 165 ft	(225ft) 225 ft
Category II: Interdunal wetlands	(110 ft) 110 ft (buffer width not based on habitat scores)		(165 ft)	(225 ft) 225 ft
Category II: Estuarine	110 ft (buffer width not based on habitat scores)			
Category III (all)	(60 ft) 60 ft	(105 ft)	(165 ft) 225 ft	(225 ft) 225 ft
Category IV	40 ft			

The current buffer system, when updated to reflect the change in habitat score ranges, will be aligned with BAS. The current code also mandates that for any project that does not employ the mitigation measures listed in table 14.2, a 33% buffer width increase will be required. This multi-tiered approach helps to ensure no-net-loss of wetland functions.

7.2.2 Consider adding provision to end buffer where there is a functional disconnection

Areas that are disconnected from the wetland by a permanent road or other substantially developed surface often do not provide significant buffer function. The City could consider adding a provision that the edge of an improved right-of-way or similar infrastructure of a linear nature shall be considered the extent of the buffer, if the part of the critical area buffer on the other side of the infrastructure provides insignificant function in relation to the part of the buffer adjacent to the wetland, unless the infrastructure can be feasibly removed, relocated or restored to provide buffer functions. Such functional analysis should be included in the critical areas report.

7.2.3 Reduction of wetland buffer widths

Current LMC allows for up to a 25% buffer reduction on a case-by-case basis for unique wetland circumstances. However, the current recommended buffer widths provided by Ecology already includes reduced widths than what is normally required, and these widths should not used in conjunction with other reductions. We recommend removing the allowance for up to a 25% buffer reduction. Alternatively, if the City wishes to keep the reduction option in the code, updated buffer widths would be required which would increase each buffer width by 33%.

7.3 Mitigation (LMC 14.162.100)

7.3.1 Update mitigation ratios to reflect Ecology recommendations

Ecology's recent publication *Wetland Guidance for Critical Areas Ordinance (CAO) Updates* dated October 2022 (Shorelands and Environmental Assistance Program, 2022) outlines additional research for mitigation practices. These updates include new recommended mitigation ratios. We recommend that you update the mitigation ratios located in LMC 14.162.100 (B)(3) to reflect Ecology's recommended ratios. The mitigation ratio table in the current Code, updated with Ecology's 2022 guidance is shown below.

Table 7. Current wetland mitigation ratio, updated with 2022 Ecology guidance

Category and Type of Wetland	Creation or Reestablishment	Rehabilitation	Preservation	Enhancement
Category I: Mature forested	6:1	12:1	24:1	16:1
Category I: Based on functions	4:1	8:1	16:1	16:1
Category II	3:1	6:1	12:1	12:1
Category III	2:1	4:1	8:1	8:1
Category IV	1.5:1	3:1	6:1	6:1

4. Add additional information for required mitigation steps

7.3.2 Add additional information for required mitigation steps.

Ecology's recent publication Wetland Guidance for Critcal Areas Ordinance (CAO) Updates dated October 2022 outlines recommended mitigation steps to ensure a thorough approach to no net loss for development projects. We recommend that you expand on the existing code language and incorporate the following language into the mitigation section of the LMC.

14.162.100 – Mitigation

(A) Mitigation Sequencing. Before being authorized to impact any wetland or its buffer, an applicant must demonstrate that they have implemented mitigation in the following order.

1. Avoid impacts altogether by not taking certain action or parts of an action.
2. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
3. Rectify impacts by repairing, rehabilitating, or restoring the affected environment.
4. Reduce or eliminate impacts over time by preservation and maintenance operations.

5. Compensate for impacts by replacing, enhancing, or providing substitute resources or environments.
6. Monitor required compensation and take remedial or corrective measures when necessary.

(C) Methods of Compensatory Mitigation. Mitigation for wetland and buffer impacts shall rely on a method listed below in order of preference. A lower-preference form of mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the [Administrator]'s satisfaction that all higher-ranked types of mitigation are not viable, consistent with the criteria in this Section.

1. Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former or degraded wetland. Restoration is divided into two categories:
    a. Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland area and functions. Example activities could include removing fill, plugging ditches, or breaking drain tiles to restore a wetland hydroperiod, which in turn will lead to restoring wetland biotic communities and environmental processes.
    b. Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions and environmental processes to a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland area. The area already meets wetland criteria, but hydrological processes have been altered. Rehabilitation involves restoring historic hydrologic processes. Example activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.
2. Establishment (Creation): The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland where a wetland did not previously exist at an upland site. Establishment results in a gain in wetland area and functions. An example activity could involve excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils by intercepting groundwater, and in turn supports the growth of hydrophytic plant species.

a. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the [Administrator] may authorize establishment of a wetland and buffer upon demonstration by the applicant's qualified wetland professional that:
    i. The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that establishment of a wetland at the site will not likely cause hydrologic problems elsewhere;
    ii. Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and
    iii. The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.
    iv. The proposed wetland would not be established at the cost of another high-functioning habitat (i.e., ecologically important uplands).

3. Preservation (Protection/Maintenance). The removal of a threat to, or preventing the decline of, wetlands by an action in or near those wetlands. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms such as recording conservation easements and providing structural protection like fences and signs. Preservation does not result in a gain of aquatic resource area or functions but may result in a gain in functions over the long term. Preservation of a wetland and associated buffer can be used only if:

    a. The [Administrator] determines that the proposed preservation is the best mitigation option;
    b. The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;
    c. The area proposed for preservation is of high quality or critical for the health and ecological sustainability of the watershed or sub-basin. Some of the following features may be indicative of high-quality sites:
        i. Category I or II wetland rating.
        ii. Rare or irreplaceable wetland type [e.g, peatlands, mature forested wetland, estuaries, vernal pools, alkali wetlands]

or aquatic habitat that is rare or a limited resource in the area.

iii. The presence of habitat for threatened or endangered species (state, federal, or both).

iv. Provides biological and/or hydrological connectivity to other habitats.

v. Priority sites identified in an adopted watershed plan

c. Permanent preservation of the wetland and buffer shall be provided through a legal mechanism such as a conservation easement or tract held by an appropriate natural land resource manager/land trust.

d. The [Administrator] may approve another legal and administrative mechanism in lieu of a conservation easement if it is determined to be adequate to protect the site.

4. Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific wetland function(s). Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in the gain of selected wetland function(s) but may also lead to a decline in other wetland function(s). Enhancement does not result in a gain in wetland area. Enhancement activities could include planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods in existing wetlands.

   Applicants proposing to enhance wetlands and/or associated buffers shall demonstrate how the proposed enhancement will increase the wetland and/or buffer functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.

5. Alternative Types of Mitigation/Resource Tradeoffs. The [Administrator] may approve alternative mitigation proposals that are based on best available science, such as priority restoration plans that achieve restoration goals identified in the SMP. Alternative mitigation proposals shall provide an equivalent or better level of ecological functions and values than would be provided by standard mitigation approaches. Alternative mitigation approaches shall comply with all reporting, monitoring, and performance measures of this Section including adherence to mitigation sequencing. The [City/County] may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical

areas. The [Administrator] will consider the following for approval of an alternative mitigation proposal:

a. Clear identification of how an alternative approach will achieve equal or better ecological benefit.
b. The proposal uses a watershed approach consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach [Western Washington or Eastern Washington (Ecology Publication #09-06-32 or Publication #10-06- 007), or as revised].
c. All impacts are identified, evaluated, and mitigated.
d. Methods to demonstrate ecological success are clear and measurable.

(D) Location of Compensatory Mitigation. Permitee-responsible compensatory mitigation actions shall be conducted using a watershed approach and shall generally occur within the same sub-drainage basin. However, when the applicant can demonstrate that a mitigation site in a different sub-drainage basin is ecologically preferable, it should be used.

The following criteria will be evaluated when determining whether on-site or offsite compensatory mitigation is ecologically preferable. When considering the location of mitigation, preference should be given to using programmatic approaches, such as a mitigation bank or an ILF program.

1. No reasonable opportunities exist on site or within the sub-drainage basin or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capability of the site to compensate for the impacts. Considerations should include anticipated replacement ratios for wetland mitigation, buffer conditions and required widths, available water to maintain anticipated hydrogeomorphic class(es) of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
2. On-site mitigation would require elimination of high-quality upland habitat;
3. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions compared to the altered wetland.
4. Off-site locations shall be in the same sub-drainage basin unless:
    a. Watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the [City/County] and strongly justify locating mitigation at another site;

b. Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;
c. Fees are paid to an approved ILF program to compensate for the impacts.

5. The design for the compensatory mitigation project needs to be appropriate for its position in the landscape. Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland.

(D) Timing of Compensatory Mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will impact wetlands. At the least, compensatory mitigation shall be completed immediately following wetland impacts and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

1. The [Administrator] may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or significant construction difficulties. For example, a project delay that creates conflicts with other regulatory requirements (fisheries, wildlife, stormwater, etc.) or installing plants should be delayed until the dormant season to ensure greater survival of installed materials. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the delay shall include a written justification that documents the environmental constraints that preclude timely implementation of the compensatory mitigation plan. The justification will be verified by the [City/County] who will issue a formal decision.

(E) Monitoring. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met, but not for a period less than five years. If a scrub-shrub or forested vegetation community is proposed, monitoring may be required for ten years or more. The mitigation plan shall include monitoring elements that ensure success for the wetland and buffer functions. If the mitigation goals are not attained within the initially established monitoring period, the applicant remains responsible for managing the mitigation project until the goals of the mitigation plan are achieved.

8 REFERENCES

DNR (Washington Department of Natural Resources). (2023). Geologic Information Portal. Retrieved from DNR: https://www.dnr.wa.gov/geologyportal

Granger, T. H. (2018). *Wetlands in Washington State, Volume 2 - Guidance for Protecting and Managing Wetlands (used with modified Appendix-C, 2018).* Olympia: Washington State Ecology Publication No. 05-06-008.

Lakewood, C. o. (2023). *City of Lakewood Legislative History: Ordinance 718.* Retrieved from City of Lakewood: https://lakewood.municipal.codes/enactments?page=2&type=OrdRentz, R. A. (2020). *Riparian Ecosystems, Volume 2: Management Recommendations .* Olympia: Habitat Program, Washington Department of Fish and Wildlife.

Shorelands and Environmental Assistance Program. (2022). *Wetland Guidance for Critical Areas Ordinance (CAO) Updates - Western and Eastern Washington.* Olympia: Department of Ecology Publication #22-06-014.