

FINAL
ENVIRONMENTAL IMPACT STATEMENT

for the

**NORTH DOWNTOWN
SUBAREA PLAN**



July 2, 2014

prepared by the

City of Tacoma, Planning and Development Services Department

and

Bates Technical College, Facilities and Operations

FINAL

ENVIRONMENTAL IMPACT STATEMENT

for the

NORTH DOWNTOWN SUBAREA PLAN

This Final Environmental Impact Statement (Final EIS) for Tacoma's ***North Downtown Subarea Plan*** has been prepared in compliance with the State Environmental Policy Act (SEPA) of 1971 (Chapter 43.21C, Revised Code of Washington); the SEPA Rules, effective April 4, 1984, as amended (Chapter 197-11, Washington Administrative Code); and rules adopted by the City of Tacoma implementing SEPA (Tacoma Municipal Code, Chapter 13,12 – Environmental Code. Whereas the City of Tacoma and Bates Technical College co-lead agencies for SEPA compliance, the City is serving as the nominal SEPA Lead Agency¹ for the ***North Downtown Subarea Plan*** EIS. Both the City and Bates Technical College have determined that this EIS has been prepared in a responsible manner using appropriate methodology. As nominal SEPA Lead Agency, the City has directed the areas of research and analysis that were undertaken in preparation of this EIS. This Final EIS will accompany the proposed ***North Downtown Subarea Plan*** and will be considered in making final decisions concerning the Subarea Plan, as well as new policies and regulations, and site-specific projects proposed within the North Downtown Subarea.

Date of Final EIS Issuance July 2, 2014

Date of Draft EIS Issuance May 15, 2014

Date of Draft EIS Public Hearing May 29, 2014
(Refer to pg. vii of this Final EIS for time, location and intended meeting format)

Date comments were due on the Draft EIS..... June 16, 2014

¹ A nominal lead agency is the public agency responsible for complying with the duties of lead agency (WAC 197-11-944) and complying with SEPA's procedural requirements (WAC 197-11-758).

--PREFACE--

The purpose of this Final Environmental Impact Statement (Final EIS) is to:

- identify and evaluate probable adverse environmental impacts that could result from development associated with the *Action Alternative* and the *No Action Alternative*; and
- identify measures to mitigate those impacts.

This Final EIS is unique in that: **1)** it is jointly sponsored by the City of Tacoma and Bates Technical College; **2)** it is a non-project document in that it addresses approximately a 520-acre area of North Downtown Tacoma and presents cumulative impact analyses for the entire Subarea, rather than piecemeal analysis on a project-by-project basis; **3)** it is an EIS aimed at comprehensiveness yet conciseness to improve usefulness; and **(4)** it is a "Planned Action" EIS with the objective of eliminating the need for subsequent environmental review associated with site-specific development or redevelopment -- providing certainty for future development and simplifying and expediting the permitting process in order to foster the realization of high quality urban development in the Subarea.

The "Planned Action" EIS is an upfront environmental review of the North Downtown Subarea prepared pursuant to the authorization and requirements of RCW 43.21C.420, .440, .229, regulations set forth in Chapter 197-11 WAC, and the requirements set forth in the Tacoma Municipal Code.² Once complete, the EIS will allow the City Council to enact ordinances that use one or more or a hybrid of the upfront environmental review tools authorized by these statutory provisions, and to authorize or grant permits and approvals based upon certain "upfront" EIS provisions.

This Final EIS also builds upon previous regional planning efforts conducted by the Puget Sound Regional Council (PSRC) to meet the requirements of the State Growth Management Act (GMA), which requires regions, counties, cities and towns to plan for forecasted growth. The two major regional plans put forth by PSRC are VISION 2040 and Transportation 2040, both of which were backed by comprehensive EIS's. Pierce County establishes Countywide Planning Policies in conjunction with the cities and towns in the County and assigns population and employment growth allocations for the cities within its jurisdiction, including Tacoma, as mandated by the GMA. The development alternatives being analyzed in this Final EIS have been designed in accordance with the two PSRC regional plans and the Pierce County growth allocations and, therefore, have already been analyzed and approved at the regional level. VISION 2040 is a regional strategy for accommodating the 5 million people expected to live in the central Puget Sound region by 2040. The Final EIS for VISION 2040 was issued in 2008, and in the preferred alternative, the largest shares of the region's future growth would occur in the region's five major metropolitan cities, including Tacoma.

Transportation 2040 is an action for regional transportation for the next 30 years and the Final EIS for the plan was issued in 2010. Land use assumptions were based on VISION 2040. The preferred alternative in the EIS emphasizes greatly expanded employer and residential programs to reduce unnecessary travel and increase use of transit, vanpools, bicycling, and walking. Each EIS referenced in this paragraph is incorporated into this Final EIS by this reference, as are the SEPA documents used for the Countywide Planning Policies and Population and Employment allocations (also referenced in this paragraph).

The Final Environmental Impact Statement (Final EIS) for the Subarea Plan will accompany the **North Downtown Subarea Plan** through the review process associated with Subarea Plan and will be the principal environmental document that will be considered in the decision-making process for the Subarea Plan, as well as new policies and regulations, and site-specific projects that are proposed within the North Downtown Subarea.

The environmental elements that are analyzed in this Final EIS were determined as a result of the formal, public EIS scoping process that occurred June 14, 2013, through July 19, 2013. The SEPA Determination of

² Prior to issuing the Draft EIS, the lead agencies fulfilled the required notice and meeting requirements set forth in RCW 43.21C.420 and .440 and the associated requirements in the Tacoma Municipal Code.

Significance/Scoping Notice was mailed to agencies and organizations and a Scoping Meeting/Open House was held on June 26, 2013. During the EIS Scoping period, the City received written comments, as well as oral comments, regarding the scope of the Final EIS. At the conclusion of the Scoping process, the City and Bates Technical College confirmed the alternatives to be analyzed in this EIS and the range of environmental issues to be evaluated. Thirteen broad areas of environmental review are evaluated, including: **earth, air quality, water, plants / animals, environmental health, noise, land use, population / housing, historic / cultural resources, aesthetics, transportation, public services, and utilities.**

The Table of Contents for this Final EIS begins on pg. *viii* of the *Fact Sheet*. In general, the Final EIS is organized into four major sections:

- **Fact Sheet** (immediately following this *Preface*) -- provides an overview of the proposed project, its location, approvals needed, contact information, and the Table of Contents);
- **Section I** (starting on page 1-1) -- summarizes the *Proposed Action* and the alternatives, and includes a comparative matrix describing adverse environmental impacts, mitigation measures, and potential significant adverse environmental impacts associated with the alternatives;
- **Section II** (beginning on page 2-1) -- provides a detailed description of the *Proposed Action*; and
- **Section III** (page 3-1) -- is an analysis of probable adverse environmental impacts that could result from implementation of the Action Alternative. This section also identifies possible mitigation measures and potential significant adverse environmental impacts.

FACT SHEET

Name of Proposal	North Downtown Subarea Plan
Proponents	<p>City of Tacoma Planning and Development Services Dept. 747 Market St., Room 345 Tacoma, WA 98402</p> <p>Bates Technical College Downtown Campus 1101 S Yakima Ave Tacoma, WA 98405</p>
Location	<p>The North Downtown Subarea Plan addresses an area of approximately 520 acres -- extending generally from S. 15th St. on the south to Yakima Ave and 'I' Street on the west, to the Thea Foss Waterway on the east, and N 4th Ave on the north. The Subarea encompasses the northern portion of Downtown Tacoma and includes Bates Technical College Campus, the Commercial Core, Foss Waterway, the Stadium District, the northern portion of the Hillside District, the St. Helens District, and Wright Park. Properties located along the west edge of the Thea Foss Waterway between S. 15th St. and S. 4th St. are not included in the Subarea.</p>
Proposed Action	<p>The Proposed Action consists of several related decisions by the Tacoma City Council – with involvement, as appropriate, by Bates Technical College – regarding the North Downtown Subarea Plan, including:</p> <ul style="list-style-type: none">• approval of the Final EIS as a document that is adequate for SEPA compliance, decision making, and implementation of the upfront SEPA process;• implementation of the associated Planned Action ordinance for the project;• adoption of the North Downtown Subarea Plan and the associated policies and implementing regulations, as well as site-specific projects that are proposed within the North Downtown subarea; and• determination of whether the Action Alternative contained in the Subarea Plan, or the No Action Alternative is the City's preferred alternative for the North Downtown area.

EIS Alternatives

The **No Action Alternative** and the **Action Alternative** are evaluated in this Final EIS. Key elements of each alternative include the following:

No Action Alternative – Tacoma’s existing *Comprehensive Plan*, Zoning Map, and the City’s *Land Use Code* would remain in effect. All existing planning and implementation policies and existing development regulations would continue to guide development decisions for properties within the North Downtown Subarea, including the Bates Technical College campus. No Planned Action ordinance would be adopted and the advantages of upfront SEPA review would not be realized.

Action Alternative – This alternative could result in a net increase of up to 26,250,000 total gross sq. ft. of net development within the North Downtown Subarea consisting of up to 15,000,000 sq. ft. of residential development, 11,250,000 sq. ft. of commercial development, 30,000 residents, and 30,000 jobs.

Preferred Alternative – The analysis presented in this Final EIS supports the selection of the **Action Alternative** as the preferred alternative.

SEPA Lead Agencies

**City of Tacoma
Planning and Development Services Dept.**

and

Bates Technical College

SEPA Nominal Lead Agency³

**City of Tacoma
Planning and Development Services Dept.**

SEPA Responsible Official⁴

Ian Munce, J.D., AICP
City of Tacoma Planning and Development Services Dept.
747 Market St., Room 345
Tacoma, WA 98402

³ A nominal lead agency is the public agency responsible for complying with the duties of lead agency (WAC 197-11-944) and complying with SEPA’s procedural requirements (WAC 197-11-758).

⁴ The Responsible Official is the designated person within the City of Tacoma’s Planning and Development Services Department that is responsible for compliance with the SEPA lead agency procedural responsibilities.

EIS Contact Person

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Dept.

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Final Actions

City of Tacoma

- Approval of the Final EIS for the **North Downtown Subarea Plan** as a document that is adequate for SEPA compliance, decision making, and implementation of the upfront SEPA process;
- Adoption of the **North Downtown Subarea Plan**;
- Implementation of the Planned Action Ordinance; and
- Determination of whether the **Action Alternative** or the **No Action Alternative** is the preferred alternative for the Subarea.

Bates Technical College

- Approval of the Final EIS for the **North Downtown Subarea Plan** as a document that is adequate for SEPA compliance, decision making, and implementation of the upfront SEPA process;

Phased Environmental
Review⁵

No additional SEPA review will be required for site specific development that is proposed within the Subarea if it (1) is consistent with the **North Downtown Subarea Plan**, (2) is consistent with the “Planned Action” ordinance enacted by the City Council, and (3) vests within 10 years of issuance of the Final EIS. After 10 years of issuance of the Final EIS, no additional SEPA review will be required for site specific development that is proposed within the Subarea if it (1) is consistent with the **North Downtown Subarea Plan**, (2) is consistent with the “Planned Action” ordinance enacted by the City Council, (3) is **not** an essential public facility,⁶ and (4) vests within 30 years of the issuance of the Final EIS.

In addition, no additional SEPA review will be required for site specific development that is proposed within the subarea if it is exempt under an “infill exemption”

⁵ WAC 197-11-060(5)

⁶ Pursuant to RCW 43.21C.440(1)(f), an essential public facility is not subject to subsequent environmental review if it achieves the requirements listed above and is accessory to or part of a residential, office, school, commercial, recreational, service, or industrial development.

ordinance adopted by the City under RCW 43.21.229.

If development deviates substantially from what is envisioned in this EIS -- subsequent site-specific environmental review may be necessary; development regulation agreements pursuant to TMC 13.05.095 are by definition not to be considered as substantial deviations.

Required Approvals and/or Permits

This is a non-project EIS for a broad area of downtown Tacoma. While Final Actions by the City and Bates Technical College are noted above, the following interim approvals were also made:

City of Tacoma

- Authorization to publish the Draft **North Downtown Subarea Plan** for public review and comment;
- Authorization to publish the Draft EIS for the **North Downtown Subarea Plan** for public review and comment;

Bates Technical College

- Review and comment regarding the pre-Draft EIS;
- compliance with the College's SEPA WAC requirements; and
- Approval by Bates Technical College to publish the Draft EIS for the **North Downtown Subarea Plan**.

Additional permits or approvals will be needed in conjunction with future development activity. Depending upon the scope of development and the site, the following approvals could be required:

State Agencies

- **Department of Labor & Industries**
 - Elevator Permits for subsequent development

Regional Agencies

- **Puget Sound Clean Air Agency**
 - Asbestos surveys (associated with building renovation/demolition)
 - Demolition Permits
- **Tacoma – Pierce Co. Health Department**
 - Underground Storage Tank Decommissioning Permit (site-specific, if applicable)

City of Tacoma

- **City Council**
 - Final Actions noted above
- **Planning and Development Services Department**
 - building permit
 - mechanical permits

- Plumbing Permits
- Concurrency Authorization
- Certificates of Occupancy
- **Public Works Department**
 - Grading, Excavation and Erosion Control Permits
 - Street Use Permits (temporary – construction related)
 - Street Improvements (*i.e.*, sidewalks, curbcuts, etc.)

Tacoma Public Utilities

- Electrical Permits
- Utility Extensions

Authors and Principal
Contributors to this EIS

This Tacoma ***North Downtown Subarea Plan*** Final EIS has been prepared under the direction of the Tacoma Planning and Development Services Dept. Research and analysis associated with this EIS were provided by the following consulting firm:

- **VIA Architecture** – Subarea Plan and EIS research, analysis, and document preparation

Location of Background
Data

VIA Architecture
1809 Seventh Ave., Suite 800
Seattle, Washington 98101
Telephone: 206.284.5624

Date of Issuance of Draft
EIS

May 15, 2014

Draft EIS Comment Period

May 15 – June 16, 2014

Agencies, affected tribes, and members of the public were invited to comment on the Draft EIS, including comments on the alternatives, probable significant adverse impacts, proposed mitigation measures, and licenses or other approvals that may be required.

Draft EIS Public Meeting

Date of the public meeting: May 29, 2014

Time of the public meeting: 5:30 PM,

Meeting Location: Bates Technical College, Downtown Campus Auditorium, 1101 S. Yakima Ave.

The purpose of the public meeting was to provide an opportunity for agencies, organizations and individuals to learn more about the proposed North Downtown Subarea Plan and to present comments regarding the Draft EIS – in addition to submittal of written comments.

Date of Issuance of this
Final EIS

July 2, 2014

Availability of this Final
EIS

Copies of the Final EIS, together with the Final North Downtown Subarea Plan, will be distributed by CD to agencies, organizations and individuals noted on the Distribution List (Appendix A to this document).

Hard copies of the Final EIS, the Final Subarea Plan, and the EIS's incorporated by reference can be reviewed at the following locations:

- City of Tacoma Planning and Development Services Dept. -- 747 Market St., Room 345;
- Bates Technical College – Downtown Campus, Building 'A,' 1101 S. Yakima Ave.
- Tacoma Public Library – Main Branch -- 1102 Tacoma Avenue S.

The Final EIS and the Final Subarea Plan can also be reviewed online at cityoftacoma.org/planning – click on “North Downtown Subarea Plan and EIS.”

In addition, a limited number of complimentary hardcopies or CD's of the Final EIS and the Final Subarea Plan will be made available (while the supply lasts) from the City of Tacoma Planning and Development Services Dept. Additional copies may be purchased at the Planning and Development Services Dept. for the cost of reproduction. The Planning and Development Services Dept. is open 8 AM to 4:30 PM Monday through Friday.

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SECTION I

SUMMARY

SECTION I SUMMARY

A. INTRODUCTION

This chapter provides a summary of the Final Environmental Impact Statement (FEIS) for the Tacoma **North Downtown Subarea Plan**. It briefly describes the Proposed Action, the **Action Alternative**, and the **No Action Alternative**, and contains a comprehensive overview of significant environmental impacts identified for the alternatives. Please see **Chapter 2** of this FEIS for a more detailed description of the alternatives, and **Chapter 3** for a detailed presentation of the affected environment, significant impacts of the alternatives, mitigation measures, and significant unavoidable adverse impacts.

The proposed project involves development of an innovative, area-wide Subarea Plan for Tacoma's North Downtown Subarea, which, when approved by the Tacoma City Council will become an element of the City's *Comprehensive Plan*. Please refer to **Section 2.2** through **2.4** of this environmental impact statement and the **North Downtown Subarea Plan** for additional details.

The North Downtown Subarea Plan is designed to: (1) satisfy the requirements of the State's Growth Management Act for Tacoma to plan for forecasted growth; and (2) to support the goals of the Puget Sound Regional Council's (PSRC) VISION 2040 and Transportation 2040 (T2040) regional plans. Pierce County establishes Countywide Planning Policies in conjunction with the cities and towns in the County, and assigns population and employment growth allocations for the cities within its jurisdiction including Tacoma, in accordance with the requirements of the GMA. The purpose of VISION 2040 and T2040 is to provide regional planning frameworks that support accommodation of forecasted growth in a manner that results in the greatest overall benefits to the central Puget Sound region as a whole. Both of these regional plans were analyzed and approved through extensive EIS processes.

The fundamental goal of the North Downtown Subarea Plan is to promote economic development. In North Downtown today, lack of economic development is both the chief impediment to sustainable growth, and the most significant root cause of adverse impacts to the community and environment. The Subarea Plan is intended to provide innovative planning and policy interventions to help North Downtown achieve its tremendous potential for economic development, an outcome will deliver a broad range of equitable social and environmental benefits at both the local and regional scales.

The above goals have implications for how to accurately and comprehensively assess environmental impacts in this Final EIS. First, based on typical development-related EIS's conducted in the past, it is commonly presumed that the "No Action" alternative—i.e. minimal development—is the most benign scenario. In contrast, in North Downtown Tacoma, well-planned, ambitious redevelopment can be expected to maximize net environmental and community benefits, and to promote the most sustainable outcomes for both people and the planet. Second, EIS's are typically focused on local impacts, but development in North Downtown would result in significant positive impacts at the regional scale. Because the Subarea Plan is grounded in the approved regional growth strategies of VISION 2040 and T2040, these regional benefits merit substantial consideration in the EIS analysis.

Further redevelopment is the critical step to unleashing North Downtown’s potential to provide equitable livability and a diverse, thriving economy with minimal environmental impact. This standpoint is endorsed by a plethora of public policy spanning the federal, State, regional, county, city, and neighborhood levels, as well as a mountain of research and studies on “smart growth.” Creating compact, mixed-use, transit-rich communities in North Downtown is precisely the kind of smart growth that will help Tacoma and the region achieve established goals for sustainable growth, as documented in the Tacoma Comprehensive Plan, the Pierce County Countywide Planning Policies, and the PSRC’s VISION 2040.

The overarching local benefit that would be provided by development in North Downtown—housing development in particular—is equitable access to the amenities of the City, including economic opportunity, education, culture, entertainment, and perhaps the most valuable amenity of all, transportation choices. The cost of owning and operating a car is a significant portion of an average household’s expenses. Walkable, transit-rich neighborhoods that enable life without a car decrease the overall cost of living, thereby helping to create a more equitable community. New jobs and housing in North Downtown will expand the customer base for many existing businesses, retail in particular. Fortunately, because North Downtown currently has a large amount of vacant land and surface parking lots, the risk of displacement caused by redevelopment is less pronounced than it is in more typical urban areas.

Redevelopment has the potential to cause the loss of historic resources, but in the case of North Downtown, the biggest risk to historic buildings is economic stagnation. Because of the high cost of historic renovations relative to market rate rents, some historic buildings in North Downtown have been neglected and are falling further into disrepair. Eventually, if the economic situation does not improve, such buildings become more of a liability than they are worth, and end up being demolished. Tacoma’s Luzon building, demolished in 2009, is a notorious example of this process. Redevelopment of properties in proximity to historic structures in North Downtown will help raise property values and create an economic environment in which historic renovations become more feasible, thereby increasing the likelihood of historic preservation.

In addition, the Subarea Plan calls for new regulations intended to help protect both historic and cultural resources. The Plan includes recommendations for promoting the use of the City’s Transfer of Development Rights (TDR) program that includes an option for historic properties to sell their unused development rights to developers who want increased development capacity. To address potential impacts of redevelopment on cultural resources—with a focus on archeological remains from historic Puyallup Tribe settlements—the Plan proposes that the extensive cultural resource protections required in the City’s shoreline areas be applied to the entire Subarea.

Further local benefits that development in North Downtown can be expected to provide include:

- Cleanup of existing brownfield sites with contaminated soils that currently pose environmental health risks
- Reduction of polluted stormwater runoff, due to the new stormwater regulations that apply to new construction
- Expansion of tree cover resulting from development regulations that require street trees

From the regional perspective, the business-as-usual scenario of sluggish growth in North Downtown will perpetuate development pressure on farms and wildlife habitat on the urban fringe. As has been well-documented, this pressure resulting from regional population growth

stimulates sprawling land use patterns known to have a host of negative environmental impacts. For example, the development of 50 single family homes in a previously undeveloped area outside Tacoma would cause substantially more loss of habitat and trees than would a 100-unit multifamily building developed in North Downtown.

Furthermore, a fair appraisal of the potential benefits of smart growth in North Downtown should include consideration of *per capita* impacts, not just total impacts. For example, development may result in an increase in total car trips locally. But while those car trips may add to local congestion, the development can also result in increased use of alternative transportation that would reduce vehicle miles traveled (VMT) on per capita basis. Since that outcome is aligned with widely agreed upon public policy goals to reduce car-dependence—including the State of Washington’s legislated goal to reduce per capita VMT by 50 percent by 2050—the regional, per capita impacts deserve substantial weight in any environmental assessment. The same per capita logic applies to other regional benefits of smart growth in North Downtown, such as lower greenhouse gas emissions, cleaner air, less polluted stormwater runoff, and reduced land consumption.

B. PROPOSED ACTION

The **Proposed Action** consists of several related decisions by the Tacoma City Council– with involvement, as appropriate, by Bates Technical College – regarding the **North Downtown Subarea Plan**:

- approval of the Final EIS as a document that is adequate for SEPA compliance, decision making, and implementation of the upfront SEPA process;
- implementation of the associated Planned Action ordinance for the project and the associated upfront SEPA compliance provision;¹
- adoption of the **North Downtown Subarea Plan** and the associated policies and implementing regulations, as well as site-specific projects that are proposed within the North Downtown Subarea; and
- determination of the **Action Alternative** as the City’s preferred alternative for the North Downtown Subarea.

C. ALTERNATIVES

The following is a discussion of the **No Action Alternative** and the development alternatives.

No Action Alternative

Under the **No Action Alternative**, the City of Tacoma’s existing *Comprehensive Plan*, Zoning Map and the *Tacoma Land Use Code* would remain in effect. All existing planning and implementation policies and existing development regulations would continue to guide development decisions for properties within the North Downtown Subarea, including the campus of Bates Technical College. No Planned Action ordinance would be adopted and the

¹ Refer to **Section 2.2.2** of this EIS.

advantages of upfront SEPA compliance would not occur.² In addition, mitigation measures proposed in the Subarea Plan would not be adopted, and development could occur without the benefit of those mitigations.

To establish population and employment growth estimates for the **No Action Alternative**, the best available source for “business as usual” 2030 growth forecasts is the PSRC’s “Land Use Baseline.”³ The Land Use Baseline is a representation of future development based on how the market responds to development capacities established in local jurisdictions’ pre-VISION 2040 comprehensive plans (circa 2012).

The PSRC Land Use Baseline geometry is “Forecast Analysis Zones” (FAZ), and FAZ 1820 (Tacoma CBD/Stadium) is fairly closely aligned with the North Downtown Subarea boundaries. For the purposes of this Subarea Plan, FAZ 1820 provides a good enough approximation for the **No Action alternative**. This method yields an estimated year 2030 net increase of 1,808,000 total gross sq. ft. of development, consisting of 1,274,000 sq.ft. of residential development, 534,000 sq. ft. of commercial development, and corresponding to approximately 2,956 residents, and 1,424 jobs.

Action Alternative

The **Action Alternative** could result in a net increase of up to 26,250,000 total gross sq. ft. of net development consisting of 15,000,000 sq. ft. of residential development, 11,250,000 sq. ft. of commercial development, and corresponding to approximately 30,000 residents, and 30,000 jobs. Note that the **Action Alternative** has many times more growth than the **No Action Alternative**.

D. IMPACTS

The Table below summarizes the impacts that would potentially result from the **Action Alternative** and **No Action Alternative** analyzed in this FEIS. This summary table is not intended to be a substitute for the complete discussion of each element that is contained in Chapter 3.

² This includes increased certainty for future, site specific development proposals, as well as simplification and expediting of the permitting process for projects located within the North Downtown Subarea.

³ <http://www.psrc.org/data/forecasts/2013-forecast-products/>

Action Alternative	No Action Alternative
3.1 EARTH	
<p>Redevelopment activity would involve site-specific alteration of existing grades and earthwork. No significant earth-related adverse impacts are anticipated in that such projects would be required to fully comply with existing development regulations. If redevelopment occurs on sites with contaminated soils, regulations will require soil remediation, resulting in the positive impacts of cleaned up soils, and reduction of polluted stormwater runoff from contaminated sites.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to earth would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
3.2 AIR QUALITY	
<p>Increases in localized air pollutant emissions are anticipated as a result of increases in localized automobile traffic, industrial manufacturing, and short-term construction activities. Additional urban activities and accompanying vehicular traffic would contribute to increases in emissions relative to suspended particulates (PM₁₀ and PM_{2.5}), ozone (O₃), and carbon monoxide (CO) within the study area.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to air quality would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>Development would require site-specific construction activity consisting of earthwork and the use of construction equipment. Earthwork would result in localized increases in particulate levels as a result of the use of diesel-powered trucks and equipment. All construction-related impacts would be temporary and localized.</p>	
<p>New development and activities would increase local GHG emissions. However, at the regional scale, per capita GHG emissions can be expected to decrease, because on average, households located in transit-rich urban centers such as North Downtown drive less than households in car-dependent suburban or rural areas. Transportation modeling projected a decrease in per capita vehicle-miles traveled for the Action Alternative compared to the No Action Alternative.</p>	
3.3 WATER QUALITY	
<p>If not properly designed or managed, development could result in adverse impacts to the quality of groundwater and stormwater runoff in the Subarea. Development may also increase impervious surfaces thereby increasing the quantity of surface water runoff that, if not properly managed according to existing regulations, can discharge pollutants into surface waters. However, development that adheres to existing regulations would not be expected to cause adverse impacts on water quality. In fact, development may improve the quality of stormwater runoff because in most cases new development must meet more stringent stormwater management requirements than what it replaces. In addition, existing regulations require soil remediation for development projects on contaminated sites, which permanently removes a potential source of contamination to both surface and ground water.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to water resources would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>

Action Alternative	No Action Alternative
<p>From a regional perspective, increased urban infill development in North Downtown Tacoma is likely to reduce development on undeveloped land elsewhere in the region. Compared to urban infill, development in suburban or rural areas can have greater adverse impacts on water quality because it impacts more previously undeveloped land. Also, development is denser in urban areas than in suburban or rural areas, such that urban development has less impervious surface on a per capita basis.</p>	
<p>3.4 PLANTS AND ANIMALS</p>	
<p>Urban development, redevelopment, and associated construction activities, if not properly planned and regulated, could increase peak stormwater runoff, cause erosion, and result in siltation of surface waters with adverse effects on plant and animal populations. Also, site redevelopment would likely result in the removal of existing trees, shrubs and ground cover on individual lots and the displacement of animal habitats associated with that existing vegetation. However, it is expected that redevelopment would also involve the addition of new trees, shrubs and ground cover, consistent with the City's Land Use Code. Plant and animal-related impact mitigation presently exists and will continue, therefore no significant impacts would be anticipated.</p> <p>At the regional scale, development in the Subarea can reduce net adverse impacts to plants, animals and habitat. The more of the region's growth that is accommodated in North Downtown, the less development there will be in suburban and rural areas that typically have much more ecologically valuable plant and animal species and habitat.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to plants and animals would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>3.5 ENVIRONMENTAL HEALTH</p>	
<p><u>Contaminated Soils</u> Excavation and other construction activities associated with development can lead to exposure of contaminated soils and present environmental health risks to construction workers and others proximate to the construction site. Before any redevelopment can occur, environmental conditions of concern relating to soil contamination -- whether suspected or encountered -- must be investigated and remediated according to existing local, State, and Federal standards. For these reasons, when development occurs on contaminated sites it will result in a reduction of the risk of exposure to contaminated soil.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to environmental health would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p><u>Indoor Air Quality</u> New development in the North Downtown Subarea would not be expected to result in increased risk of exposure to indoor air contaminants, because new buildings would be constructed and operated in accordance with modern building codes. Demolition or renovation of older buildings can increase the risk of exposure to asbestos. However, no significant, environmental health-related impacts are</p>	

Action Alternative	No Action Alternative
<p>anticipated with the implementation of appropriate mitigation measures.</p>	
<p>Land Use Patterns Urban environments that force residents to rely on cars for most trips, and that lack recreation opportunities and grocery stores within easy walking distance, can exacerbate many chronic diseases. The intended outcome of the North Downtown Subarea Plan is to create an urban environment in which residents can meet many of their daily needs via relatively short trips by walking, cycling, or transit, which will lead to a reduction in adverse health impacts.</p>	
<p>Urban Forestry and Agriculture Development may result in the loss of existing trees on private lots. However, development will also result in the planting of additional street trees as required by the Tacoma land use code. Development could result in the loss of land that could be used for urban agriculture unless careful attention is paid to this issue.</p>	
<p>3.6 NOISE</p>	
<p>The potential exists for noise-related impacts associated with new development. However, considering the fact that this is an urbanized part of the City, that re-development is projected to occur over several decades and that noise-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the North Downtown Subarea would not result in any significant noise-related impacts.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Noise-related impacts would be evaluated on site-specific basis in conjunction with each proposed project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>3.7 LAND USE</p>	
<p>In general, development under the Action Alternative would result in increases in residential and commercial square footages, as well as the number of residents and employees within the Subarea. Development would likely result in the construction of buildings on formerly vacant lots, surface parking lots, and demolition of single family and underutilized or devalued properties in order to accommodate higher density development. Such would change the use patterns and aesthetic character at the block-scale and potentially even at the neighborhood-scale. Redevelopment of surface parking lots could also potentially reduce the amount of parking available in the vicinity of a redevelopment site, resulting in increased competition for parking spaces and possibly encouraging more walking and transit use.</p> <p>At the regional scale, increased development in the Subarea would likely result in reduced development in lower density areas outside the City. This would help prevent the proliferation of sprawling land use patterns that</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Land use-related impacts would be evaluated on a site-specific basis in conjunction with each proposed project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>

Action Alternative	No Action Alternative
<p>have been correlated with increases in numerous adverse environmental impacts, including greenhouse gas emissions, energy use, polluted stormwater runoff, infrastructure expense, and loss of farms and wildlife habitat.</p>	
<p>3.8 POPULATION HOUSING and EMPLOYMENT</p>	
<p>Development under the Action Alternative would increase the population, housing and employment intensity in North Downtown, in accordance with the goals of the City's <i>Comprehensive Plan</i>, and the State's Growth Management Act, and would be expected to have a wide range of positive impacts including: a better jobs to housing ratio, and a more balanced spectrum of housing options and household incomes.</p> <p>At the regional scale, increasing North Downtown's population and employment would help achieve the regional planning goals established in the Puget Sound Regional Council's VISION 2040 and T2040 regional plans. It is also possible that existing residents and/or businesses could be displaced as existing buildings are redeveloped. However, the North Downtown Subarea has a relatively high amount of undeveloped property and surface parking lots that could be redeveloped without displacement impacts.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Land use-related impacts would be evaluated on a site-specific basis in conjunction with each proposed project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>3.9 HISTORIC and CULTURAL RESOURCES</p>	
<p>Historic Resources The Action Alternative would continue the redevelopment trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. Development could result in the loss of historic structures or degradation of historic character in certain areas of North Downtown. However, the economic revitalization that is likely to occur along with the redevelopment of the Subarea could result in the preservation of historic structures historic renovation becomes more financially feasible.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to historic resources would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>Cultural Resources There is the potential for the study area to contain historic period and/or pre-contact archaeological resources, particularly in shoreline areas. Construction of new buildings within the North Downtown Subarea would require excavation, which has the potential to encounter archaeological deposits. However, the Subarea Plan proposes additional regulations to protect archeological resources, which can be expected to reduce the likelihood of the loss of resources compared to the No Action Alternative.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to cultural resources would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>3.10 AESTHETICS</p>	
<p>Views As projects develop according to existing zoning, views of,</p>	<p>Development within the North Downtown Subarea would occur on a project-by-</p>

Action Alternative	No Action Alternative
<p>and within the Subarea are expected to change significantly. Views of existing lowrise structures would be affected as neighboring buildings are demolished and redeveloped with taller structures. Lowrise buildings that were constructed recently will be the last to redevelop and will be impacted the most. Structures with east-facing views of Commencement Bay, and southeast views of Mt. Rainier could be affected as a result of increased height and density within this Subarea and corresponding viewshed-related impacts. The Subarea Plan does not propose any changes to existing height or bulk regulations for buildings, so the potential for development to impact views is no different from the No Action Alternative.</p>	<p>project basis consistent with development regulations in-effect at the time development is proposed. Aesthetics-related impacts would be evaluated on a site-specific basis in conjunction with each proposed project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>Urban Design Development in the Subarea will result in a higher preponderance of buildings with greater height, bulk, and scale, as compared to existing buildings. It is possible that urban design within the Subarea could be favorably affected as all of the zoning districts within the Subarea include development standards that would ensure relatively high standards for urban design for new development and for renovations. Conversion of surface parking lots adjacent to city streets to buildings is expected to result in an improved pedestrian environment.</p>	
<p>Shadows, Light and Glare Development of taller buildings would result increased shading throughout the area, which could periodically affect smaller buildings and open spaces -- particularly if such buildings and open spaces are located north of the redevelopment. The Subarea Plan does not propose any changes to existing height or bulk regulations for buildings, so the potential for development to impact shadows is no different from the No Action Alternative.</p> <p>New and renovated structures would provide additional light sources within the Subarea, including interior and exterior building lighting and security lighting. Such would be noticeable from adjacent neighborhoods and the freeways. Additional vehicular traffic is also anticipated and would result in additional light from vehicles entering and leaving the subarea.</p> <p>The primary sources of glare from development would be direct glare from lighting sources and reflective solar glare from specular surfaces. New sources of light and glare would be similar to those that current exist in the Subarea and could be perceived as a continuation of existing light and glare in the area. Glare impacts are also influenced by climatic conditions.</p> <p>No significant light, glare or shadow-related impacts are anticipated.</p>	

Action Alternative	No Action Alternative
3.11 TRANSPORTATION	
<p><u>Vehicular Traffic</u> To estimate potential impacts to vehicular traffic within the North Downtown Subarea and at the regional level, this FEIS utilizes the travel demand modeling documented in the 2013 South Downtown Subarea Plan EIS. Overall, the Action Alternative is expected to result in reduced rates of driving and increased rates of walking, cycling and utilization of public transportation for travel to, from, and within the Subarea.</p> <p>For the greater region, the Action Alternative is expected to result in a lower share of trips made by driving single occupant vehicles (SOV), reduced Vehicle Hours of Delay, essentially no change to VMT, and increased use of non-auto modes of transportation, relative to the No-Action Alternative.</p> <p>For the Subarea, the Action Alternative is expected to result in lower per capita VMT, exposure to vehicle delay, and auto mode shares (SOV+ carpool), and higher walk, bike and transit mode shares, relative to the No-Action Alternative.</p>	<p>See description for the Action Alternative.</p>
<p><u>Waterborne/Rail Traffic</u> No impacts to rail transportation or waterborne transportation to, from, or within the Subarea would occur.</p>	<p>No impacts to rail transportation or waterborne transportation to, from, or within the Subarea would be expected.</p>
<p><u>Public Transit</u> To estimate potential impacts to transit within the North Downtown Subarea and at the regional level, this FEIS utilizes the travel demand modeling documented in the 2013 South Downtown Subarea Plan EIS. Overall, the Action Alternative is expected to result in significant increases in demand for transit service within the Subarea, and connecting to other parts of the City, County and larger Puget Sound Region, relative to the No-Action Alternative.</p> <p>Link service in North Downtown can be expected to have sufficient capacity to meet future demand for local transit trips within the North Downtown Subarea under the Action Alternative. However, new or redeployed local public transit services may be necessary to accommodate a share of the projected trips within the North Downtown Subarea for which the trip origin or destination is not easily accessible to a Tacoma Link Station.</p>	<p>The No Action Alternative is expected to result in increases in demand for transit service within the Subarea, and connecting to other parts of the City, County and larger Puget Sound Region, but significantly less than the Action Alternative.</p>
<p><u>Non-Motorized Systems</u> To estimate potential impacts to transit within the North Downtown Subarea and at the regional level, this FEIS utilizes the travel demand modeling documented in the 2013 South Downtown Subarea Plan EIS. Very significant and substantial increases in trips to/from and within the Study Area made by walking and bicycling are expected. The substantial projected increase in pedestrian activity</p>	<p>The No Action Alternative is expected to result in increases in trips to/from and within the Study Area made by walking and bicycling, but significantly less than the Action Alternative.</p>

Action Alternative	No Action Alternative
<p>within the Subarea increases the importance of planned and potential future improvements to pedestrian facilities in the area, including filling gaps in the street and sidewalk networks, enhancing crossings, and providing new facilities where appropriate.</p>	
<p><u>Parking</u> Projected increases in demand for vehicle travel to, from and within the Subarea may be associated with increased demand for short-term and long-term parking, but will not necessarily affect the availability of parking for residents and others traveling to and from the Subarea by car. In the near-term and long-term, no impact to the availability of parking or the auto accessibility of the Subarea is projected.</p>	<p>The No Action Alternative is expected to result in increased in trips to/from and within the Study Area made by walking and bicycling, but significantly less than the Action Alternative.</p>
<p>3.12 PUBLIC SERVICES</p>	
<p><u>Fire and EMS</u> Development consistent with the proposed North Downtown Subarea Plan would generate new demands for fire and EMS service based on an increased number of residential, office, commercial and neighborhood service uses, as well as the associated employment and population increases. Under the Action Alternative, approximately 3.27 apparatus and 0.48 EMS units could be necessary based on the City's LOS requirements.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to fire and EMS service would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p><u>Law Enforcement</u> Increases in the North Downtown Subarea population and employment under the Action Alternative would be incremental and would be accompanied by increases in demand for police service. Call volumes could increase under all of the proposed alternatives; however, the exact number of incremental new calls cannot be quantified. Under the Action Alternative, according to the City's adopted LOS standards, roughly 8,657.40 sq. ft. of law enforcement facilities could be necessary.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to law enforcement would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p><u>Public Schools</u> All alternatives will continue development of the lands within the North Downtown subarea for urban uses and activities at various intensities. Development will increase the residential population, requiring additional public school capacity. The Tacoma Public School District is committed to expanding public school services to meet the needs of its future growth. State funding for public schools is allocated on a per student basis (average \$5,032 per student in the 2011-12 school year), so funding will increase as enrollment increases. Local taxes are primarily property taxes, and revenue will rise as property is developed and increases in value in the North Downtown Subarea.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to public schools would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>

Action Alternative	No Action Alternative
<p><u>Parks and Open Space</u> Increases in the North Downtown Subarea population and employment under the Action Alternative would be incremental and would be accompanied by increases in demand for public parks and open spaces. The 2008 Open Space Habitat and Recreation Element of Tacoma's Comprehensive Plan establishes policies designed to ensure sufficient parks and open space for a growing City.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to parks and open space would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p>3.13 PUBLIC UTILITIES</p>	
<p><u>Wastewater</u> The increased density and intensity of development that would be permitted by the Action Alternative would result in greater demands on the wastewater collection and treatment system. Natural drainage strategies that are implemented with new development will help reduce the occurrence of sanitary sewer overflows. The City of Tacoma Public Works Department has an ongoing Rehabilitation/ Replacement program to repair and upgrade wastewater pipes. With planned upgrade programs, new initiatives would not need to be developed, although no guarantee can be made that there is capacity in every line for every new development that could occur. The City is willing to adjust the timing of ongoing sewer programs to stimulate private investment and to partner with property owners through the use of local improvement district financing and construction mechanisms.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to wastewater would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p><u>Stormwater</u> New development is not expected to significantly change the amount of impervious surface and the associated volume of runoff to the stormwater system. Furthermore, because new development must comply with increasingly stringent best management practices (BMPs), new development has the potential to reduce capacity demand on the stormwater system.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to stormwater would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p><u>Potable Water</u> Water demand would increase relative to existing conditions. According to the existing LOS standard of 562 gallons per day per EDU, the additional residential projected under the Action Alternative could result in at least 8.43 million gallons per day of total water demand.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to potable water would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>

Action Alternative	No Action Alternative
<p><u>Power</u> The increased density and intensity of development that would be permitted could result in greater demands on electrical energy. Tacoma Power has evaluated their existing distribution system within the bounds of the North Downtown Subarea. Resources exist to support development for the near future. However, as development advances, additional resources will be required to support the additional electrical load. The electrical delivery infrastructure does not exist within each block to support full build out to the development capacities allowed by existing land use code.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to power would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p><u>Communications/Data</u> Higher intensity development would increase demand for telecommunications services. The Click! Network is committed to expanding its telecommunications services to meet the additional needs of future growth.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to communications/data would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>
<p><u>Solid Waste</u> Development will increase demand for solid waste services, which if not properly handled, may result in increased vectors and public nuisance. Under the <i>Action Alternative</i>, 33,900 tons of waste could be generated by the additional residential population, according to the City's LOS standard.</p>	<p>Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to solid waste would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.</p>

E. MITIGATION MEASURES

Mitigation measures are based on existing City policies, regulations, and other mitigation, along with proposed new mitigation measures. Under the **Action Alternative**, the Tacoma Comprehensive Plan (Amended Ordinance Number 27769), taken together with implementing regulations, will apply and will help to mitigate potential impacts.

F. POTENTIAL SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS

The following summarizes the potential significant adverse environmental impacts identified in this environmental analysis.

Earth

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to earth resources.

Air Quality

With adherence to applicable codes and regulations, as well as the mitigation measures noted above, no significant unavoidable adverse impacts are anticipated relative to air quality resources under the **Action Alternative**.

Water Quality

With application of water-related codes and regulations and mitigation measures noted above, no significant unavoidable adverse impacts to water resources are anticipated under the **Action Alternative**.

Plants and Animals

With application of plant and animal-related codes and regulations noted above, no significant unavoidable adverse impacts to plant and animal resources are anticipated under the **Action Alternative**.

Environmental Health

With application of the environmental health-related guidelines noted above, no significant unavoidable environmental health impacts are anticipated in conjunction with the **Action Alternative**.

Noise

With application of the noise-related regulations noted above, no significant unavoidable noise impacts due to temporary construction or long-term sources are anticipated in conjunction with the **Action Alternative**.

Land Use

With application of the land use-related mitigation noted above, no significant unavoidable land use impacts are anticipated in conjunction with the **Action Alternative**. Proposed redevelopment within the North Downtown Subarea would result in an intensification of development, additional employment opportunities, and increased population. While the intensity of redevelopment in the Subarea would be substantially greater than existing development, such redevelopment would be consistent with the **North Downtown Subarea Plan** (if adopted), the intent of the City's *Comprehensive Plan* and zoning, the goals and intent of the Puget Sound Regional Council's VISION 2040 regional plan for growth, and the requirements of the Washington State Growth Management Act.

Population, Housing and Employment

With application of the population, housing and employment-related elements of the Subarea Plan, no significant unavoidable impacts are anticipated in conjunction with the **Action Alternative**. Proposed redevelopment within the North Downtown Subarea would result in an intensification of development, additional employment opportunities, and increased population. While the intensity of redevelopment in the Subarea would be substantially greater than existing development, such redevelopment would be consistent with the **North Downtown Subarea Plan** (if adopted), the intent of the City's *Comprehensive Plan* and zoning, the goals and intent of the Puget Sound Regional Council's VISION 2040 regional plan for growth, and the requirements of the Washington State Growth Management Act.

Historic and Cultural Resources

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to historic or cultural resources.

Aesthetics

No significant unavoidable adverse impacts are anticipated relative to aesthetic resources.

Transportation

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to vehicular traffic, waterborne/rail traffic, public transit, non-motorized systems or parking.

Public Services

No unavoidable adverse impacts are anticipated.

Public Utilities

With implementation of mitigation measures, no unavoidable adverse impacts are anticipated.

G. PREFERRED ALTERNATIVE

After considering the Impacts, Mitigation Measures, and Potential Significant Adverse Environmental Impacts analyzed in this Final EIS and summarized in Sections D, E, and F above, the City of Tacoma has determined that the Action Alternative is the preferred alternative for the North Downtown Subarea.

This Final EIS demonstrates that the higher levels of development anticipated under the Action Alternative compared to the No Action Alternative can be expected to result in significant environmental benefits in both the Subarea and the greater region. As described in Section III of this Final EIS, these potential benefits include:

- reduced polluted stormwater runoff
- reduced risk of exposure to contaminated soils
- reduced per capita vehicle-miles traveled, both locally and regionally, and a corresponding reduction in total greenhouse gas emissions
- improved health outcomes for residents through more active transportation options
- more efficient utilization of the Subarea's significant transit investments
- greater housing choices for residents
- greater economic opportunity for local business owners
- more urban trees
- an improved public realm
- improved prospects for historic preservation as property values rise
- reduced development pressure on farms and wildlife habitat in the greater region
- accelerated progress towards achieving the Central Puget Sound region's smart growth goals

SECTION II

PROJECT DESCRIPTION

and

ALTERNATIVES

SECTION II

PROJECT DESCRIPTION AND ALTERNATIVES

2.0 PROPONENT/PROJECT LOCATION

2.0.1 Proponent

The Tacoma **North Downtown Subarea Plan** is sponsored by the City of Tacoma. The City and Bates Technical College are joint lead agencies for this North Downtown Subarea Plan Final EIS.

2.0.2 Project Location

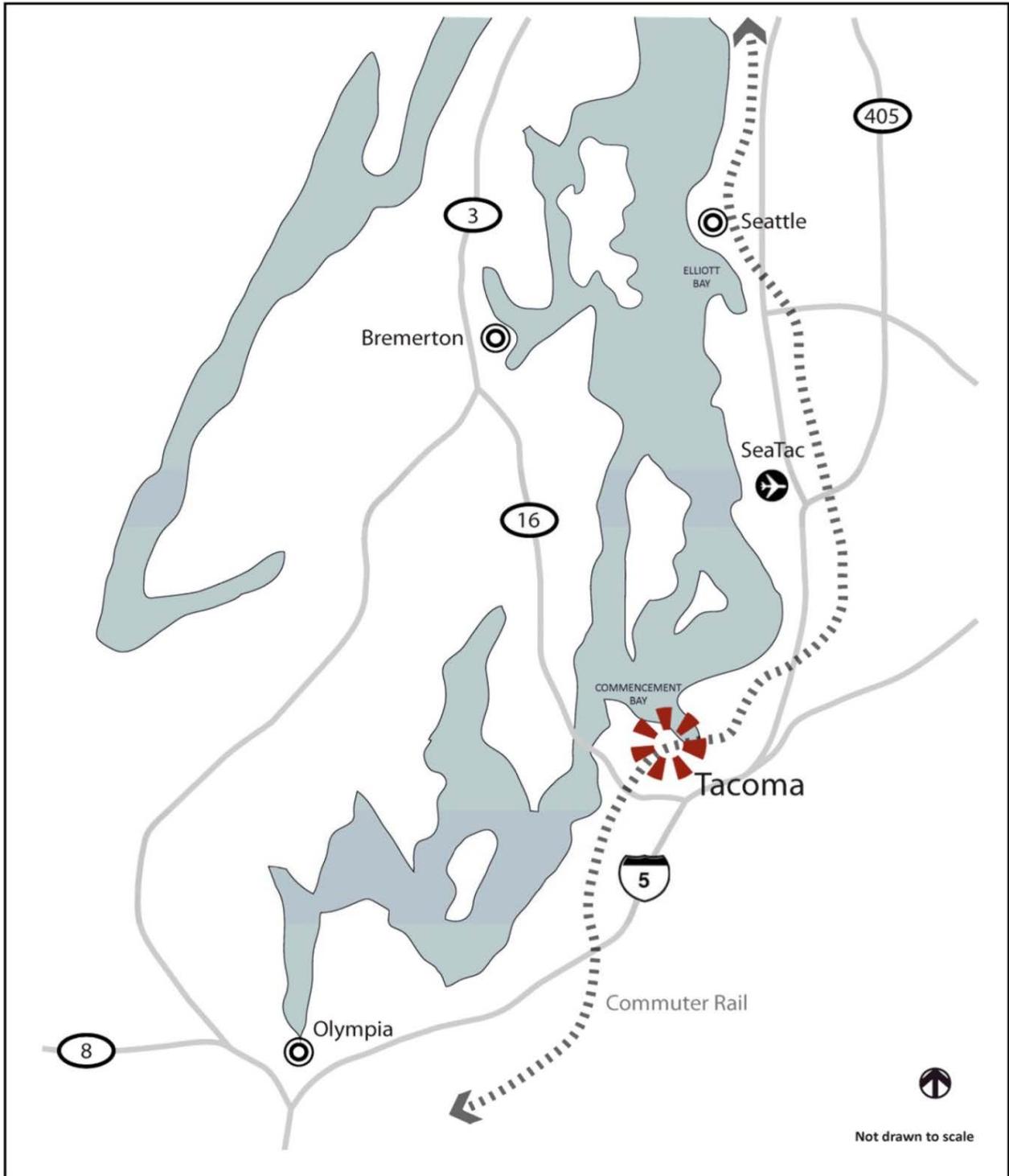
The North Downtown Subarea encompasses approximately 520 acres of urban commercial and mixed-use neighborhoods in the northern half of Tacoma's downtown. See **Figures 2-1, 2-2 and 2-3**. The Subarea extends generally from S. 15th St. on the south to Yakima Ave and 'I' Street on the west, to the Thea Foss Waterway on the east, and N 4th Ave on the north. It is bordered by the University of Washington - Tacoma and the Museum District to the south, the Hilltop mixed-used residential district to the west, the Old Town and Proctor districts to the north, and the Port of Tacoma to the east.

The Subarea encompasses the northern portion of **Downtown Tacoma** and includes Bates Technical College Campus, the **Commercial Core**, **Foss Waterway**, the **Stadium District**, the northern portion of the **Hillside District**, the **St. Helens District**, and **Wright Park**. Properties located along the west edge of the Thea Foss Waterway between S. 15th St. and S. 4th St. are not included in the Subarea (these properties are part of the South Downtown Subarea).

2.1 PROJECT OVERVIEW

The proposed project involves development of an innovative, area-wide subarea plan for Tacoma's North Downtown Subarea, which when approved by the Tacoma City Council will become an element of the City's *Comprehensive Plan*. Please refer to **Section 2.2** through **2.4** of this environmental impact statement and the **North Downtown Subarea Plan** for additional details.

Figure 2-1 – Tacoma Regional Map



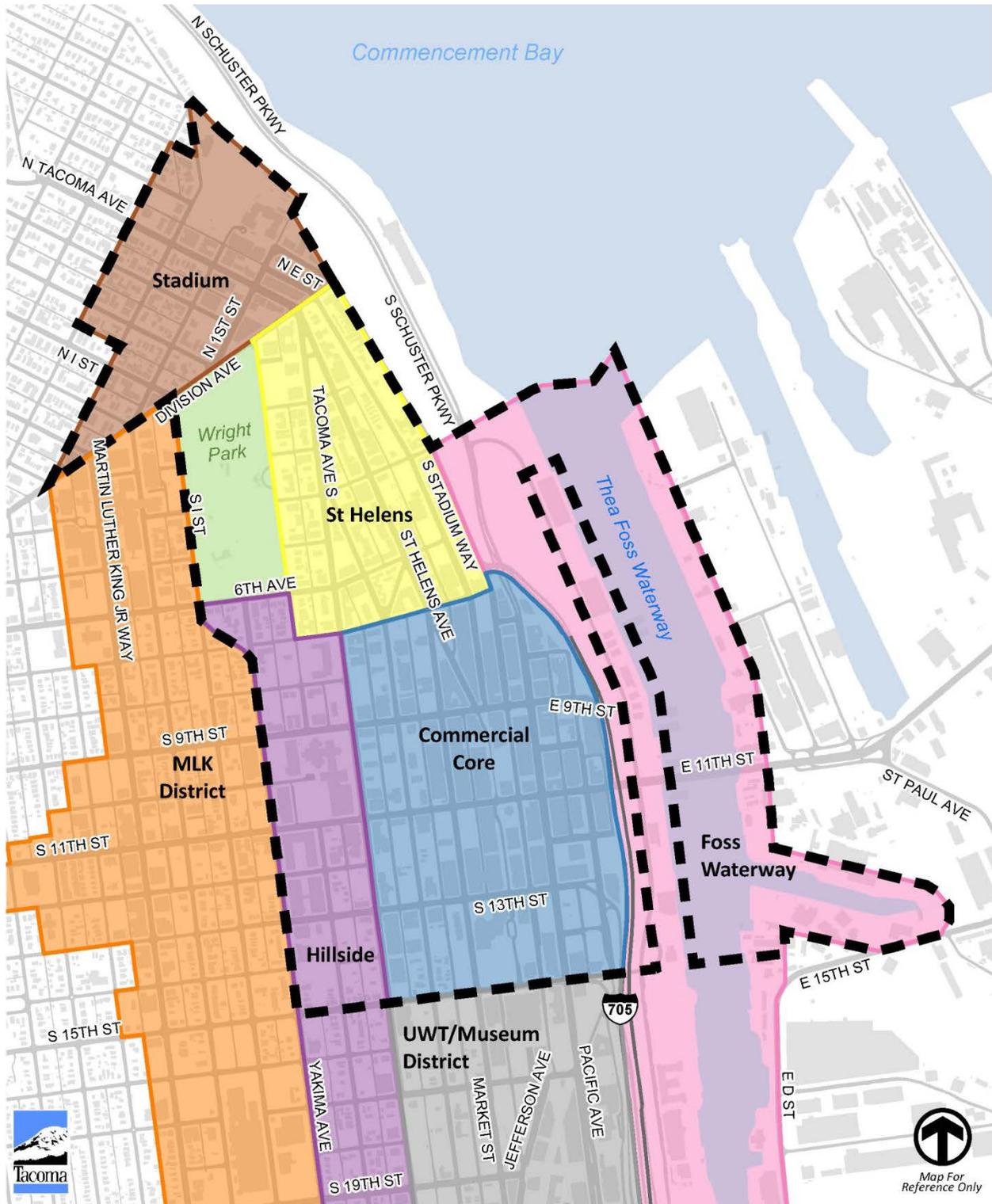
Source: VIA Architecture

Figure 2-2 – North Downtown Subarea context aerial



Source: VIA Architecture

Figure 2-3 – North Downtown Subarea character areas



Source: City of Tacoma Department of Planning and Development Services

2.2 BACKGROUND INFORMATION

*This section provides an overview of the proposed **North Downtown Subarea Plan** and an overview of the environmental review process associated with this project.*

2.2.1 North Downtown Subarea Plan

The Subarea Plan

The final **North Downtown Subarea Plan** is available online at cityoftacoma.org/planning, and hard copies may be reviewed at City of Tacoma Planning and Development Services Dept. – 747 Market St, Room 345; Bates Technical College – Downtown Campus – 1101 S Yakima Ave, Building A; and the Tacoma Public Library – Main Branch – 1102 Tacoma Ave. S, and CDs of the Subarea Plan are available from City of Tacoma Planning and Development Services Dept. The Subarea Plan should be reviewed along with this FEIS for a comprehensive understanding of all aspects of the Plan and probable environmental impacts.

The **North Downtown Subarea Plan** is designed to: (1) satisfy the requirements of the State's Growth Management Act for Tacoma to plan for forecasted growth; and (2) to support the goals of the Puget Sound Regional Council's (PSRC) VISION 2040 and Transportation 2040 (T2040) regional plans. Pierce County establishes Countywide Planning Policies in conjunction with the cities and towns in the County, and assigns population and employment growth allocations for the cities within its jurisdiction including Tacoma, in accordance with the requirements of the GMA. The purpose of VISION 2040 and T2040 is to provide regional planning frameworks that support accommodation of forecasted growth in a manner that results in the greatest overall benefits to the central Puget Sound region as a whole. Both of these regional plans were analyzed and approved through extensive EIS processes.

In the preferred alternative of the VISION 2040 Final EIS, the largest shares of the region's future growth would occur in the region's five major metropolitan cities, including Tacoma. In this alternative, considerable redevelopment could occur in the region's metropolitan and core cities, with most new jobs reinforcing these areas as major regional employment centers. Job growth would be accompanied by a significant concentration of new residential growth in a variety of types and styles including new high-rise and mid-rise apartments, condominiums and townhouses built near job centers and in areas close to high capacity transit systems.

The primary goals of T2040 are to improve mobility, ease congestion, and reduce greenhouse gas emissions and water quality impacts to Puget Sound. Land use assumptions for T2040 build upon VISION 2040 to further the goal of providing jobs vs. housing balance, and to pursue additional refinements through strategies such as transit-oriented development. The T2040 Final EIS preferred alternative emphasizes greatly expanded employer and residential programs to reduce unnecessary travel and increase use of transit, vanpools, bicycling, and walking, along with efficiency improvements through shifts in the chosen route, the time of travel, the mode of travel, and the patterns of trips taken to work and other activities. The preferred alternative would implement a comprehensive transit strategy, including completion of funded Sound Transit projects and additional Link light rail extensions to Tacoma.

The goals, policies, and recommendations of the North Downtown Subarea Plan are in complete alignment with the preferred strategies and outcomes of VISION 2040 and T2040

summarized above. Thus in effect, the Subarea Plan has already been analyzed and approved at the regional level. The Subarea Plan and Final EIS provide the local focus and additional analysis necessary to coordinate and bridge planning efforts from the State, to the regional, and finally to the local level. The Subarea Plan also supports the *Downtown Tacoma Plan Update*¹ and the City's *Comprehensive Plan*,² while focusing on issues and opportunities at a scale more responsive to the subarea's specific needs.

The objectives of the of the North Downtown Subarea planning effort are to:

- promote equitable, sustainable development in Tacoma's North Downtown area in accordance with the State's Growth Management Act (GMA);³
- develop an innovative area-wide long-range plan for the north end of downtown Tacoma; and
- complete pre-development environmental review that will identify how to address environmental and community issues, ultimately reducing uncertainty, risk, and permit review time for future development projects and defining implementation time lines.

The project team is working closely with property owners, businesses, residents and community members to ensure that the priorities of these key stakeholders are represented in the outcomes of the project. Bates Technical College is partnering with the City of Tacoma as the State Environmental Policy Act (SEPA) co-lead agency for the North Downtown Subarea Plan and EIS; this arrangement mirrors the similar South Downtown Subarea Plan where the City partnered with the University of Washington Tacoma. The proposed project time line is 2013-14.

The City intends that the North Downtown Subarea Plan should:

- establish a *policy* framework to guide and promote the transformation of North Downtown into a community that is thriving, healthy, equitable, and transit-oriented;
- catalyze economic development that provides benefits across the socio-economic spectrum;
- provide certainty and protect investment for both the community and developers;
- develop a collaborative, trusting relationship between the community, the city, and "city builders;" and
- document the policy and mitigation measures that are necessary.

The ***North Downtown Subarea Plan*** will amend current City of Tacoma policies governing the environment, land use, economics, transportation, design standards, parks and recreation, public services, and utilities. Actions that will implement the Subarea Plan include: new regulations that address land use, archeological and historic preservation, transportation, housing, zoning, capital improvement programs, as well as other Tacoma ordinances and regulations. Many of these actions are intended to provide mitigation for impacts that may be caused by development.

¹ City of Tacoma, 2008a (refer to the **References** section of this EIS for the complete citation).

² City of Tacoma, 2011.

³ Chapter 36.70A RCW

The Subarea Plan includes the following major components:

- a vision statement and approach that provides overarching guidance for the entire **North Downtown Subarea Plan** and EIS project;
- a review of existing plans and policies that support the vision of the project and the intention of the Subarea Plan;
- proposed plans, policies and land use code updates that are intended to guide mitigation or provide mitigation, including the following:
 - Land Use
 - Economic Development
 - Historic and Archeological Resources
 - Housing
 - Open Space
 - Mobility
 - Catalyst Projects

The North Downtown Subarea planning effort was funded through a \$50,000 of grant from the State Community Economic Revitalization Board (CERB) to complete a Subarea Plan and Environmental Impact Statement for North Downtown.

Specifics of the *Proposed Action* and the **Action Alternative** that could implement the proposed **North Downtown Subarea Plan** are described in **Section 2-4** of this EIS, together with the **No Action Alternative**.

The Subarea Community Planning Process

The Subarea Plan was developed over approximately a one-year-long process and represents integration of input from a broad range of stakeholders and other interested parties, as outlined below. Further details concerning the outreach process are described in the **North Downtown Subarea Plan**.

- EIS Public Community Meeting (included stringent pre-notification requirements)
- EIS Scoping Public Meeting: 13 people provided oral testimony, including representatives of the New Tacoma Neighbor Council, the Cascadia Green Building Council, the Tacoma Sustainability Commission, the Guadeloupe Land Trust, and Pierce County
- EIS Scoping comment period: Written comments were received from 13 parties, including the Department of Ecology, the Tacoma-Pierce County Health Department, and a representative of the Gallucci Learning Garden.
- Monthly Steering Committee: Members comprised of local residents, workers, property owners, and businesses
- DEIS public hearing: Oral public comments were solicited, reviewed, and responded to

- DEIS comment period: Written public comments were solicited, reviewed, and responded to

2.2.2 Overview of the Environmental Review Process

As noted, the **North Downtown Subarea Plan** is a land use plan that establishes the framework for future development, redevelopment and revitalization of the North Downtown Subarea – based on several possible development scenarios or alternatives. The purpose of this EIS is to identify and evaluate the probable, significant environmental impacts associated with each development alternative, as well as the **No Action Alternative**.

This EIS for the **North Downtown Subarea Plan** is unique in that it is a:

- **Joint City of Tacoma and Bates Technical College Effort** -- This EIS is being prepared jointly by the City of Tacoma and Bates Technical College. The Bates Technical College campus is located within the Subarea.
- **Non-project document** – This is a non-project EIS that addresses a broad geographical area (approx. 520 acres) and presents a cumulative impact analysis for the entire subarea. As such, rather than piecemeal analysis of environmental impacts and mitigation that is provided on a project-by-project or site-by-site basis, this EIS comprehensively evaluates environmental impacts and identifies reasonable mitigation measures for the entire subarea based on the **Action Alternative**.
- **Planned Action EIS** – This is a Planned Action EIS,⁴ which is a streamlined environmental review process that applies to the specific geographical area associated with the North Downtown Subarea. In general, a Planned Action EIS differs from other EISs in that the impact analysis focuses largely on cumulative impacts based on future development that is anticipated to occur within a broad area -- rather than impact analysis associated with individual, sequential site-specific development projects. The objective of this Planned Action EIS is to evaluate probable environmental impacts of the **Action Alternative** and the **No Action Alternative** for the entire Subarea as comprehensively and completely as possible to eliminate the need for subsequent environmental review associated with site-specific development or redevelopment. Such is expected to provide certainty for future, site specific development proposals and both simplify and greatly expedite the permitting process for such projects. The *no further environmental review* provision applies to development that complies with the Subarea's development regulations, and occurs within 10 years of issuance of the Final EIS for this project.
- **Regional Perspective** – Because the actions being assessed are expected to have significant positive impacts at the regional scale, this EIS includes consideration of impacts well beyond the borders of the Subarea. As discussed above, the population and employment growth scenario in the **Action Alternative** is derived from growth allocations based on the requirements of the GMA, and these allocations are intended to help the region achieve the goals of VISION 2040, the Puget Sound Regional Council's adopted plan for accommodating regional growth. The regional impacts are important to

⁴ prepared pursuant to RCW 43.21C.420,.031 and .229 and WAC 197-11-164 and -168

consider because an impact seen as adverse at the local level could in fact be a net positive impact at the regional level. For example, if North Downtown experiences significant growth, the total amount of GHG emissions in the Subarea will increase. However, because a typical household located in a transit rich urban center such as North Downtown drives less than a household located in a low density suburban or rural area, the accommodation of regional growth in North Downtown can be expected to result in a reduction of GHG for the region as a whole.

- **Concise Analysis** – Consistent with the focus of simplifying and streamlining the development process for projects within the North Downtown Subarea, the intent of this EIS is to: 1) provide an objective, balanced analysis of each alternative; and 2) create a simplified, reader-friendly document. EIS's that are voluminous can inhibit readability and severely limit the document's usefulness as a resource for decision makers, agencies and the public. The aim of this EIS, therefore, is to create a document that is comprehensive, concise, and not overly technical⁵ -- one that enables the reader to understand the most significant issues associated with the **Action Alternative**.

The EIS process consists of three phases: **EIS Scoping**, the **Draft EIS** and the **Final EIS**. Each phase is briefly described below:

- **EIS Scoping** – This is the first crucial step in the EIS process. This step defines the alternatives and the range of environmental issues to be evaluated in the EIS. The purpose of scoping is to narrow the focus of the EIS -- to address only those environmental parameters that could be significantly affected as a result of the alternatives.

The EIS Scoping process for this project occurred **June 14, 2013, through July 19, 2013**. A public EIS Scoping meeting was held on June 26, 2013 to provide an opportunity for agencies, organizations and the public to present comments in addition to submittal of written comments. At the conclusion of the Scoping process, the City and Bates Technical College confirmed the scope of the EIS.

- **Draft EIS** – The Draft EIS represents the City and Bates Technical College's best determination of probable significant environmental impacts associated with each of the subarea plan alternatives. The *Proposed Action* and **Action Alternative** are described and evaluated based on 12 environmental parameters (e.g., earth, air, etc.). The Draft EIS was issued on May 15, 2014, and copies were distributed to agencies (federal, state, regional, City), organizations, and the public for a 30-day public review and comments, ending June 16, 2014.
- **Final EIS** -- This Final EIS completes the environmental review process for the project. It incorporates changes or clarifications regarding the Draft EIS, all comment letters and testimony that are received from agencies, organizations and individuals during the public comment period, and contains responses to the comments raised. The Final EIS

⁵ Consistent with WAC 197-11-425. This is a section within Washington State's *SEPA Guidelines*, which implements the State Environmental Policy Act (SEPA). A provision in this section provides guidelines regarding document size (e.g., not to exceed 75 pages unless the proposal is of unusual scope or complexity, in which case it may not exceed 150 pages).

is the SEPA document that the City and Bates Technical College will use to decide on the **Action Alternative**. Copies of this Final EIS will be made available to those agencies (federal, state, regional, City), organizations, and the individuals that received the Draft EIS and/or provided comments on the Draft EIS.

2.3 PROJECT VISION AND GOALS

The following Vision for the North Downtown Subarea is the result of a collaborative effort between North Downtown stakeholders, City staff, and the consultant team:

- *Center of Opportunity*: A thriving, equitable, urban, mixed-use community that offers a robust range of opportunities for education, transportation, housing, health care, business, employment, shopping, and recreation.
- *Open Spaces and Natural Systems*: An environmentally-responsive urban center which values its green spaces and strives to maintain and enhance existing open spaces, parks, recreational opportunities, view corridors, community gardens, and the connections between each while carefully adjusting to local terrain conditions.
- *Cultural and Heritage District*: A community that respects and preserves the mix of historic characteristics and vibrant business of all types while encouraging and celebrating the rich mix of cultures and heritages.
- *Place-Based Identity*: An integrated component of the greater City that capitalizes on its unique characteristics to successfully blend and support exchange between business districts, sustain connections to surrounding neighborhoods, leverage regional assets, and project a compelling identity to the region and beyond.
- *Urban Livability*: A Downtown Core area with significant economic development potential, incentives, and requirements to ensure that greater intensity of use has long term positive impacts on livability.
- *Partnerships to Promote Economic Vitality*: A community that actively pursues and supports public-private investments in order to address the needs and concerns of the business owners, residents, and visitors while at the same time supporting the arts, culture, tourism, infrastructure improvements, international trade, and social services for all segments of the population.
- *Walkability and Transportation Choices*: A community that will maintain and enhance the existing development fabric and capitalize on the extensive local and regional transit system within the subarea to support walkability, a variety of transportation modes, and future infrastructure improvements.
- *Promote Education and Lifelong Learning*: A community that embraces its educational heritage by supporting and growing educational opportunities and facilities for all members of society at all educational levels.

In short, the Vision for North Downtown is a vibrant, equitable urban center that offers a rich spectrum of opportunities to live, learn, work, and play. To achieve that Vision, the primary

goals of the North Downtown Subarea Plan & EIS are to catalyze economic development and sustainable urban growth. North Downtown has the potential to accommodate intense development in its commercial core, which will leverage existing urban infrastructure and transit assets. However, measures must be taken to assure that development occurs in a way that supports urban livability. This planning effort proposes innovative strategies to help North Downtown achieve its potential for economic development in a way that will maximize net environmental and community benefits.

Over recent decades, Tacoma has seen relatively low levels of economic development, which has resulted in a variety of negative impacts on downtown neighborhoods, including underutilized properties, deterioration and loss of historic structures, and limited economic opportunity for residents and employers.

Further redevelopment is the critical step to realizing North Downtown's potential to provide equitable livability and a diverse, thriving economy while minimizing environmental impact. This point of view is endorsed by a wide range of public policy spanning the federal, State, regional, County, City, and neighborhood levels, and is supported by countless studies on "smart growth." Building upon the Subarea's significant assets to cultivate vibrant, compact, transit-rich districts will help the City of Tacoma and the surrounding region achieve established goals for smart and sustainable growth.

Redevelopment in North Downtown should create the following: infill projects that improve the quality of the public realm, open spaces and revitalized streetscapes that increase the livability and walkability of urban neighborhoods, strengthened physical and visual connections to the Foss Waterway and Commencement Bay.

The goal of the Subarea Plan is to build upon the character of North Downtown's varied districts - commercial core, neighborhood residential, historic, and arts/cultural - to promote and enable diverse housing choices and employment opportunities, thriving urban institutions, amenities that attract visitors as well as residents, and a mix of uses that includes the essential elements of livability.

New jobs and housing in North Downtown will expand the customer base for existing businesses and increase opportunities for residents to benefit from the Subarea's concentration of urban amenities and infrastructure.

2.4 DESCRIPTION OF THE PROPOSED ACTION AND THE ALTERNATIVES

2.4.1 Proposed Action

The **Proposed Action** consists of several related decisions by the Tacoma City Council -- with involvement, as appropriate, by Bates Technical College -- regarding the **North Downtown Subarea Plan**:

- approval of the Final EIS as a document that is adequate for SEPA compliance, decision making, and implementation of the upfront SEPA process;

- implementation of the associated Planned Action ordinance for the project and the associated upfront SEPA compliance provision;⁶
- adoption of the **North Downtown Subarea Plan** and the associated policies and implementing regulations, as well as site-specific projects that are proposed within the North Downtown Subarea; and
- determination of whether the **Action Alternative** contained in the *Subarea Plan*, or the **No Action Alternative** is the City's preferred alternative for the North Downtown Subarea.

2.4.2 Alternatives

SEPA requires analysis of “reasonable alternatives” as part of an EIS and defines reasonable as “actions that could feasibly attain or approximate a proposal’s objectives, but at a lower environmental cost or decreased level of environmental degradation.”⁷ In every EIS, the **No Action Alternative** must also be evaluated. The following is a discussion of the **No Action Alternative** and the development alternatives.

No Action Alternative

Under the **No Action Alternative**, the City of Tacoma’s existing *Comprehensive Plan*, Zoning Map and the *Tacoma Land Use Code* would remain in effect. All existing planning and implementation policies and existing development regulations would continue to guide development decisions for properties within the North Downtown Subarea. No Planned Action ordinance would be adopted and the advantages of upfront SEPA compliance would not occur.⁸ In addition, adverse impacts of development could occur without any requirement for mitigation.

To establish 2030 population and employment growth estimates for the **No Action Alternative**, the best available source for “business as usual” growth forecasts is the PSRC’s “Land Use Baseline.”⁹ The Land Use Baseline is a representation of future development based on how the market responds to development capacities established in local jurisdictions’ pre-VISION 2040 comprehensive plans (circa 2012).

The PSRC Land Use Baseline geometry is “Forecast Analysis Zones” (FAZ), and FAZ 1820 (Tacoma CBD/Stadium) is fairly closely aligned with the North Downtown Subarea boundaries. For the purposes of this Subarea Plan, FAZ 1820 provides a good enough approximation for the **No Action alternative**. This method yields the 2030 estimates shown in **Table 2-1**.

⁶ Refer to **Section 2.2.2** of this EIS.

⁷ WAC 197-11-440(5)

⁸ This includes increased certainty for future, site specific development proposals, as well as simplification and expediting of the permitting process for projects located within the North Downtown Subarea.

⁹ <http://www.psrc.org/data/forecasts/2013-forecast-products/>

Another **No-Action**-related consideration involves the possibility of delaying implementation of the proposed **North Downtown Subarea Plan** to some future time. If this course of action is taken, the following outlines possible benefits and disadvantages of such delay.

Benefits of Deferral

None known.

Disadvantages of Deferral

- Deferral could postpone implementation of pre-development environmental review that is one of the key features of the North Downtown Subarea Plan. As such, development uncertainty and risk would not be lessened and permit review timeframes for future development project would not necessarily be shortened.
- Deferral would not necessarily eliminate or lessen the severity of environmental impacts that are identified in this EIS, but merely postpone them. In some situations, this could result in greater cumulative impacts (e.g., traffic, noise, aesthetics, etc.) as a result of redevelopment that occurs, consistent with the City's *Comprehensive Plan*, *Bates Technical College Master Plan*, and the City's development regulations, due to changes in background conditions.
- It is anticipated that North Downtown will continue to grow and develop. By deferring adoption of a plan for North Downtown, the City and the surrounding community could lose opportunities for future development that may be more consistent with the direction outlined in the **North Downtown Subarea Plan** than that associated with the broader *Comprehensive Plan*.
- The proposed improvements and mitigations in the **North Downtown Subarea Plan** would likely not be implemented.
- The **North Downtown Subarea Plan** and this EIS process support the implementation of PSRC's VISION 2040. Deferral may be inconsistent with this intent and result in a loss of potential implementation funding.
- Deferral could limit the ability by the City of Tacoma to effectively respond to new development opportunities.
- Deferral would likely lead to increased development outside of the designated regional urban center in downtown Tacoma, an outcome that runs counter to the goals of the State's Growth Management Act.

The **No Action Alternative**, including potential deferral, does not meet the goals and objectives of the City.

Action Alternative

The City of Tacoma, with involvement from Bates Technical College, identified goals and objectives, which are included in the **North Downtown Subarea Plan** and were noted

previously in part 2.3 of this section of the Final EIS. Based on those goals and objectives, the City, with input from Bates Technical College, defined an **Action Alternative** that could feasibly attain or approximate the project’s goals and objectives. The **Action Alternative** (as well as the **No Action Alternative**) is summarized in **Table 2-1**, defined in terms of the net increase relative to:

- total gross square footage within the Subarea;
- residential square footage;
- commercial square footage;
- number of residents living within the Subarea; and
- number of jobs located within the Subarea.

**Table 2-1
EIS Alternatives**

Development Parameter	No Action Alternative	Action Alternative
Total Sq. Ft.	1,808,138	26,250,000
Residential Sq. Ft.	1,274,138	15,000,000
Commercial Sq. Ft.	534,000	11,250,000
Number of Residents	2,956	30,000
Number of Jobs	1,424	30,000

The assumptions used to determine the Action Alternative are as follows. The primary goal of the North Downtown Subarea Plan is to encourage and guide redevelopment that will accommodate significant population and employment growth in the Subarea. The 2030 growth allocations for population and employment established by the Puget Sound Regional Council (PSRC) and Pierce County for the City of Tacoma, in accordance with the State of Washington’s Growth Management Act, are 78,600 new residents (39% increase over 2008), and 64,200 new jobs (57% increase over 2008).

In 2013, the City of Tacoma proposed new allocation targets for its urban centers and mixed-use centers.¹⁰ As The 2030 estimations for North Downtown are 20,080 new residents, and 19,470 new jobs. A key element of the approach to planning for this growth is to test scenarios that make full use of North Downtown’s capacity for future development. With the intent of exploring the upper limits of what could be possible for future growth in North Downtown, the

¹⁰ “A New Approach to Growth Allocations for Tacoma’s Urban Centers,” Draft: September 2013, City of Tacoma Department of Planning and Development Services

Action Alternative was defined to address a growth scenario of 30,000 new residents, and 30,000 new jobs, which is the Action Alternative analyzed in the EIS. To convert between estimates of population and jobs and the square footage (sf) of development needed to accommodate those uses, as shown in **Table 2-1**, the following assumptions were made:

- 1000 sf average household size
- 2.32 people average per household¹¹
- 375 sf average commercial floor space per employee

The City's 2013 allocation report cited above includes estimates of development capacity in North Downtown. GIS analysis was used to identify developable parcels, based on the following set of assumptions. First, parcels with the following uses were designated as undevelopable:

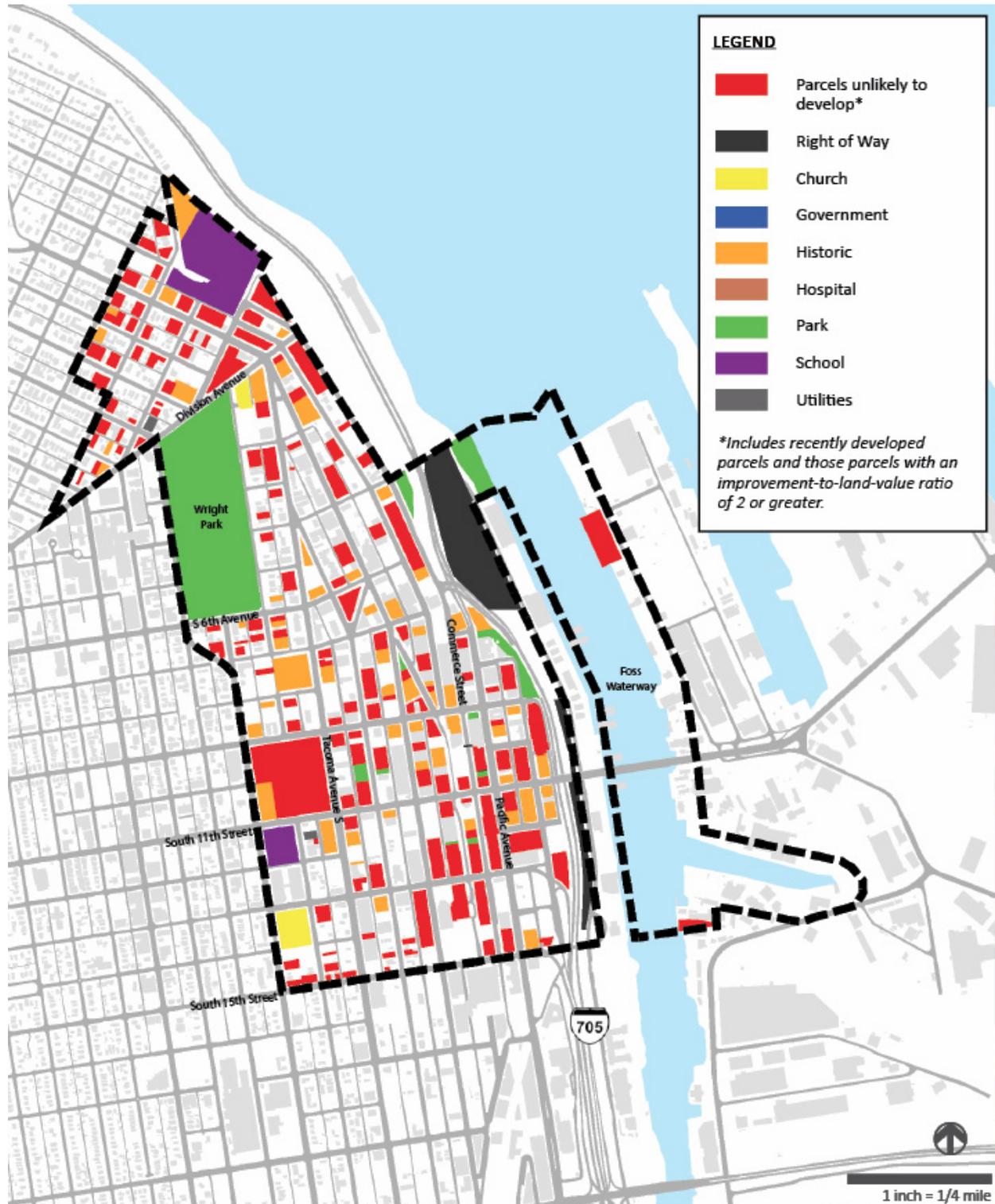
- schools
- historic structures
- parks and greenbelts
- religious services
- hospitals
- significant government offices
- utilities
- right-of-way (including rail)

To account for the dependence of future development potential on the value of existing improvements, parcels with an improvement-value-to-land-value ratio greater than "2" were designated as undevelopable. A map of developable and undevelopable parcels is provided in **Figure 2-4**.

For all parcels not identified as undevelopable, development capacity was calculated according to an assumed capacity of population and employment based on the zoning. Lot coverage of 70% was assumed, along with zone-specific assumptions for average number of floors, and for residential-commercial use mix. Lastly, a 25% market factor was applied to arrive at a final estimated capacity for the North Downtown Subarea of 39,499 people and 30,756 jobs. This estimate indicates that there is sufficient capacity in North Downtown to accommodate the 30,000 new residents and 30,000 new jobs assumed for the **Action Alternative**.

¹¹ Projected 2022 average housing size for Tacoma, as given in the 2007 Pierce County Buildable Lands Report

Figure 2-4 – Developable Parcels in the North Downtown Subarea



Source: VIA Architecture and City of Tacoma Department of Planning and Development Services

SECTION III

AFFECTED ENVIRONMENT,
IMPACTS, MITIGATION
MEASURES and UNAVOIDABLE
ADVERSE IMPACTS

3.1 EARTH

Information presented in this section addresses topography, soils, and earth-related environmentally critical areas. This information is based on readily available secondary sources of data; primary research, such as soil borings, detailed topographic surveys, etc. have not been conducted for this analysis. The following information source formed the basis of data that is presented in this section and is, hereby, incorporated by reference¹ into this Final EIS:

- U.S. Department of Agriculture; Soil Conservation Service. 1955 and 1976. *Soil Survey for Pierce County, Washington.*

3.1.1 Affected Environment

Topography

The topography of the Subarea is shown in **Figure 3.1-1**. In roughly the southern half of the Subarea, the topography varies from sea level at the Foss Waterway to an elevation of approximately 300 feet along Yakima Ave, at the west edge of the Subarea. From the Waterway, the topography rises steeply to I-705 and South A St, rises slowly between Pacific Ave. and Commerce St., and then begins to rise more steeply to Yakima Ave. In the northern portion of the Subarea, there are steep slopes rising from the Foss Waterway to Stadium Way. Topography also rises along Stadium Way from about 140 feet at the I-705 ramps, to about 240 feet when at the intersection with North 1st Street.

Soils

The North Downtown Subarea is composed primarily of Alderwood gravelly sandy loam soil, defined further by the degree of slope and the effects topography has on soil characteristics. Alderwood 1C soils are typically found on 6 percent to 15 percent slopes, and Alderwood 1D soils are typically found 15 percent to 30 percent slopes. Puyallup soils are located on both sides of Thea Foss Waterway.

Geologic Hazardous Areas²

In 2004 and 2008, the City of Tacoma mapped five types of geologic hazardous areas in the City. The following information relates each of these geologic hazardous areas to the North Downtown Subarea. The Tacoma Municipal Code defines each of these hazardous areas in Chapter 13.11.720, and establishes the general development standards associated with each type in Chapter 13.11.730.

Erosion Hazard Areas

As shown by **Figure 3.1-2** and **Figure 3.1-3**, there are unstable slopes located within the North Downtown Subarea along the steep bluffs between Stadium Way and Schuster Parkway, and

¹ WAC 197-11-754 -- "Incorporation by reference" means the inclusion of all or part of any existing document in an agency's environmental documentation by reference (WAC 197-11-600 and 197-11-635).

² Tacoma Municipal Code Chap. 13.11.700

near the east edge of I-705, north of South 11th St.

Landslide Hazard Areas

Figure 3.1-3 indicates that there are areas of steep slopes of 40% or greater located within the North Downtown Subarea along the bluffs between Stadium Way and Schuster Parkway. All slopes greater than 40 percent are considered potential landslide hazardous areas.

Seismic (earthquake) Hazard Areas

In 2004, the WA Department of Natural Resources (DNR) published liquefaction maps in a report called *Liquefaction Susceptibility and Site Class Maps of Washington State By County*.³ Liquefaction is a phenomenon in which strong earthquake shaking causes a soil to rapidly lose its strength and behave like quicksand. **Figure 3.1-4** depicts liquefaction areas within the Subarea. The Puyallup soils located on both sides of Thea Foss Waterway are considered susceptible to high liquefaction during an earthquake.

Volcanic Hazard Areas

These areas are subject to debris flow and debris avalanche zones as a result of an eruption of Mount Rainier. Hazard zones are assessed on the basis of a likely occurrence of a volcanic event occurring on a low or 500-1000 year frequency, moderate or 500-1000 year frequency, or high based on a 100-500 year frequency. **Figure 3.1-5** depicts volcanic hazard areas within the Subarea. As shown, the entire Puyallup River valley is subject to a high or 100-500 year volcanic eruption frequency including all of the Port of Tacoma and the east side of Thea Foss Waterway. The west side of Thea Foss Waterway within the North Downtown Subarea is subject to a low or 500-1000 year frequency due to mud flows generated by a possible pyroclastic mud flow.

Mine Hazard Areas

As shown in **Figure 3.1-6**, there are no known mine hazard areas in the North Downtown Subarea.

Tsunami Hazards

Tsunamis are earthquake- or landslide-generated waves that occur in open water bodies generated directly by an earthquake or by an earthquake-induced landslide. A 2007 paper⁴ by the Tacoma Washington Tsunami Hazard Mapping Project modeled several scenarios, including:

- **Seattle Fault earthquake:** Approximately 14 min after generation, the tsunami starts to inundate the Port of Tacoma and the Thea Foss Waterway, building to a 3.5-m wave that overtops port facilities, the public esplanade, and adjacent low-lying neighborhoods.

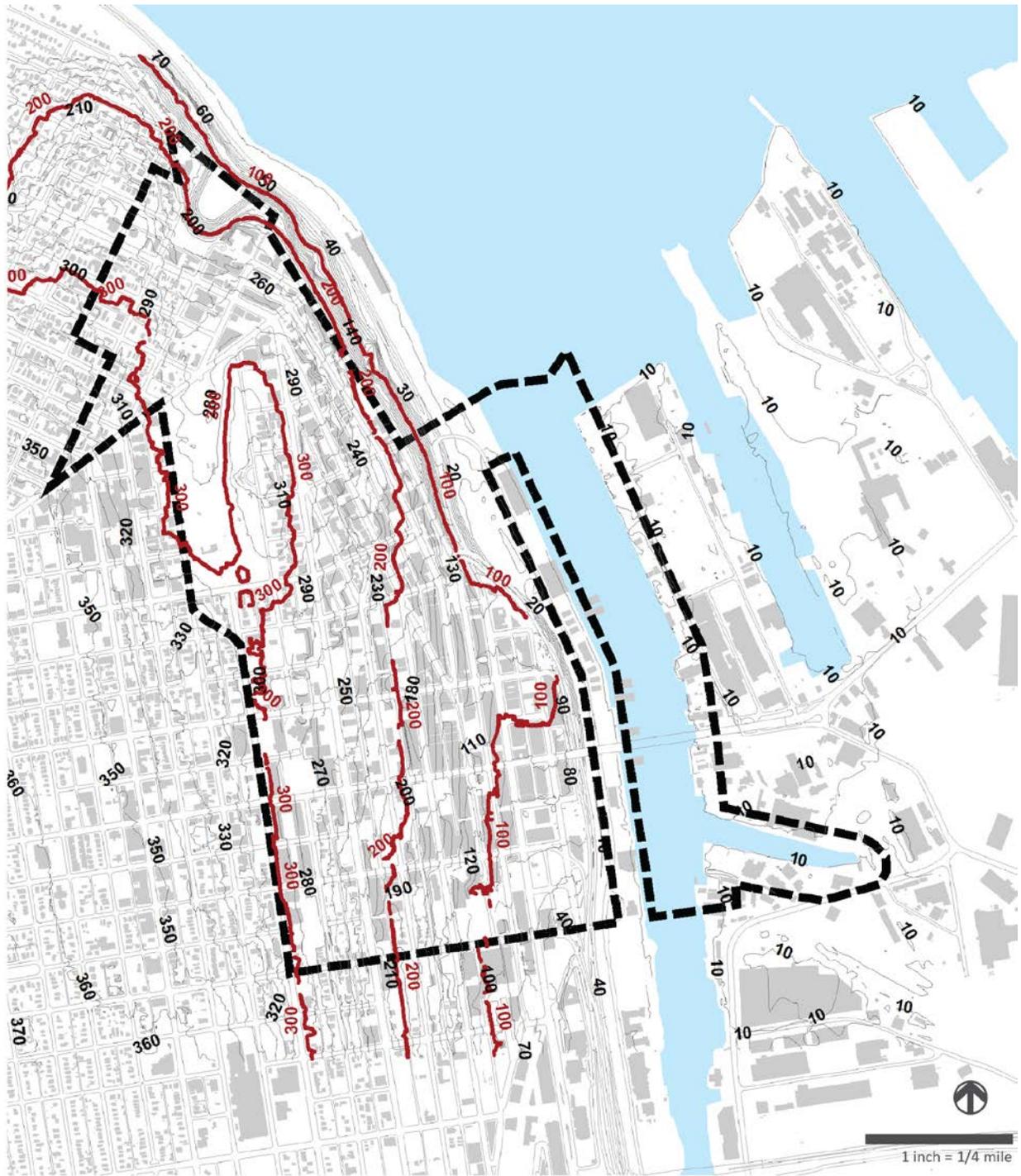
³ WA Dept. of Natural Resources, 2004.

⁴ Venturato, Angie J., et. al, 2007. Tacoma Hazard Mapping Project: Modeling Tsunami Inundation from Tacoma and Seattle Fault Earthquakes. Joint Institute for the Study of the Atmosphere and Ocean (JISAO), University of Washington, Seattle, WA, Pacific Marine Environmental Laboratory, Seattle, WA (January 2007).

- Tacoma Fault earthquake: The tsunami hits the Thea Foss Waterway and Port of Tacoma with an initial 0.6-m wave 10 min after generation. Resonance in the waterways and Puyallup River continue to overflow the channels, and the port and public esplanade are slowly inundated over a period of 3 hr.

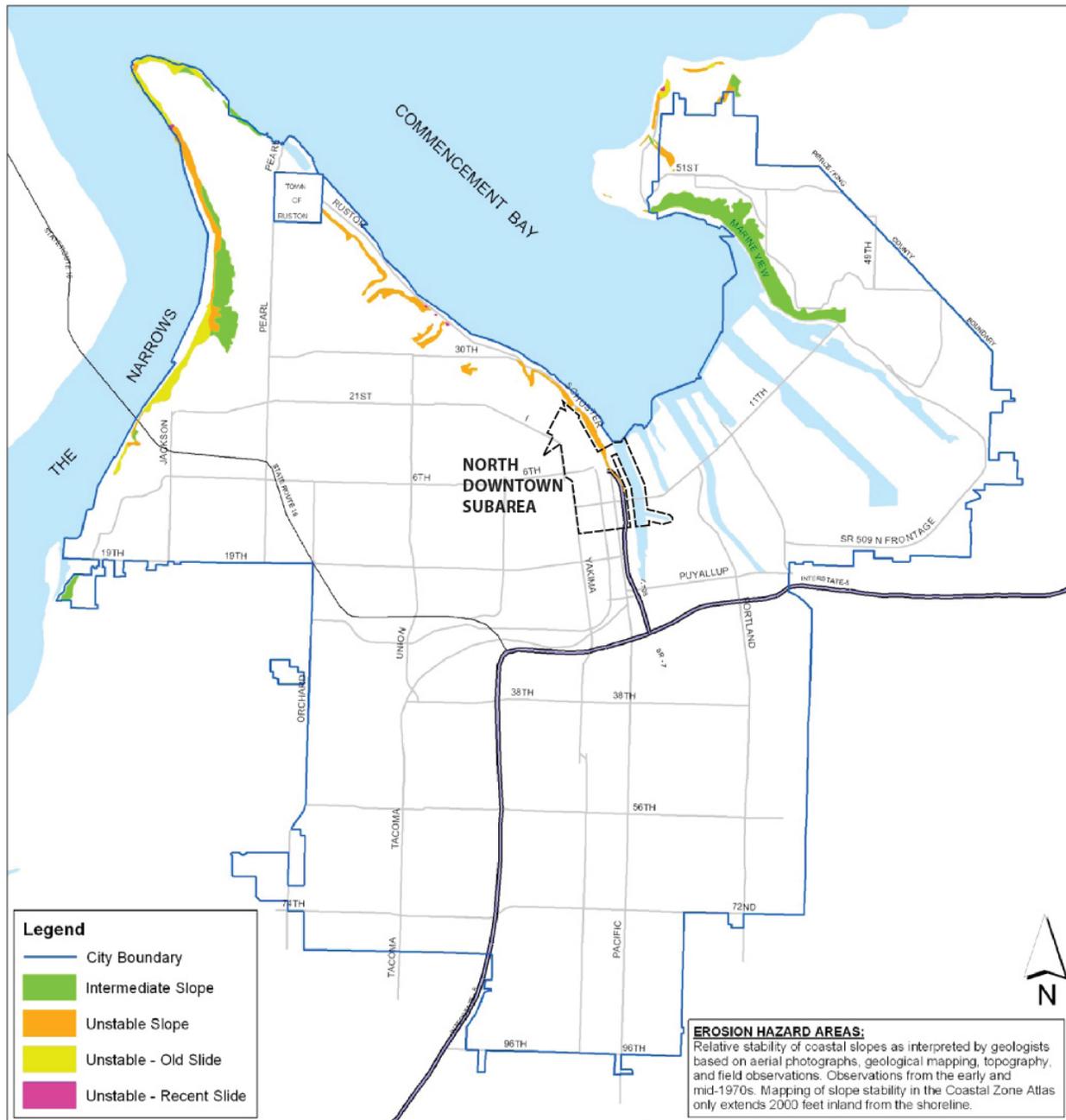
The type of earthquakes needed to generate a significant tsunami generally has probabilities of occurrence in the range of 2 percent in a 50-year period. Overall, the risk of inundation from an earthquake-induced tsunami related to the Seattle or Tacoma Faults is considered low.

Figure 3.1-1: Topography



Source: VIA Architecture and City of Tacoma

Figure 3.1-2: Erosion Hazards



This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration with funds appropriated for the Coastal Zone Management Act of 1972 through a grant to the Washington Department of Ecology. The views expressed herein are those of the authors and do not reflect the views of NOAA or any of its sub-agencies.



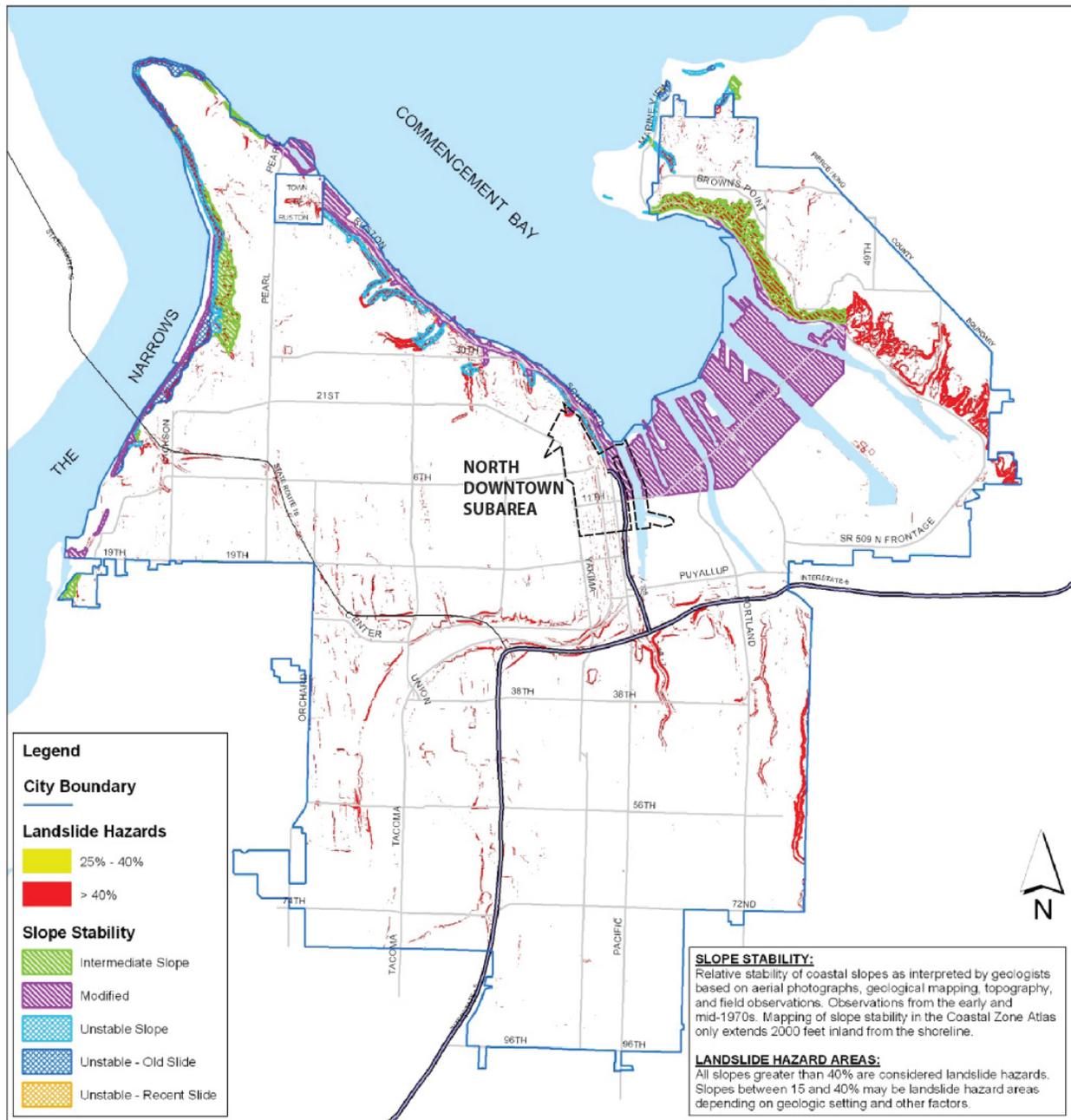
City of Tacoma
Tacoma Economic Development Department



NOTE: This map is for reference only.



Figure 3.1-3: Landslide Hazards



This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration with funds appropriated for the Coastal Zone Management Act of 1972 through a grant to the Washington Department of Ecology. The views expressed herein are those of the authors and do not reflect the views of NOAA or any of its sub-agencies.



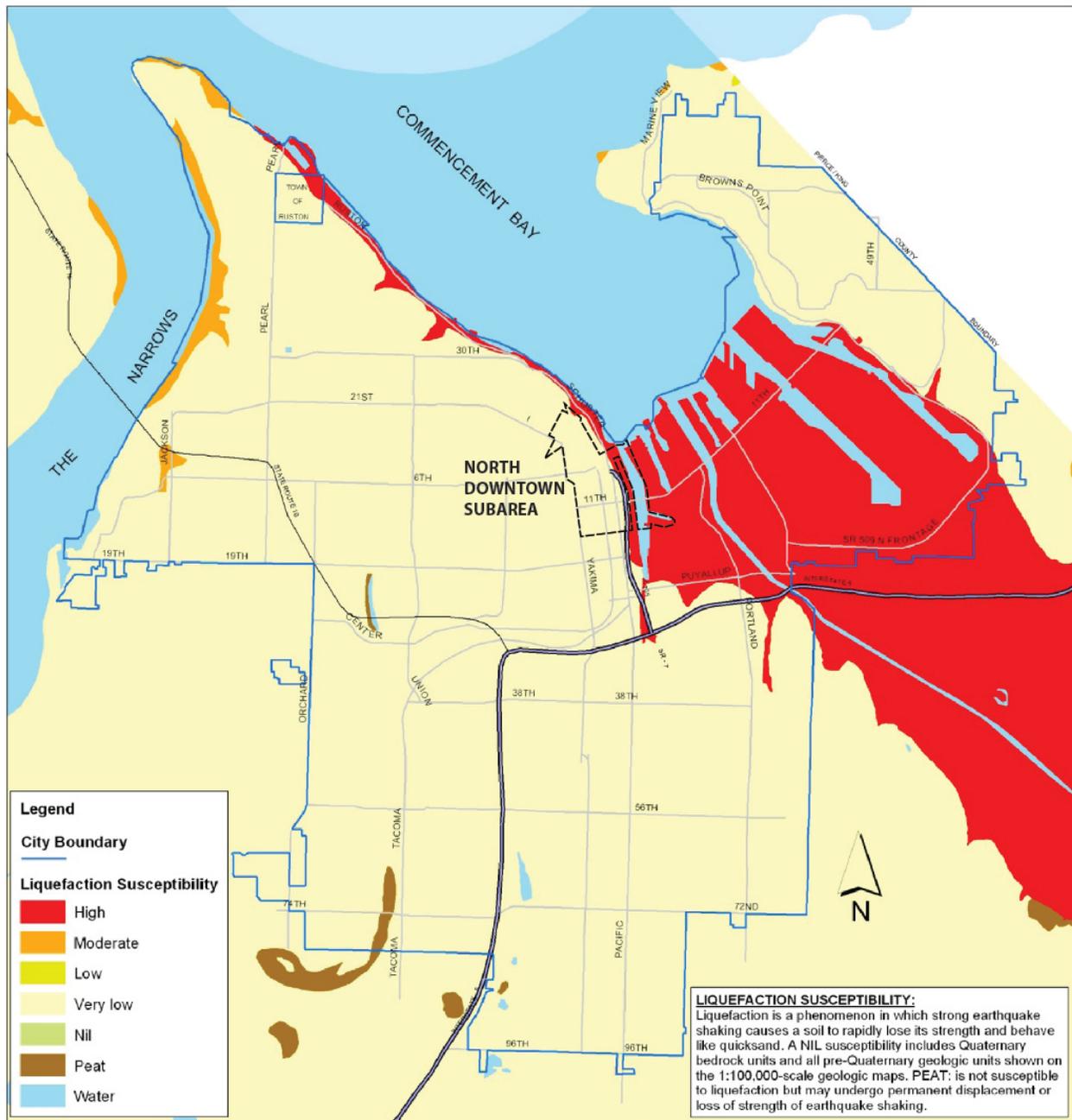
**City of Tacoma
Tacoma Economic Development Department**



NOTE: This map is for reference only.



Figure 3.1-4: Seismic Hazards



This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration with funds appropriated for the Coastal Zone Management Act of 1972 through a grant to the Washington Department of Ecology. The views expressed herein are those of the authors and do not reflect the views of NOAA or any of its sub-agencies.



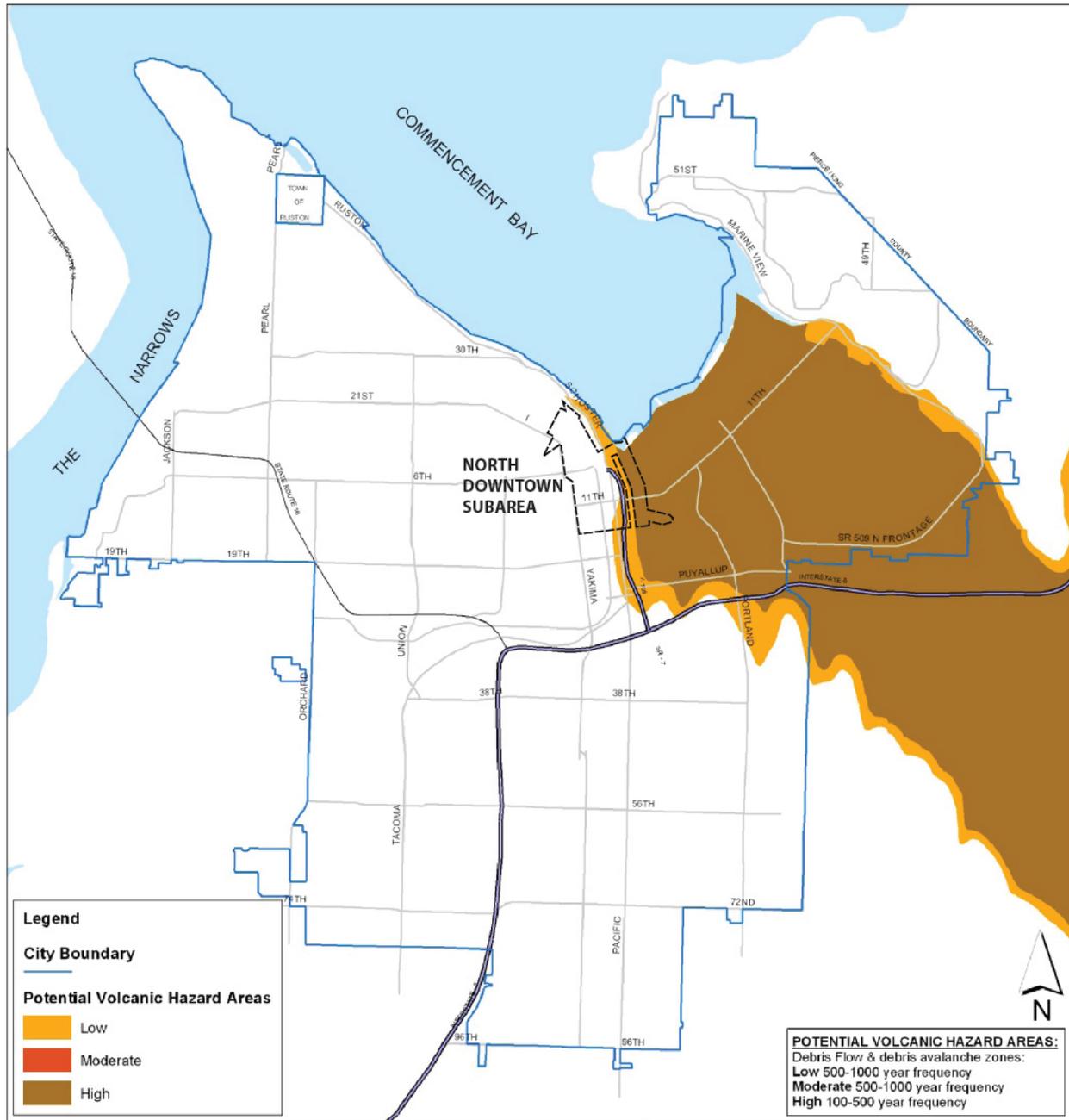
**City of Tacoma
Tacoma Economic Development Department**



NOTE: This map is for reference only.



Figure 3.1-5: Volcanic Hazards map



This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration with funds appropriated for the Coastal Zone Management Act of 1972 through a grant to the Washington Department of Ecology. The views expressed herein are those of the authors and do not reflect the views of NOAA or any of its sub-agencies.



**City of Tacoma
Tacoma Economic Development Department**



NOTE: This map is for reference only.



Figure 3.1-6: Mine Hazards



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**City of Tacoma
Tacoma Economic Development Department**



NOTE: This map is for reference only.



3.1.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to earth would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposed development alternative would continue the re-development trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. However, considering the fact that such development is projected to occur over several decades and that earth-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the North Downtown Subarea would not result in any significant earth-related impacts. While re-development activity would involve site-specific alteration of existing grades and earthwork, no significant earth-related impacts are anticipated in that such projects would be required to fully comply with existing development regulations, as noted in part **3.1.3** of this section.

3.1.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations, and other mitigation, as noted below.

City Policies

The following policies, together with City codes and other more specific measures, can mitigate impacts that are described in this section of the Final EIS.

Comprehensive Plan -- Environmental Policy Element

The Environmental Policy Element of Tacoma's *Comprehensive Plan*⁵ is intended to be a comprehensive, single source of Tacoma's environmental policies. The Element has established a range of policies that provides mitigation for adverse impacts. The Element states:

Managing growth within potentially hazardous natural areas prevents environmental problems as well as preserves open space. For example, steep slopes and floodplains that are potentially hazardous when developed provide scenic corridors and greenbelts when retained in a natural state. Development patterns and practices that preserve or enhance natural features add to community quality as well as protect water quality, wildlife and property.

⁵ Ord. No. 27295, adopted Nov. 16, 2004 and amended by Ord. No. 27996 of June 14, 2011

Developments in potentially hazardous areas need to be subject to standards which may be stricter than the standards which apply in areas where natural constraints are not present. In cases where developments are permitted in these potentially hazardous areas, the developments need to be designed in harmony with natural systems. This approach is intended to protect the public health, safety and welfare by averting potential problems associated with development, and may also reduce needless public and private expenditures related to landslides, flooding, erosion, uneven settlement or other disruptions. Lastly, one of the purposes of the Environmental Policy Element is to insure that if development activities occur, undue hardships are not imposed on adjacent property owners and land owners, developers and buyers are made aware of natural constraints.

The **Environmental Policy Element** includes the following policies:

Policy	Intent
E-GD-1 Site Planning	<i>Encourage site planning and construction techniques that maintain natural landforms, retain native vegetation, and preserve open space.</i>
E-GD-2 Development Hazards	<i>Discourage development on lands where such development would pose hazards to life or property, or where important ecological functions or environmental quality would be adversely affected: (a) floodways of 100-year floodplains, (b) erosion hazard areas, (c) landslide hazards areas, (d) unique or significant wetlands or stream corridors, (e) fish and wildlife conservation areas and (f) seismic hazard areas.</i>
E-GD-3 Manage Development	<i>Encourage development standards in critical areas in accordance with the severity of natural constraints to reduce risks, minimize damage to life and property and mitigate potential hazards.</i>
E-GD-4 Educational/Aesthetic Appearance	<i>Encourage regulations or development limitations within areas of recognized educational, anthropological, historical, biological or aesthetic significance to avoid irreversible damage to such areas.</i>
E-GD-5 Environmental/Economic Consideration	<i>Recognize that management of environmental resources should consider protection of the public health, safety and welfare and economic development needs.</i>
E-ENF-1 Natural Features Value	<i>Recognize the value of natural features of the land within the urban environment; conserve as many natural features as is possible and appropriate. Natural features are not only important for ecological reasons but they both possess educational and recreational values as well.</i>
E-ENF-2 Preservation of Natural Resources	<i>Preserve through programs of acquisition, easement, design standards and zoning an optimum amount of the City's desirable natural features for public purposes. Included would be steep slope areas, water frontage, wooded areas, aquatic lands and other unique and significant natural areas.</i>
E-ENF-3 Environmental Considerations	<i>Emphasize careful planning in growth and development activities in order that the City's natural features may be preserved, soil stability maintained and renewable and non-renewable resources protected.</i>

<i>E-ENF-4 Natural Features and Unstable Soil</i>	<i>Carefully plan residential development in order that the city's natural features are preserved, if at all possible, and areas of unstable soil are not disturbed.</i>
<i>E-ENF-5 Natural Features</i>	<i>Avoid alteration of desirable natural features, where feasible, in the development of utilities and services facilities.</i>

Other Mitigation

Under all alternatives, the Environmental Policy Element of the Tacoma *Comprehensive Plan* (Amended Ordinance Number 27769), taken together with implementing regulations, will protect environmentally sensitive lands. Therefore, no additional mitigation measures are necessary or proposed to address potential impacts associated with the proposal or alternatives.

Depending on the nature of future site-specific development, site-specific impacts may be mitigated through existing City of Tacoma regulations. In some cases, additional mitigation may be necessary under City Public Works and Building Codes to address site-specific impacts that could occur with development under any of the alternatives. Site specific measures may include reducing the size of the project, placing limits on project timing and schedule, or requiring additional practices during construction to avoid adverse impacts. Additional practices might include landscaping, supplemental drainage measures, water quality control, erosion control, and stabilization measures, all currently authorized under existing City codes and regulations

Additional measures related to stormwater and its potential impact on soils are given in the Water Element of this document, and measures related to contaminated soils are given in the Environmental Health Element of this document. Large scale redevelopment is of critical importance to improving existing stormwater quality and cleaning up contaminated soils.

3.1.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to earth resources.

3.2 AIR QUALITY

Information presented in this section addresses air quality in the North Downtown Subarea. Information contained in this section is based on readily available secondary sources of data; primary research, such as project-specific air quality monitoring or modeling have not been conducted as part of this analysis.

3.2.1 Affected Environment

Regulatory Overview

Three agencies have air quality jurisdiction in the Tacoma/Pierce County area: the US Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and the Puget Sound Clean Air Agency (PSCAA). Air quality regulations are designed to limit emissions from air pollution sources and to minimize concentrations of pollutants in the outdoor air. Standards established by each agency are provided in **Table 3.2-1**.

The Washington State Department of Ecology (DOE) and the Puget Sound Clean Air Agency (PSCAA) maintain a network of air quality monitoring stations throughout the region to measure existing air quality. Based on monitoring information collected over a period of years by these agencies and by EPA, regions are designated as “attainment” or “nonattainment” areas for each criteria air pollutant. A status of “attainment” for a given pollutant indicates that the air quality in an area complies with the National Ambient Air Quality Standards (NAAQS) for that pollutant. If the area does not meet the NAAQS for a particular pollutant, the area is designated “nonattainment” for that pollutant.

A plan, called a State Implementation Plan (SIP), is developed and implemented to reduce ambient pollutant concentrations below the NAAQS and bring the area back into attainment with the NAAQS. When the air quality in a nonattainment area has improved to the point that the standard is no longer exceeded for a specified period, the area is re-designated as “attainment” – this re-designation requires a maintenance plan (typically covering the first 10 years after re-designation) to ensure that ambient concentrations do not deteriorate back to nonattainment levels. These re-designated areas are called “maintenance areas.”

Conformity

Mandated by Clean Air Act Amendments, *conformity* is the process by which areas of nonattainment and air quality maintenance are protected from further air quality deterioration due to new development. The objective of the conformity regulation is to ensure that “Federal Actions” are consistent with the applicable State Implementation Plan (SIP). Federal actions can include the issuance of permits, funding of projects, etc.

The Washington State Environmental Policy Act (SEPA) requires that all major actions sponsored, funded, permitted, or approved by state and/or local agencies undergo planning to ensure environmental considerations such as impacts on air quality are given due weight in decision-making.¹ The Clean Air Washington Act (CAWA) of 1991² requires transportation

¹ WAC 197-11 and WAC 468-12

² RCW 70.94

plans, programs, and projects to be consistent with the SIP to improve air quality in areas where federal air quality standards are not met. WAC 173-420 contains regulations to ensure conformity of transportation activities to the SIPs.

**Table 3.2-1
Air Quality Regulations**

Pollutant	U.S. Environmental Protection Agency	WA Department of Ecology	Puget Sound Clean Air Agency
Carbon Monoxide			
1-hour average	35 ppm	35 ppm	35 ppm
8-hour average	9 ppm	9 ppm	9 ppm
Particulate matter – PM₁₀			
Annual Average	Revoked	50 ug/m ³	50 ug/m ³
24-hour average	150 ug/m ³	150 ug/m ³	150 ug/m ³
Particulate matter – PM_{2.5}			
Annual average	15 ug/m ³	----	----
24-hour average	35 ug/m ³	----	----
Total suspended Particles			
Annual average	60 ug/m ³	60 ug/m ³	60 ug/m ³
24-hour average	150 ug/m ³	150 ug/m ³	150 ug/m ³
Ozone			
1-hour average	Revoked	----	----
8-hour average	0.075 ppm	----	----
Nitrogen dioxide			
Annual average	0.053 ppm	0.05 ppm	0.05 ppm
Sulfur dioxide			
Annual average	0.03 ppm	0.02 ppm	----
24-hour average	0.14 ppm	0.10 ppm	----
1-hour average/yr		0.40 ppm	----
1-hour average/7 day		0.25 ppm	----
Lead			
Quarterly average	1.5 ug/m ³	----	----

Source: Chapter 173, Sections 470-475 Washington Administrative Code (WAC).

PSCAA is also responsible for enforcing several Washington State laws and regulations, including those concerning:

WAC 173-400-040	General Regulation for Air Pollution Sources
WAC 173-400-110	General Standards for Maximum Emissions
WAC 173-425	New Source Review
WAC 173-430	Open (Outdoor) Burning
WAC 173-433	Agricultural Burning
WAC 173-433	Solid Fuel Burning (woodstoves, etc)
WAC 173-460	Controls for New Sources of Toxic Air Pollutants
RCW 70-94	Washington State Clean Air Act

Source: Washington Administrative Code (WAC) and Revised Code of Washington (RCW)

For projects within the central Puget Sound region of Washington State, the Puget Sound Regional Council (PSRC) is responsible for developing the long range transportation plan, for maintaining the TIP and for undertaking regional conformity analysis to ensure that all projects listed in the MTP/TIP meet regional conformity standards.

Existing Air Quality

Particulate Matter

Particulate matter (PM) is a form of pollution composed of very small particles of dust, smoke, soot, and other materials. PM comes in many shapes, sizes, and compositions. The EPA has identified 2 sizes of PM that have identifiable health risks: PM₁₀ and PM_{2.5}. PM₁₀ is composed of particles that are 10 microns or smaller in diameter and PM_{2.5}, 2.5 microns or smaller in diameter. PSCAA measures and evaluates fine particle pollution levels through a network of monitors located throughout the 4-county jurisdiction.

Both long- and short-term exposure to PM pollution can pose a range of serious health effects. Exposure has been linked to respiratory disease, decreased heart and lung function, asthma attacks, heart attacks, strokes, and premature death. A 2009 study³ conducted by DOE conservatively estimates that approximately 1,100 die every year in Washington due to fine particle pollution. Children, older adults and people with respiratory and cardiac illnesses are especially at risk. Breathing PM pollution can cause coughing, wheezing, and decreased lung function even in otherwise healthy children and adults. Certain types of PM contain chemicals known to cause cancer. In addition to health effects, fine particle pollution can limit visibility. Fine particle pollution can also deposit in lakes, rivers and the Puget Sound, affecting ecosystems and organisms.

Fine particle pollution comes primarily from combustion (burning) of fuels, such as wood and fossil fuels. This includes exhaust from motor vehicles (trucks, buses, ships, etc.) and smoke from burning in fireplaces and wood stoves, as well as land-clearing burning and backyard burning of yard waste. Industrial operations also contribute a small portion of fine particle pollution.

³ Health Effects and Economic Impacts of Fine Particle Pollution in Washington, Washington State Department of Ecology, Air Quality Program, December 15, 2009.

Pierce County Non-attainment Area:

Most of Pierce County was designated a nonattainment area for particulate matter (PM) in 2009, becoming one of 32 nonattainment areas in the country and the only nonattainment area in the state. The non-attainment area includes all of the North Downtown Subarea and most of Pierce County's urban growth area, as shown in the map in **Figure 3.2-1**. Over the past decade PM pollution levels in Tacoma have remained somewhat stable, but in 2006 EPA tightened the federal limit for fine particle pollution from 65 micrograms per cubic meter to 35 micrograms per cubic meter.

PM pollution in the non-attainment area is most severe during the fall and winter months, as shown in **Figure 3.2-2**. During January, February, November and December between 2000 and 2010, pollution levels violated the Federal air quality standard. The biggest source of this wintertime PM pollution is wood smoke on cold, clear winter days when air is trapped close to the land ("inversion" conditions) and there is little wind to blow the smoke away. The worst pollution levels in Pierce County were recorded at the air monitoring station that is located at South L Street in Tacoma's South End neighborhood. During the summer, fine PM pollution levels are lower overall, when motor vehicles typically contribute more than other sources. Industrial operations also contribute a small portion of fine particle pollution. By law, Pierce County is required to clean up the air by 2019.

Carbon Monoxide (CO)

Carbon monoxide (CO) is a product of incomplete combustion. It is generated by transportation sources (e.g., motor vehicles, marine vessels) and other fuel-burning activities such as residential space heating, especially heating with solid fuels like coal or wood. CO is usually the pollutant of greatest concern related to roadway transportation sources, because it is the pollutant emitted in the greatest quantity for which short-term health standards exist.

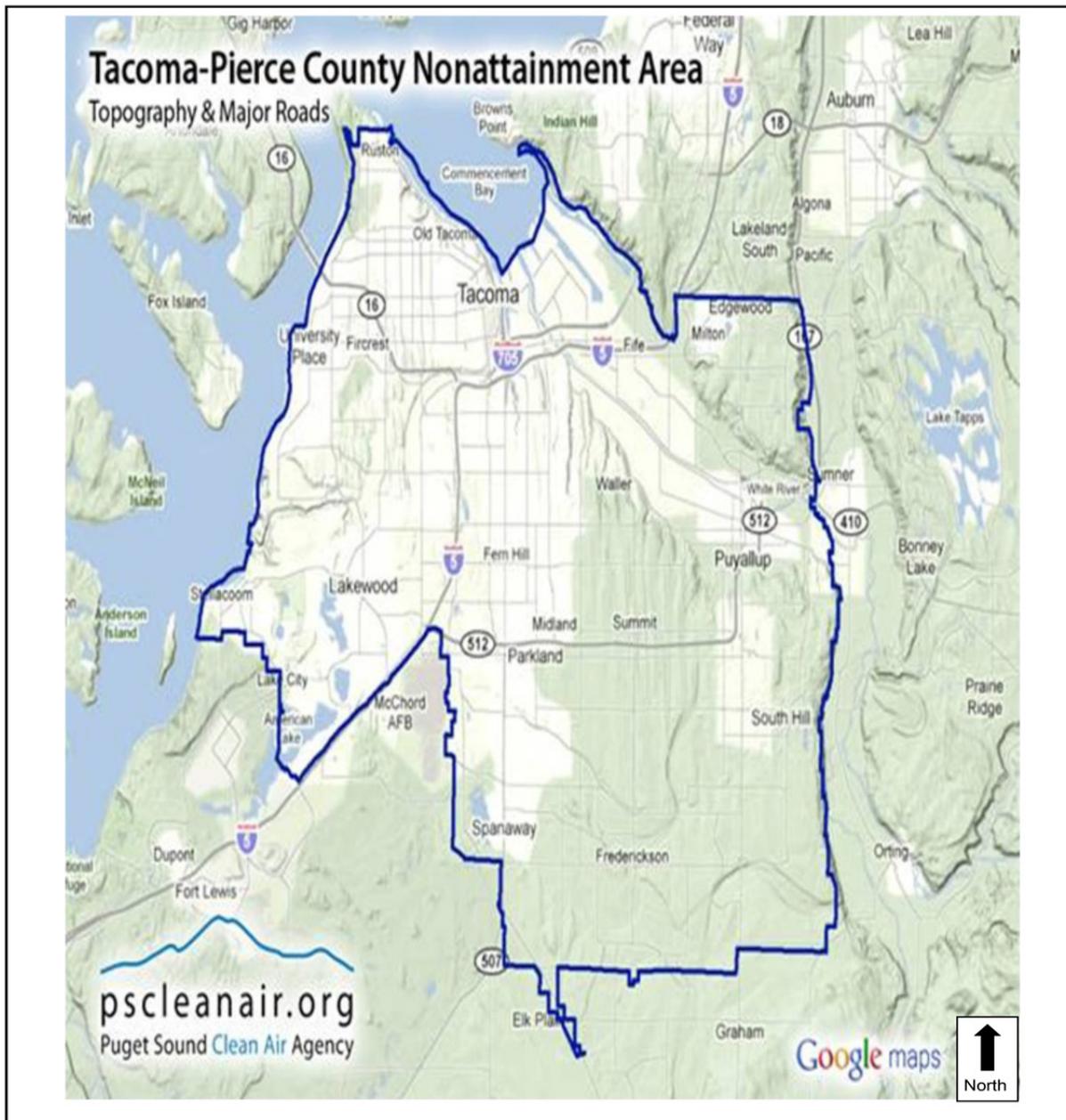
Pierce County was a maintenance area for CO through 2006. As part of the maintenance plans, a second maintenance plan was developed and submitted for a second consecutive 10 year period (2006-2016). This second 10-year maintenance plan for CO was approved by EPA in 2004. CO levels around Puget Sound have decreased significantly in the past 15 years. Levels are well below federal standards and there has not been a violation of the National Ambient Air Quality Standards (NAAQS) for CO in the Tacoma area since 1992, due primarily to cleaner car technology.

Ozone (O₃)

Ozone is a form of oxygen created by the action of the sun on hydrocarbons and nitrous oxides like those found in automobile exhaust and emissions from coal-fired power plants, garbage incinerators, and oil refineries. Even at low concentrations ground level ozone adversely affects human health and has detrimental effects on other species.

Pierce County regained "attainment" status of the ozone standard in 1996, meaning Pierce County was a maintenance area for the 1-hour ozone standard through 2006. A second maintenance plan was developed and submitted for 2006-2016 and was approved by EPA in 2004. However, in 2005, EPA revoked the 1-hour ozone standard for Pierce County, such that Tacoma is no longer designated as a 1-hour ozone maintenance area.

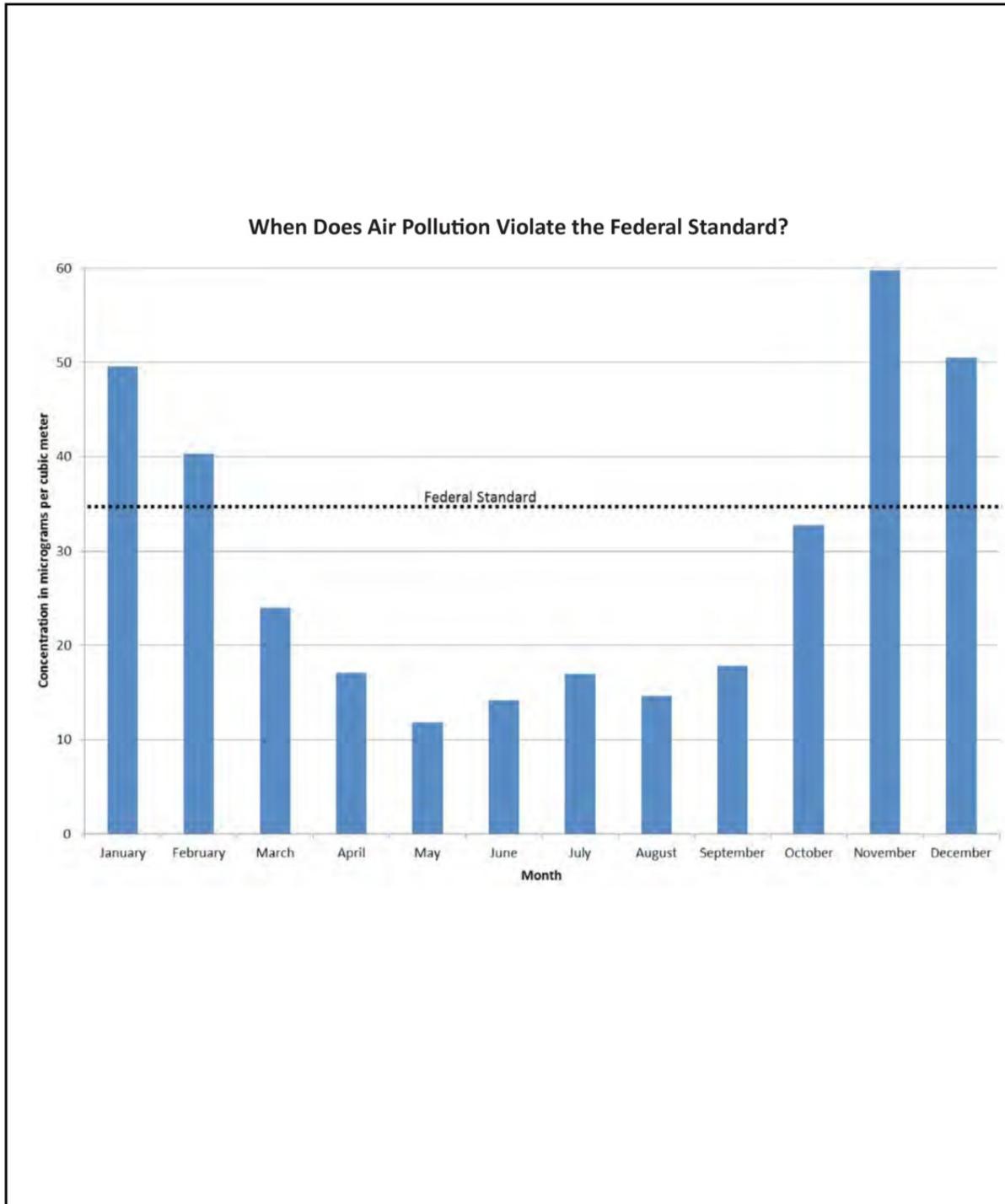
Figure 3.2-1:



Source: Puget Sound Clean Air Agency

Figure 3.2-1
Tacoma-Pierce County Nonattainment Area

Figure 3.2-2



Source: Puget Sound Clean Air Agency, 2013

Figure 3.2-2

Tacoma South L Street, Fine Particulate, 98th Percentile per Month, 2000 - 2010

Nitrogen Oxides (NO_x)

Nitrogen oxides (nitrogen dioxide, nitric acid, nitrous oxide, nitrates, and nitric oxide) are highly reactive gases, many of which are colorless and odorless. Nitrogen oxides react with other substances in the air to form ground level ozone, acid rain, and particulate matter. NO_x reacts readily with common organic chemicals to form a wide variety of toxic products, some of which may cause biological mutations. Nitrate particles and nitrogen dioxide can block the transmission of light, reducing visibility. Nitrous oxide is a greenhouse gas.

North Downtown is in attainment of ambient standards for NO_x.

Sulfur Dioxide (SO₂)

Sulfur dioxide belongs to the family of sulfur oxide (SO_x) gases, which are formed when fuel containing sulfur (such as coal and oil) is burned, when gasoline is extracted from oil, or when metals are extracted from ore. Sulfur dioxide dissolves in water vapor to form acid and interacts with other gases and particles in the air to form sulfates. Sulfur dioxide causes a wide variety of health and environmental impacts.

North Downtown is in attainment of ambient standards for SO₂.

Lead (Pb)

Exposure to lead can lead to a wide range of well documented human health issues. In the past, the largest sources of lead emissions have been motor vehicles and industrial sources, however, since the phase-out of leaded gasoline, airborne-related lead levels have decreased significantly.

North Downtown is in attainment of the ambient standards for lead.

Greenhouse Gas Emissions (GHG)

There is broad consensus that greenhouse gas emissions caused by humans have already caused measurable increases in global temperature and are expected to result in significantly greater increases in temperature in the future. A wide range of policies and actions to reduce GHG emissions have been enacted -- globally and locally -- but emissions trends are still on the rise globally.

The most significant GHGs are carbon dioxide (CO₂), nitrous oxide (NO₂), and methane (CH₄), of which CO₂ emissions are by far the largest in terms of mass emissions and total global warming potential. In the central Puget Sound Region, transportation produces roughly one-half of all GHG emissions. Buildings are the second largest source.

Tacoma's 1990 estimated GHG emissions level was 1,990,830 tons, based on an emissions inventory that was conducted in 2007. Because Tacoma has already implemented a series of sustainability programs, for 2012 the city was on pace to reduce its emissions by 104,775 tons, which is more than 5 percent of Tacoma's 1990 estimated emissions level.

3.2.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to air quality would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposed development alternative would continue the re-development trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. As such, increases in localized air pollutant emissions are anticipated as a result of increases in localized automobile traffic, industrial manufacturing, and short-term construction activities. Additional urban activities and accompanying vehicular traffic would contribute to increases in emissions relative to suspended particulates (PM₁₀ and PM_{2.5}), ozone (O₃), and carbon monoxide (CO) within the study area.

The proposed development alternative would continue the re-development trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. Considering the fact that development is projected to occur over several decades for each alternative, and that air quality-related impact mitigation presently exists and will continue (as described in part 3.2.3 of this section), it is anticipated that the increased amount of urban activity within the North Downtown Subarea would not result in any significant air quality-related impacts or create air pollutant conditions at a point where EPA, DOE, or PSCAA standards would be at risk.

Development associated with the action alternative would require site-specific construction activity consisting of earthwork and the use of construction equipment. Earthwork would result in localized increases in particulate levels and the use of diesel-powered trucks and equipment would result in localized increases in air quality emissions as a result of the equipment and indirectly from idling vehicles as a result of construction-related traffic delays. All construction-related impacts would be temporary and localized.

The action alternative would generate new development and activities that would increase GHG emissions at the local level. However, because GHG gases are a global, not local, phenomenon, a full accounting of their impacts must include consideration of the per capita emissions across the greater region. It is well established that households in transit-rich, walkable neighborhoods drive less than households in lower-density, car-dependent neighborhoods, and this reduction in driving translates to reduced GHG emissions.⁴ Given that a certain amount of growth is expected to occur in the region, the more of that growth that can be captured in the transit-rich, walkable North Downtown Subarea, the less that will end up in the more car-dependent urban fringe. Therefore, at the regional scale, total per capita GHG emissions can be expected to decrease as a larger share of the region's growth is accommodated in North Downtown. This result is in fact projected by the transportation

⁴ See for example, Growing Cooler, by Reid Ewing, Keith Bartholomew, Steve Winkelman, Jerry Walters, and Don Chenm, Urban Land Institute, 2008.

modeling detailed in the Transportation Element of this FEIS, which estimates a net reduction of per capita regional transportation-related GHG emissions for each of the three development alternatives, as compared to the No Action alternative. Based on this regional perspective, the highest intensity alternative would result in the greatest *benefits* in terms of GHG emissions reductions.

Directing regional growth to urban centers to reduce environmental impacts is a central strategy of the PSRC's VISION 2040 regional plan. By planning for, and encouraging significant redevelopment in North Downtown, the North Downtown Subarea Plan is in alignment with VISION 2040. As described above, the reduction of regional GHG emissions that would result from significant redevelopment in North Downtown is an outcome that would further the intended goals of VISION 2040.

3.2.3 Mitigation Measures

In addition to general mitigation, PM non-attainment, construction and operational measures that are outlined below – are necessary or proposed to address probable environmental impacts associated with the development alternatives. Furthermore, best management practices that provide mitigation will continue to evolve and improve.

General Mitigation Measures

Numerous federal, state, and local regulations have been enacted that address air quality in the central Puget Sound region. Such regulations include those under the *Federal Clean Air Act* and the *Washington Clean Air Act*.

Washington's *Operating Permit Regulation* (Chapter 173-401 (WAC), complies with Title V of the *Federal Clean Air Act* and requires a facility to obtain an Operating Permit if it has the potential to emit any of the following:

- more than 100 tons per year of any pollutant, such as nitrogen oxides (NO_x), volatile organic compounds (VOCs), carbon monoxide (CO), sulfur dioxide (SO₂), and particulate matter (PM). Lower thresholds may apply in "nonattainment areas";
- more than 10 tons per year of any hazardous air pollutant (HAP), as listed in subsection 112(b) of the *Federal Clean Air Act*, or
- more than 25 tons per year of a combination of any HAPs.

A facility may also be required to have an Operating Permit if it is subject to certain federal air quality requirements, including:

- Title IV Acid Rain Program;
- New Source Performance Standards (NSPS); or
- National Emission Standard for Hazardous Air Pollutants (NESHAP).

Also, to address hazardous emissions at the regional level, site-specific demolition activity is required to obtain a demolition permit from PSCAA when such demolition involves asbestos-contained material.

Tacoma Comprehensive Plan Policies on Air Quality

The Environmental Policy Element of Tacoma’s Comprehensive Plan includes the following general policies that help mitigate adverse impacts on air quality:

Policy	Intent
<i>E-P-1 Environmental Protection</i>	<i>Acknowledge the dangers to health presented by all forms of environmental pollution and degradation by individuals as well as by industries, and support education and technical assistance, as well as rigorous enforcement of regulations when necessary, to alleviate these dangers.</i>
<i>E-P-2 Air and Water Pollution</i>	<i>Support education and technical assistance, as well as strict enforcement when necessary, of air, water, noise and other pollution laws and regulations with the ultimate purpose of eliminating these problems as negative features of the environment.</i>
<i>E-P-3 Prevention and Mitigation</i>	<i>Prioritize prevention and avoidance of pollution when possible. Use SEPA Substantive Authority, where warranted, in conjunction with adopted policies to provide mitigation for unavoidable impacts to environmental quality.</i>
<i>E-AQ-1 Air Pollution</i>	<i>Support the control and ultimate elimination of the contaminating by-products of transportation equipment.</i>
<i>E-AQ-2 Air Quality Studies</i>	<i>All developments subject to SEPA environmental review procedures should address air quality impacts resulting from the development and its operation. In order to adequately assess impacts, any development proposal that requires state or federal air permits or reporting shall provide a quantitative study as part of their environmental analysis.</i>

PM Non-Attainment Mitigation Measures

Regulations associated with the particulate matter (PM) “non-attainment” designation in Pierce County ensure that none of the alternatives would create adverse PM-related impacts. By law, the non-attainment area must be cleaned-up by 2019 and the following conditions must be met:

- air quality monitoring data shows the area meets the standard;
- reductions in the area's emissions are permanent and enforceable;
- the State Implementation Plan (SIP) that has been developed for the area has met the requirements of the *Federal Clean Air Act* and been fully approved by EPA;
- EPA has fully approved a 10-year Maintenance Plan for the area submitted by DOE as a revision to the SIP; and
- the Subarea meets requirements of the Clean Air Act for general SIPs and nonattainment areas.

Federal, State and local projects must meet SIP conformity requirements.

Tacoma-Pierce County Clean Air Task Force:

To achieve attainment status for PM pollution, PSCAA is working with DOE -- with input from the Tacoma-Pierce County Clean Air Task Force -- to develop a plan to reduce PM pollution

from all sources, particularly wood smoke. Formed by the PSCAA, the Tacoma-Pierce County Clean Air Task Force is a diverse cross-section of community leaders representing Pierce County residents, including those who heat their homes with wood, and volunteers from business, government and health.

The Task Force transmitted its recommendations to PSCAA in December 2011 with three primary recommendations:

1. Improve Enforcement of Air Quality Burn Bans;
2. Require the Removal of Uncertified Wood Stoves and Inserts by a Certain Date; and
3. Reduce Pollution from Gasoline Vehicles, Diesel Vehicles, Industries, Ships.

DOE submitted the SIP modifications to EPA in December 2012 for review and approval. In addition, PSCAA has been developing plans and implementing actions to improve air quality in the nonattainment area. The attainment timeline is as follows:

• 2006	Health studies cause EPA to tighten standard for PM pollution
• December 2009	EPA designates Tacoma-Pierce County as a nonattainment area
• Summer 2011	PSCAA convenes Tacoma-Pierce County Clean Air Task Force
• Fall 2011	Clean Air Task Force makes recommendations to PSCAA
• Winter 2011	PSCAA submits recommendations to Ecology
• December 2012	Ecology submits State Implementation Plan to EPA
• 2014	Target for Tacoma-Pierce County nonattainment area to reduce PM pollution to meet federal standard
• 2019	Final deadline to meet federal standard for fine particle pollution

Additional PM Pollution Policies and Regulations:

An estimated 25-33 percent of the emission reductions needed to meet the PM pollution standard by 2019 in Pierce County will be accomplished from new federal regulations and local initiatives relating to non-wood smoke sources of pollution (e.g., vehicles, ships, etc.). Nationally, the focus for reducing fine particle pollution related to gasoline vehicles has been on creating cleaner standards for both engines and fuels. Washington State has adopted the California Clean Car Standards for vehicles—the most stringent automobile standards in the country—which will help reduce fine particle pollution. Local governments have adopted several programs to reduce fine particle pollution related to gasoline engines, including installing electric vehicle charging stations, using electric and biodiesel vehicles, and adopting anti-idling programs. The regional transportation plan⁵ adopted by the Puget Sound Regional Council has several policy goals that will help reduce fine PM pollution. A number of planned transportation capital investments will also help, such as high occupancy vehicle (HOV) lane extensions, ramp metering, Sound Transit Sounder rail improvements, and other investments in alternatives to travel by motor vehicle.

Among the industrial sources of PM pollution within the nonattainment area, six have been identified by DOE and PSCAA as the largest emitters. These six contribute more than 90% of the PM pollution from industrial sources in the nonattainment area. The federal Clean Air Act establishes a requirement for working with industries to reduce their levels of pollution called

⁵ Transportation 2040, Puget Sound Regional Council, adopted May 20, 2010

Reasonably Available Control Technology (RACT). DOE and PSCAA are reviewing the existing pollution controls and operations at these six industrial sources to determine if they already meet RACT.

For ocean-going ships, beginning in 2012 new international standards require the use of lower sulfur fuel. More restrictive levels are required by 2015, which will reduce the fine particle pollution from ships. The Port of Tacoma and its tenant, Totem Ocean Trailer Express (TOTE), have also installed shore power facilities and retrofitted ships so that ships can use shore power instead of operating diesel engines to create power when they are berthed.

Greenhouse Gas Emissions Mitigation

Tacoma's Climate Action Plan:

In 2008 the City of Tacoma adopted a *Climate Action Plan*.⁶ One of the main “realities” articulated in the Plan is aligned with goals of the ***North Downtown Subarea Plan***:

“Tacoma must demonstrate leadership to accept population growth, while increasing the quality of life and attractiveness of living within the urban core. Providing spectacular, affordable opportunities for people to live closer to where they work, shop and entertain themselves is not just an economic development issue, it’s a climate change solution, and Tacoma must invest in the tools to encourage this growth while increasing the quality of life of its residents.”

The Plan established the following targets:

- By **2012**: Tacoma’s greenhouse gas emissions should be reduced to 15% below 1990 levels.
- By **2020**: Tacoma’s greenhouse gas emissions should be reduced to 40% below 1990 levels.
- By **2050**: Tacoma’s greenhouse gas emissions should be reduced to 80% below 1990 levels.

The Plan proposes the following five GHG emission reduction strategies to help meet the above targets:

1. City leading by example;
2. Moving people and goods more efficiently;
3. Enhancing compact/livable neighborhoods;
4. Energy efficiency in buildings, homes and industries; and
5. Reuse and recycle ... from buildings to food waste.

Prior Greenhouse Gas Policy in Tacoma:

Tacoma’s Mayor signed the US Mayors *Climate Protection Agreement* in April 2005, pledging that Tacoma would strive to meet or exceed the reduction target set in the Kyoto Protocol to cut emissions from 1990 levels by 7% by 2012. In April 2006, the Tacoma City Council adopted a resolution supporting efforts to curb global warming and reduce greenhouse gases, while encouraging the continued growth and development of clean technology businesses in the City.

⁶ City of Tacoma, 2008

State Greenhouse Gas Policy:

Washington has adopted a set of coordinated policies to grow the State's economy and reduce greenhouse gas emissions, including:

- enacted State greenhouse gas emissions reduction limits into law (RCW 70.235.020)
 - Return to 1990 levels by 2020;
 - By 2035, reduce emissions to 25% below 1990 levels; and
 - By 2050, reduce emissions to 50% below 1990 levels.
- required that persons operating single facility, source, or site that emits at least 10,000 metric tons of greenhouse gases annually must report to the Department of Ecology their emissions of certain greenhouse gases (RCW 70.94.151);
- established Evergreen Jobs Initiative with the goal of, by 2020, increasing the number of green economy jobs to 25,000 from the 8,400 green economy jobs the state had in 2004. (RCW 43.330.310 and RCW 43.330.370);
- authorized financing of the upfront costs of renewable energy and energy-efficiency improvement projects and establish the Sustainable Energy Trust Program. (RCW 43.180);
- adopted California "Clean Car" Greenhouse Gas Tailpipe Standards in 2005. (RCW 70.120A.010);
- enacted minimum renewable fuel content requirements and fuel quality standards. (RCW 19.11.110, RCW 19.11.120);
- required that starting in 2010, new vehicles must disclose greenhouse gas emissions. (RCW 70.120A.050)
- enacted electric vehicles planning and infrastructure provisions with Chapter 459, Laws of 2009 and codified in several RCWs;
- required the WA Department of Transportation to establish an alternative fuels corridor pilot project along I-5. (RCW 47.38.070);
- required implementation of the Commute Trip Reduction program required from all large employers. (RCW 70.94.537);
- adopted the Energy Independence Act (Initiative 937), which sets energy conservation and renewable energy targets. Large utilities must acquire renewable resources like wind and solar to meet part of their electricity needs and must implement all cost-effective energy-efficiency measures. (RCW 19.285);
- required as part of State Energy Codes that are adopted from 2013 through 2031 must incrementally move towards achieving seventy percent reduction in annual net energy consumption for new residential and commercial buildings by 2031. (RCW 19.27A.160);
- required that the WA Department of Commerce develop and implement a strategic plan (by December 31, 2010) for enhancing energy efficiency in and reducing greenhouse gas emissions from homes, buildings, districts, and neighborhoods (RCW 19.27A.150). The strategic plan must be used to help direct the future code increases in RCW 19.27A.020. The strategic plan needs to identify barriers to achieving net zero energy use in homes and buildings and identify how to overcome these barriers in future energy code updates and through complementary policies;
- required that all new electric generating resources, including those under long term contract, must meet a greenhouse gas emission performance standard. (RCW 80.80.040);
- required net metering for all small renewable energy systems (RCW 80.60); and

- required that State Agencies financing infrastructure and economic development projects must take into consideration GHG emissions reduction goals and reduction in vehicle miles traveled. (RCW 70.235.070).

Additional analysis of transportation-related GHG emissions is provided in **Section 3.11 – Transportation** of this Final EIS.

Construction Mitigation

Construction-related impacts that cause a temporary increase in emissions do not have to be taken into account as part of a conformity determination (WAC 173-420-100).

All construction-related development that is proposed within Tacoma is required to comply with relevant federal, state, and local air quality regulations. In addition, the City requires that air quality control plans be implemented, which include best management practices (BMP) to control fugitive dust and emissions from diesel construction equipment. Typical construction-related mitigation includes:

- using water sprays or other non-toxic dust control methods on unpaved roadways,
- minimizing vehicle speeds while traveling on unpaved surfaces,
- preventing the track out of mud onto public streets,
- covering soil piles when practical,
- minimizing work during periods of high winds when practical,
- maintaining construction equipment engines according to manufacturers' specifications, and
- minimizing idling of equipment while not in use.
- use of ultra-low sulfur diesel fuel (ULSD)
- traffic management plan be in place during construction and any alternative routes will be well signed

Construction contractors are required to comply with all relevant federal, state, and local air quality regulations, including the preparation of a plan for minimizing dust and odors. WAC 173-420-100 states that construction-related impacts that cause a temporary increase in emissions do not have to be taken into account in a conformity determination.

Operational Mitigation

It is expected that the City will adopt the **North Downtown Subarea Plan** and the action alternative noted in this Final EIS. As such, the goals of the development alternative will be to shift mode share from private automobiles to walking, biking, and transit. Specifically, the following recommendations in the Subarea Plan mitigate impacts of vehicular use on air quality, including carbon monoxide (CO), ozone (O₃) and GHGs:

- RECOMMENDATION M-3: Establish specific thresholds of significance for transit service.
- RECOMMENDATION M-6: Develop and implement a phased-in developer impact fee system to fund multimodal transportation infrastructure investments as North Downtown builds out.
- RECOMMENDATION M-8: As the Subarea redevelops, consider implementation of

Universal Transit Pass Programs and/or a reduction of the employee threshold for the requirement of Commute Trip Reduction Programs.

- RECOMMENDATION M-9: Work with Sound Transit to secure Small Starts funding for the Tacoma LINK light expansion project.
- RECOMMENDATION M-11: Collaborate with Sound Transit to share responsibility for improvements that support multimodal access to the future stations on the Link expansion.
- RECOMMENDATION M-12: Establish a citywide policy that prioritizes projects to improve non-motorized access to Link stations.
- RECOMMENDATION M-13: Designate the following streets on the proposed Tacoma Link expansion alignment as Transit Priority Streets: Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr Way.
- RECOMMENDATION M-14: Apply the City of Tacoma's Mixed-Use Center Complete Streets Design Guidelines to Transit Priority Streets on the Tacoma Link expansion alignment.
- RECOMMENDATION M-15: Actively engage Sound Transit to collaborate on station siting and design that will most effectively leverage the transit investment and support North Downtown's vision and goals.
- RECOMMENDATION M-17: Implement the City's proposed active bicycle infrastructure projects in North Downtown as identified in the Mobility Master Plan.
- RECOMMENDATION M-18: Implement pedestrian improvements to the North Downtown problem intersections identified in the in the Mobility Master Plan.
- RECOMMENDATION TION M-19: Implement the City's proposed pedestrian connector projects in North Downtown as identified in the Mobility Master Plan.

3.2.4 Unavoidable Adverse Impacts

With adherence to applicable codes and regulations, as well as the mitigation measures noted above, no significant unavoidable adverse impacts are anticipated relative to air quality resources under any of the proposed alternatives.

3.3 WATER

This section addresses the effects of the proposed alternatives on water resources (i.e., groundwater, wetlands, stormwater, Thea Foss Waterway, and flood hazard areas) located within or proximate to the North Downtown Subarea. Information contained in this section is based on readily available secondary sources of data; primary research, such as project-specific water quality monitoring or modeling have not been conducted as part of this analysis.

3.3.1 Affected Environment

Groundwater

Tacoma's most important source of groundwater is the South Tacoma Channel, an approximately 4-mile long valley that is located in the northwest part of the Clover-Chambers Creek Watershed (see **Figure 3.3-1**). The South Tacoma Channel's geology is characterized by highly porous sands and gravels; these geologic factors make this aquifer not only highly productive but also highly susceptible to contamination. The City of Tacoma Water Division has extensively developed the groundwater resources of the South Tacoma Channel through the construction of a well field consisting of 13 high-yield production wells. Groundwater from the channel produces about 10 percent of the 80,000,000 gallon per day average demand for Tacoma Water, and about 36 percent of the 140,000,000 gallon per day peak water demand.

A clear relationship exists between uses of land and the quantity and quality of groundwater. Rainfall replenishes the aquifer in a process known as recharge. Contaminants from land use activities, if not controlled, can seep into the groundwater. The City of Tacoma's policy is to emphasize prevention, and to commit to a long-term effort to adopt and implement groundwater protection programs. Effective groundwater protection requires the combined efforts of a number of governmental departments and agencies, including Tacoma Water, Pierce County, the City of Lakewood, the Tacoma-Pierce County Health Department, Washington State Department of Health, and others.

Generally, groundwater in the North Downtown Subarea is of good quality. However, depending on location and intensity of adjacent urban uses, groundwater deposits can be contaminated by unfiltered stormwater runoff containing surface fertilizers, oil and grease pollutants and on occasion, by animal wastes. The groundwater deposits may be tapped for agricultural or commercial purposes, but can be limited for public consumption in some areas.

Wetlands

Wetlands are land areas that are inundated or saturated with surface water or groundwater at a frequency and duration to support vegetation adapted to life in saturated soil conditions. Wetlands generally include small lakes, ponds, streams, wet meadows, shallow or deep marshes, bogs and swamps that are inundated or saturated by surface or groundwater at a frequency and duration to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands slow and store floodwaters, reduce shoreline erosion from wind and tidal action and help recharge groundwater supplies. Wetlands function naturally to improve water quality by

filtering out sediments, using excess nutrients and breaking down some toxic chemicals. Loss of wetlands can result in degraded water quality, soil erosion, increased public safety and property damage risk, and loss of open space and wildlife habitat.

A variety of Federal and State laws are now in effect which help control wetland loss. Wetlands in Tacoma are designated in accord with the Washington State *Wetland Identification and Delineation Manual*¹ and evaluated using the Washington Department of Ecology (DOE) 5 class rating system. An additional “wetlands and/or streams of local significance” designation protects wetlands and/or streams to a degree higher than that afforded by strict application of the state and local criteria.

The City of Tacoma has mapped its wetlands as shown in **Figure 3.3-2**. The majority of Tacoma’s original wetlands have been filled and developed into commercial, industrial or residential land uses. There are no wetlands of local significance² or wetlands of any kind located within the North Downtown Subarea. There are some “high-probability” wetlands near the Subarea boundary, to the east of Schuster Parkway NDT boundary on the hillside below Stadium High School.

Stormwater

Surface water drainage, known as stormwater, is generated when rainfall encounters hard or impervious surfaces. The stormwater runoff generated from roadways, roofs, parking lots, and other impervious surfaces created by urban development is typically of a higher volume than what occurred in a pre-developed state. Runoff from roadways, driveways, and parking lots can transport pollutants such as gas and oil as well as residues from pesticides, fertilizers, and other chemicals used in lawn care, as well as animal waste in agricultural areas. This “non-point” source pollution accumulates as water runs over impervious surfaces toward a receiving body of water.

Stormwater in the North Downtown Subarea is collected through a system of catch basins and a network of piped storm sewers that are located within the street rights-of-way. The North Downtown Subarea drains into the Thea Foss Waterway, Commencement Bay and ultimately Puget Sound. Stormwater management in Tacoma is managed by the City Public Works Department’s Surface Water and Environmental Compliance Sections of the Environmental Services, Science and Engineering Division. Responsibilities include:

- Inspecting business activities and permitting and inspecting new construction projects.
- Collecting and evaluating stormwater and sediment quality monitoring data.
- Implementing a source control and monitoring program focused in the watershed of the Thea Foss Waterway Superfund Cleanup, and enhancing habitat areas to restore beneficial uses.
- Mapping, maintaining and cleaning a stormwater system that includes approximately 575 miles of storm pipe, 10,000 manholes, 18,300 catch basins, 400 outfalls, 4 pump

¹ 1997 Washington State Wetlands Identification and Delineation Manual, available online here: <https://fortress.wa.gov/ecy/publications/publications/9694.pdf>

² A wetland of local significance (WOLS) is described by the Washington State Department of Ecology as any wetland, identified and adopted by a local government as part of its Planning process, following public review and appeals, and satisfying certain criteria. The purpose of criteria for WOLS is to provide ways for local government to protect wetlands within the wetlands rating system to a degree higher than that afforded by strict application of the other state criteria.

stations, and 47 stormwater ponds and other treatment and flow control facilities.

- Rehabilitating and replacing aging infrastructure and improving the storm system with capital projects to address identified water quantity and quality issues.
- Providing public education about stormwater and surface water management and sharing information with staff from federal, state and neighboring municipal governments, environmental groups, businesses and interested citizens.
- Participating in regional watershed councils and committees.
- Ensuring the city activities and operations are in compliance with National Pollutant Discharge Eliminations System (NPDES) permit requirements.

Thea Foss Waterway

The North Downtown Subarea includes shoreline parcels on the Thea Foss Waterway. The nearshore environment along the Foss Waterway is intensely developed and highly altered, with minimal vegetated areas remaining. Shoreline modifications include docks and bulkhead structures, as well as large overwater piers and structures that are supported by pilings.

Under EPA's Superfund Program, contaminated bottom sediments were remediated in the Thea Foss and the Wheeler-Osgood Waterways at a cost of \$105,000,000. Sources of Contaminants of Concern (COCs) continue to exist in the drainage basins and are conveyed to the Waterways via stormwater (municipal and private), aerial deposition, marinas, and groundwater seeps. The contaminants identified as having the greatest potential to affect sediment quality following the cleanup action include polycyclic aromatic hydrocarbons (PAHs) and phthalates.

Under a Unilateral Administrative Order dated September 30, 2002, and a Consent Decree with EPA dated May 9, 2003, Tacoma implemented a stormwater monitoring and source control strategy for the municipal storm drains entering the Thea Foss and Wheeler-Osgood Waterways to help provide long-term protection of sediment quality in the waterways. The strategy uses a multifaceted approach consisting of aggressive source control efforts, a comprehensive monitoring program, a computer model to predict impacts, and a decision matrix to identify the need for additional source controls; parts of the program exceed NPDES requirements. Results to-date are provided in the *Thea Foss and Wheeler-Osgood Waterways 2009 Source Control and Water Year 2009 Stormwater Monitoring Report*. All trends indicated decreasing concentrations of contaminants.

Basin-wide stormwater line cleaning of three entire drainage basins was completed during summer 2007 and 2008 to remove residual sediments in the storm drains. Contaminants seen in sediments in the Foss Waterway may not be from new sources, but from legacy contamination in the pipe that could be contaminating stormwater or base flow through re-suspension and/or dissolution. The cleaning appears to have been most effective at removing lead and PAHs from stormwater.

Flood Hazard Areas

Located within the Department of Homeland Security, the Federal Emergency Management Agency (FEMA) is responsible for coordinating the federal government's response to natural and manmade disasters. A service that FEMA provides includes mapping the approximate locations of frequently flooded areas on Flood Insurance Rate Maps (FIRM). Additional

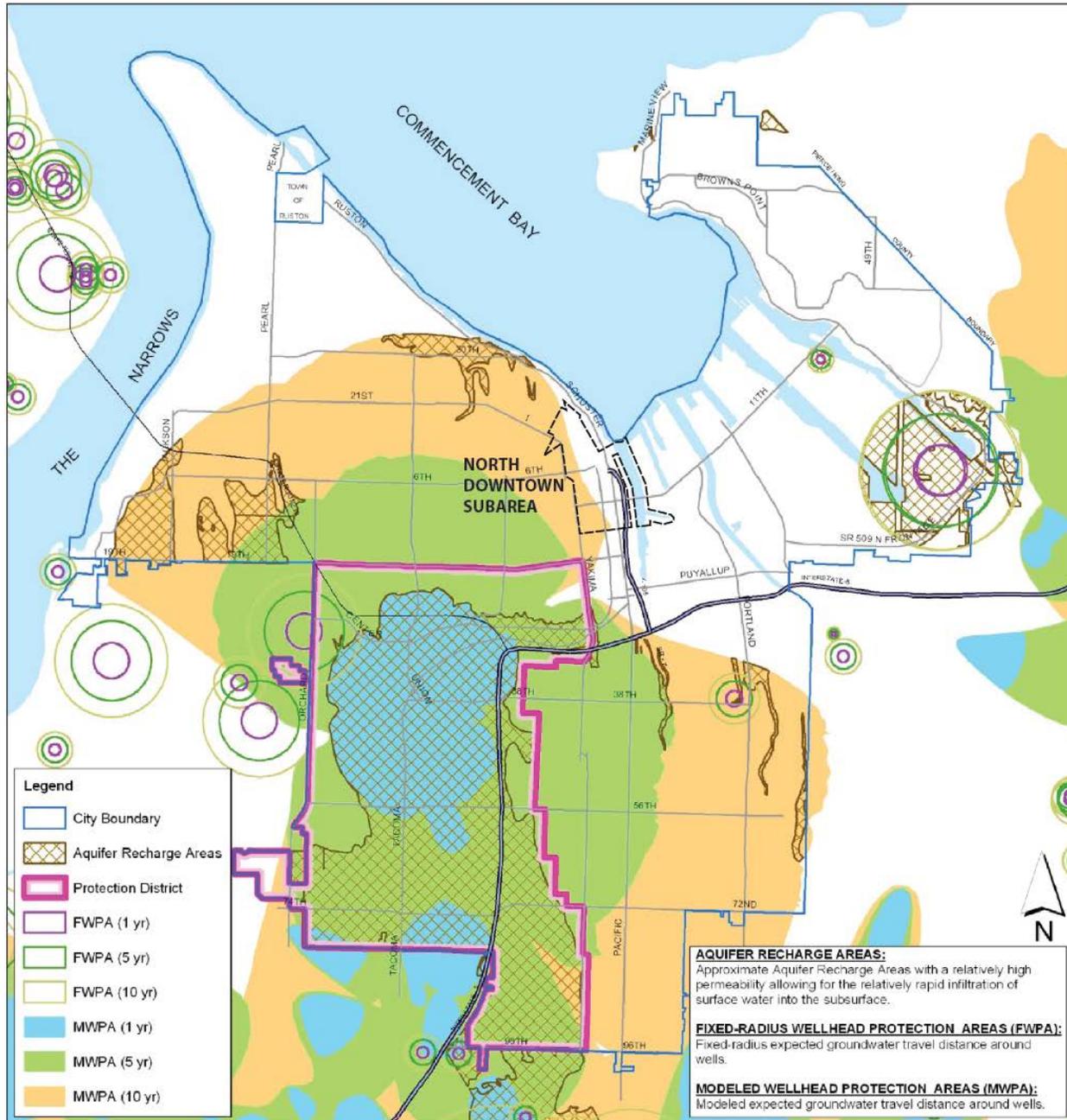
information is found on community panel maps prepared by FEMA for the National Flood Insurance Program (NFIP), which identify the following flood zones:

- **Zone A:** This is an area of 100-year flood with base flood elevations and flood hazard factors undetermined; and
- **Zone B:** These are areas located between the 100-year flood and 500-year flood, or certain areas subject to 100-year flooding with average depths less than one foot, or where the contributing drainage area is less than one square mile, or areas protected by levees from the base flood.

Tacoma's Flood Hazard Areas are mapped in **Figure 3.3-3**. Within the North Downtown Subarea the only identified flood zone is along the shoreline of Commencement Bay and the Foss Waterway, which is designated Zone A to an elevation of 9 ft. above sea level. Outside the Subarea, segments of the Puyallup River east of Interstate 5 in Fife and Puyallup are subject to Zone B or 500-year flood occurrences.

The potential impacts of climate change on mean sea level elevation in Commencement Bay and the Thea Foss Waterway are difficult to accurately predict. A 2008 report by the University of Washington (UW) Climate Impacts Group in collaboration with DOE termed *Sea Level Rise in the Coastal Waters of Washington State* projects that sea level rise by 2100 could range from between 6 and 50 inches. The Flood Hazard Areas identified on the Foss Waterway may be more vulnerable to the potential impacts of sea level rise due to the susceptibility to flooding in these areas.

Figure 3.3-1: Aquifer Recharge Areas



This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration with funds appropriated for the Coastal Zone Management Act of 1972 through a grant to the Washington Department of Ecology. The views expressed herein are those of the authors and do not reflect the views of NOAA or any of its sub-agencies.



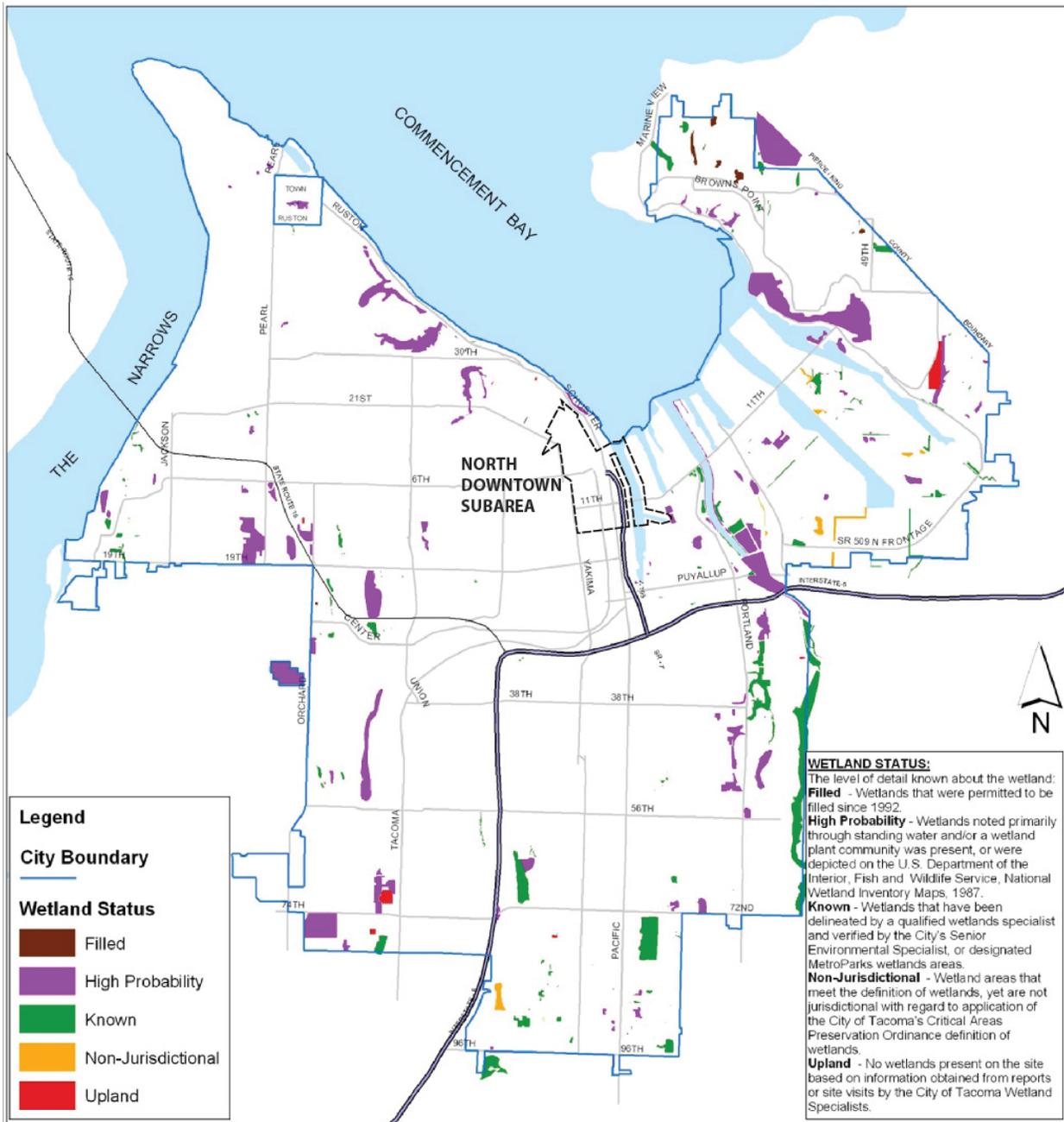
City of Tacoma
Community & Economic Development



NOTE: This map is for reference only.



Figure 3.3-2: Wetlands



This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration with funds appropriated for the Coastal Zone Management Act of 1972 through a grant to the Washington Department of Ecology. The views expressed herein are those of the authors and do not reflect the views of NOAA or any of its sub-agencies.



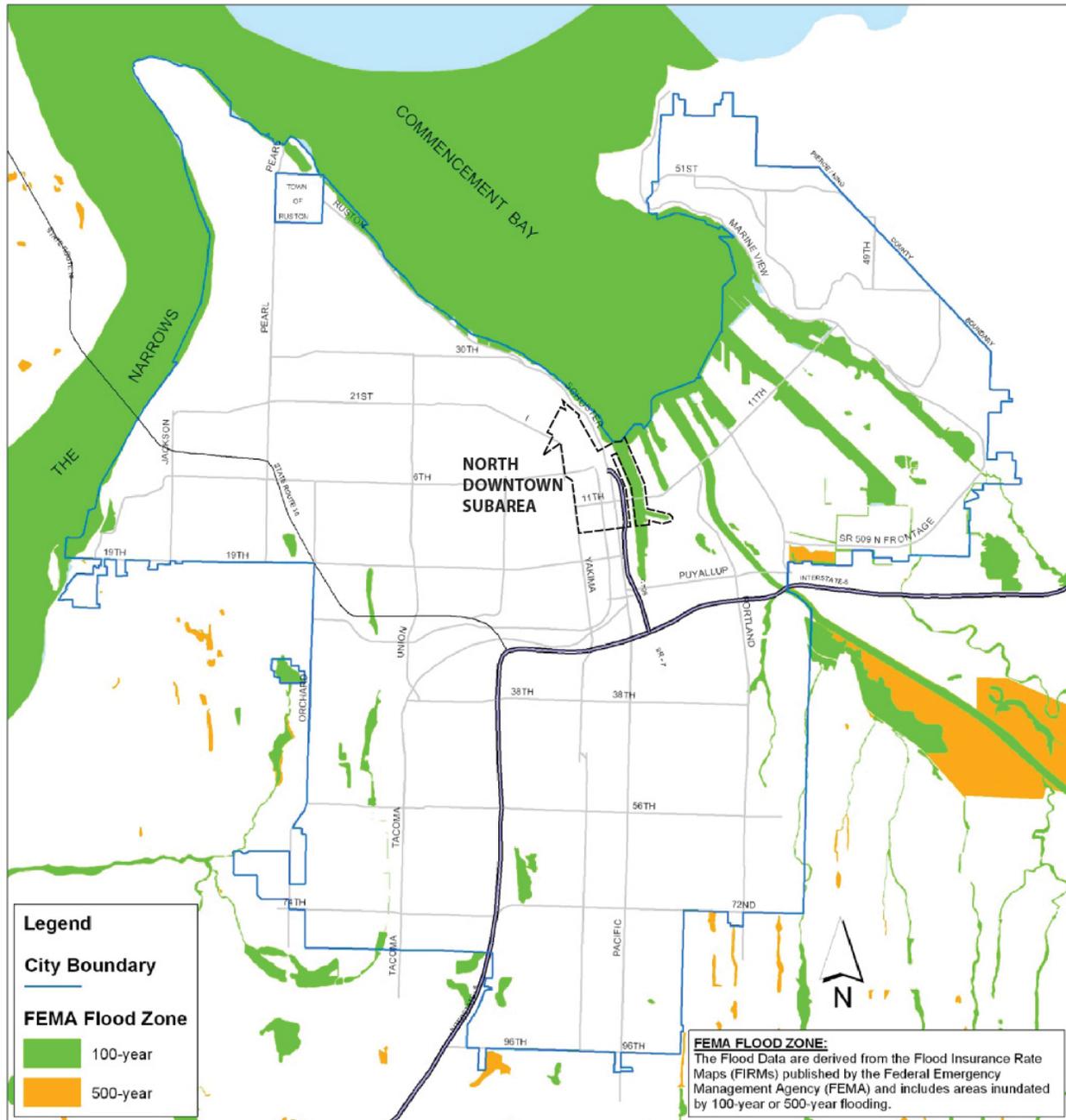
City of Tacoma
Tacoma Economic Development Department



NOTE: This map is for reference only.



Figure 3.3-3: Flood Hazards



This map was funded in part through a cooperative agreement with the National Oceanic and Atmospheric Administration with funds appropriated for the Coastal Zone Management Act of 1972 through a grant to the Washington Department of Ecology. The views expressed herein are those of the authors and do not reflect the views of NOAA or any of its sub-agencies.



**City of Tacoma
Tacoma Economic Development Department**



NOTE: This map is for reference only.



3.3.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to water resources would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposed development alternative would continue the re-development trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. As such, the potential exists for impacts to water resources within the Subarea. However, considering the fact that such development is projected to occur over several decades and that water-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the North Downtown Subarea would not result in any significant water-related impacts. Such development would be required to fully comply with existing development regulations, as noted in part **3.4.3** of this section.

If not properly regulated, designed, or managed, urban development could result in impacts to groundwater in the Subarea, which may affect the City's aquifer and domestic water supplies. Stormwater runoff can carry sedimentation and other pollutants (e.g., automobile oils and greases, fertilizers, pesticides, effluent from failed septic systems, and industrial discharges, etc.). The degree of erosion and sedimentation-related impacts would be influenced by the timing of construction, the amount of soil exposed to wind and water erosion, and the effectiveness of construction-related and long-term erosion control measures.

Without effective grading and landscaping measures, development on slopes can cause severe erosion risks with irreversible damage to surface water runoff and stormwater collection outfalls into sensitive wetlands and anadromous fish-bearing waters including Puget Sound. Inadequately located or designed urban infrastructure including roads, parking lots, and other improvements that are not sited on level lands and/or that are not planted with adequate ground covering materials can cause silting conditions to contaminate surface water and stormwater systems and fill and pollute plant and fish-bearing waters including Puget Sound. The degree of erosion and sedimentation may be affected by several factors, including the timing of construction; degree of vegetation removed; amount of un-vegetated soil or fill material to be exposed to the forces of rainfall and runoff; effectiveness of on-site erosion control measures; and the implementation of required best management practices

In general, development may increase impervious surfaces thereby increasing the quantity of surface water runoff that, if not properly managed, can discharge pollutants into surface waters, including automobile oils and greases, fertilizers, pesticides, effluent from failed septic systems, and industrial discharge sources. These pollutants may degrade fish habitat and threaten the use of surface and groundwater for domestic water supplies. However, given the stringent stormwater requirements already in place in the City of Tacoma, in the case of North Downtown, redevelopment can be expected to improve the quality of stormwater runoff for the following reasons:

- Since most development would occur on previously developed sites, the amount of impervious surface would not increase in most cases.
- Regulations establish strict limits on runoff volumes from development sites that in many cases can be expected to reduce runoff volumes compared to existing conditions.
- The City’s existing policies that promote “low-impact development” can be expected to improve stormwater quality as redevelopment occurs.
- Redevelopment on contaminated sites will require cleanup of soils, which can eliminate a potential source of polluted runoff (see **Section 3.5 – Environmental Health** of this Final EIS).

In sum, large-scale redevelopment is likely to have significant positive impacts on stormwater quality.

At the regional scale, redevelopment in North Downtown also has the potential to improve water quality. Each of the development alternatives would help direct regional growth into a previously developed urban area, thereby reducing development on less developed or undeveloped lands on the urban fringe. Compared to urban infill, new development in previously undeveloped suburban or rural areas is likely to have greater adverse impacts on water quality for the following reasons:

- Suburban areas have more roads and more driving per capita that leads to greater amounts of polluted runoff streets.
- Development in previously undeveloped areas typically involves more conversion of surfaces from pervious to impervious states
- Previously undeveloped areas on the urban fringe are more likely to have sensitive areas such as wetlands or salmon habitat that are particularly sensitive stormwater runoff.
- Higher-density urban development has less impervious surface on a per capita basis.

As is the case with any previously developed area, abandoned wells may be present in the North Downtown Subarea. Abandoned wells present extreme concerns to children, adults and animals, as well as health risks as a result of groundwater contamination. State law mandates certain procedures for decommissioning abandoned wells and anyone who violates the regulations can be held accountable. As a result, development in the North Downtown Subarea could help remove risks caused by any abandoned wells that may exist in the Subarea.

The other water-related issue noted in the Affected Environment portion of this section is Flood Hazard Areas. With an overall rise in sea level, the flood hazard potential would continue. However, redevelopment as a result of the development alternatives would involve modifying redevelopment sites to remove or significantly lessen this potential occurrence.

3.3.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations, and other mitigation, as noted below.

Comprehensive Plan -- Environmental Policy Element

The Environmental Policy Element of Tacoma’s *Comprehensive Plan* identifies the goals, policies, guidelines, and requirements of the State Growth Management Act (GMA) (RCW 36-70A-170) “to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property.”

The Environmental Policy Element establishes the following policies concerning groundwater:

Policy	Intent
E-ARA-1 Groundwater Protection	<i>Protect and preserve the quantity and quality of Tacoma's groundwater supply.</i>
E-ARA-2 Natural Area Retention	<i>Encourage the retention of sufficient natural areas to maintain a balance between development and the need for adequate recharge of the aquifer in order to assure a continued adequate groundwater supply.</i>
E-ARA-3 Management Techniques	<i>Encourage the development and use of alternative mechanisms for preventing and reducing the risk of groundwater contamination (e.g., by process or product changes) and disposal (e.g., through resource recovery and recycling).</i>
E-ARA-4 Performance Criteria	<i>Encourage the development of performance criteria and guidelines which address siting, design, construction and operation of commercial and industrial structures and activities to prevent groundwater contamination.</i>
E-ARA-5 Economic Benefit	<i>Coordinate with the Chamber of Commerce and the Economic Development Board to ensure that the groundwater protection program is used as a positive factor in attracting new business and industry to the area.</i>
E-ARA-6 Groundwater Protection Program	<i>Support a coordinated effort of City, County, State and Federal departments and agencies to develop a comprehensive program that will ensure incorporation of groundwater protection measures into all potentially disruptive development activities.</i>
E-ARA-7 Public Awareness Education	<i>Support a public awareness/education program for users and handlers of toxic and hazardous materials and the general public concerning groundwater pollution problems and necessary remedial actions.</i>
E-ARA-8 Monitoring	<i>Support an ongoing effort to monitor groundwater quality in order to determine the effectiveness of the groundwater program over time.</i>

The Environmental Policy Element also establishes the following policies concerning wetlands:

Policy	Intent
E-ARA-8 Monitoring	Support an ongoing effort to monitor groundwater quality in order to determine the effectiveness of the groundwater program over time.
E-WS-1 Preservation of Wetlands	Strive to preserve and maintain desirable small bodies of water or wetlands such as holding ponds basins, creeks, stream corridors and

	marshes for open space, flood control, drainage, water quality, aquifer recharge and habitat purposes.
E-WS-2 No Net Wetland Loss	Ensure that in the short term there is no net loss of wetland, stream, and aquatic habitat functions and acreage and, in the long term, there is a measurable gain of wetland, stream and aquatic habitat function and acreage.
E-WS-3 Wetland Protection	Ensure that new development adjacent to a wetland preserve, protect and improve the wetland and provide vegetated habitat or buffer adjacent to the wetland adequate to protect its natural functions.
E-WS-4 Wetland Development	Allow development in wetlands only if impacts are unavoidable and such development can successfully mitigate potential hazards and compensate for wetland loss.
E-WS-5 Wetland Filling/ Draining	Prohibit indiscriminate filling or draining of wetlands and stream corridors.
E-WS-6 Salt Water Intrusion	Discourage draining of wetlands lying on marine shorelands if such activity will cause salt water intrusion.

The Environmental Policy Element establishes the following policies regarding water quality:

Policy	Intent
E-WQ-1 Water Quality	<i>Recognize the need for an increase in the level of sewage treatment and potential treatment of stormwater to meet the National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater permit requirements.</i>
E-WQ-2 Retain Vegetation Near Water	<i>Encourage the retention of natural vegetation along lakes, ponds, and streams, where appropriate, in order to help preserve water quality, protect fishery resources and control erosion and runoff.</i>
E-WQ-3 Shoreline	<i>Encourage cooperation between public and private efforts in the management and development of Tacoma's shorelines.</i>

The Environmental Policy Element establishes the following policies concerning stormwater runoff:

Policy	Intent
E-WQ-1 Water Quality	<i>Recognize the need for an increase in the level of sewage treatment and potential treatment of stormwater to meet the National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater permit requirements.</i>
E-SWR-1 On-Site Retention Facilities	<i>Encourage the use of on-site retention and water quality facilities that are designed in accordance with the City's Surface Water Management Manual where not prohibited by identified critical drainage areas and the South Tacoma Groundwater Protection District.</i>
E-SWR-2 Natural Watercourses	<i>Prohibit any filling of natural watercourses without adequate mitigation, proper environmental processing and permitting, and provisions to</i>

	<i>accommodate the existing drainage through the modified watercourse in accordance with the City's regulations.</i>
<i>E-SWR-3 Natural Land Features and Erosion</i>	<i>Protect existing natural gulches, watercourses, ravines, and similar land features from the adverse erosional effects of increased storm water runoff that is generated by new development.</i>

Shoreline Master Program

The City of Tacoma recently completed an update to its Shoreline Master Program (SMP) in compliance with the State's Shoreline Management Act³ and the SMP is currently undergoing review by DOE. With regard to Flood Prevention and Flood Damage Minimization, the SMP establishes the following objectives:

- Manage flood protection in accordance with the City's current flood hazard regulations; Sections 2.12.040 through 2.12.050, Flood Hazard and Coastal High Hazard Areas, and Chapter 12.08 of the City's *Surface Water Management Manual* provide general and specific flood hazard protection.
- Participate in regional efforts on flood protection issues, coordinating with the Federal Emergency Management Agency (FEMA), the State of Washington, Pierce County as well as other jurisdictions, particularly those with jurisdiction over the Puyallup River and neighboring Puget Sound shorelines.

Other Mitigation Measures

The North Downtown Subarea Plan includes the following recommendation that helps provide mitigation for potential negative impacts to water quality:

- RECOMMENDATION OS-3: Develop partnerships and seek funding from the City of Tacoma Public Works Department, the Center for Urban Waters, Citizens for a Healthy Bay, the Puget Sound Partnership, the Department of Ecology, the U.S. EPA, and other organizations to develop natural drainage features in existing and planned open spaces.

The North Downtown Subarea Plan includes the following recommendations intended to promote brownfield remediation that provide mitigation for the potential negative impacts of contaminated soil on water quality:

- RECOMMENDATION LU-8: Identify all known sites of hazardous materials including former gas stations and laundries, develop appropriate mitigation strategies, and create a funding source for proactively mitigating the sites to support redevelopment.
- RECOMMENDATION LU-9: Adopt a policy that commits the City of Tacoma to the pursuit of strategies for the generation and dissemination of information about brownfield sites on a Subarea-wide basis.
- RECOMMENDATION LU-10: Continue to pursue grants from the EPA and other sources to fund area-wide brownfield assessment work.
- RECOMMENDATION LU-11: Initiate an internal City program to begin consolidating and integrating all available sources of brownfield data with the govME GIS system.
- RECOMMENDATION LU-12: Based on an inventory compiled from existing brownfield

³ WAC 173-26-201(2)(C)

data sources, identify key information gaps and prioritize sites for Phase I and Phase II ESAs.

- RECOMMENDATION LU-13: Pursue grants from the EPA and State sources (the State can only fund public or non-profit owned property) to fund Phase I and Phase II ESAs.
- RECOMMENDATION LU-14: Consider up front brownfield remediation for City-owned properties as a strategy to encourage redevelopment of high priority catalyst sites in North Downtown.
- RECOMMENDATION LU-15: Pursue partnerships with private landowners to enable brownfield remediation on high-opportunity private redevelopment sites in North Downtown.
- RECOMMENDATION LU-16: Pursue grants from the EPA, Department of Ecology, Department of Commerce and other sources to fund brownfield remediation on sites that have been identified as high-priority redevelopment sites in North Downtown.

As noted previously (see **Section 3.3.2** above), redevelopment has the potential to improve the quality of stormwater runoff and reduce adverse impacts on water quality. This is because, in most cases, new development must meet more stringent stormwater management requirements than what it replaces. In addition, regulations require soil remediation for development projects on contaminated sites, which permanently removes a potential source of contamination to both surface and ground water (for details see **Section 3.5 – Environmental Health** of this Final EIS). Therefore, redevelopment itself provides mitigation for potential water quality impacts. Similarly, at the regional scale, redevelopment itself provides mitigation for water quality impacts region-wide.

The following mitigation measures apply to all alternatives.

- **City of Tacoma Stormwater Management Program (SWMP)**

The Department of Ecology issues National Pollutant Discharge Elimination System (NPDES) Stormwater Permits for the City of Tacoma. The City of Tacoma Stormwater Management Program (SWMP) guides the operation of Tacoma’s Surface Water Management Utility to comply with the NPDES permit. SWMP policies and measures are implemented in Chapter 12.08 of the Tacoma Municipal Code.

The SWMP was updated in 2010 to reflect NPDES modifications issued by DOE on June 17, 2009. On August 1, 2012 DOE reissued, with limited changes, the Phase I municipal stormwater permit, effective September 1, 2012 – July 31, 2013. DOE also reissued the updated 2013-2018 Phase I permit on August 1, 2012 that will become effective on August 1, 2013. The City’s 2010 SWMP does not yet reflect these changes, but in general new City-issued permits will require tighter controls on stormwater than the existing permit process.

The SWMP establishes a wide range of NPDES compliance measures that provide mitigation for potential impacts on stormwater that could be caused by development within the South Downtown Subarea. In particular, section S5.C.5 addresses Development Regulations to Control Runoff from New Development and Redevelopment, with the intention to ensure that:

- proposed land use actions are conditioned with stormwater minimum development requirements;

- construction projects are inspected for erosion and sediment control during construction and installation of permanent stormwater management facilities; and
- existing stormwater facilities are inspected for ongoing maintenance.

Compliance measures include the following:

- ongoing program to control stormwater impacts from development, redevelopment, and construction;
 - adopt stormwater and erosion control standards equivalent to the 2005 *Stormwater Management Manual for Western Washington*;
 - revise development standards to incorporate Low Impact Development (LID) projects;
 - legal authority to enforce maintenance standards for private stormwater facilities approved by the City of Tacoma;
 - permitting, plan review, inspection, and enforcement of standards equivalent to the 2005 Manual;
 - Notice of Intent (NOI) forms for Construction and Industrial Stormwater General Permits; and
 - training for development permitting and construction inspection personnel.
- **Industrial Stormwater General Permit**

In 2010, DOE reissued the Industrial Stormwater General Permit (ISWGP) that includes new requirements. It is anticipated that under DOE's ISWGP and the existing Construction Stormwater Permit, contaminants in stormwater will be reduced over time from industrial facilities and construction sites.

- **City of Tacoma Stormwater Compliance, Maintenance, and Operations**

The City of Tacoma has adopted the following compliance and maintenance measures to mitigate the potential impacts of stormwater runoff:

- The City of Tacoma's Environmental Services Division is generating an inventory of potential stormwater pollutant generating sites for source control inspections. The list of 4,907 commercial and business facilities and 1,401 multi-family facilities is compiled and distilled from city stormwater utility account information.
- A wastewater and stormwater survey has been developed and attached to Tacoma's annual business license renewal forms to identify potential pollutant generating sites with existing stormwater facilities and the maintenance frequency of those facilities.
- All Pollution Complaint responses are investigated promptly and coordinated with other agencies, as appropriate. The complaints are documented in the Source Control database and are used to identify other pollutant generating sources, such as mobile or home-based businesses.
- Environmental Compliance staff review all new and renewed home occupational business licenses. Inspectors are trained to regularly perform drive-by observations while travelling through areas of concern.
- Environmental Compliance has adopted a geographic inspection strategy that focuses on door-to-door compliance inspections in assigned areas throughout

the city. The inspectors inspect a minimum of 20% of these sites annually (including follow up compliance inspections at the same site toward the 20% inspection rate) to assure BMP effectiveness and compliance with source control requirements.

- Since 2003, Environmental Compliance has been using a custom database used for tracking spills, complaints, business inspections and flooding claims. Regular updates and refinements have been made to facilitate advanced data management for tracking inspections.
- Environmental Compliance uses incremental enforcement as defined in the City's Draft Stormwater Compliance Policy and Tacoma Municipal Code 12.08. Enforcement procedures may include phone calls, reminder letters, follow-up inspections, warning letters, Notices of Violation, and civil penalties.
- Environmental Compliance inspectors contact DOE as standard operating procedure for all serious source control violations that present a severe threat to human health or the environment. In addition, Environmental Compliance requests assistance from DOE with non-responsive enforcement cases and continues to do so to facilitate prompt compliance.
- The City documents all inspection and enforcement activities in the Environmental Services inspection database and business inspection files.
- The allocation of maintenance resources within the Surface Water Utility is prioritized by the asset management program, which includes impacts to receiving waters as key criteria.
- Tacoma's stormwater outreach efforts include a school district environmental curriculum, car wash kits, catch basin stenciling program, and EnviroChallenger.

The City of Tacoma has adopted the following operations programs and measures to mitigate the potential impacts of stormwater runoff from streets and parking lots:

- Public Works employees follow the guidelines in the Regional Road Maintenance Endangered Species Act (ESA) Program (RRMP) for street and parking lot maintenance. The Regional Road Maintenance ESA Program provides a consistent, regional program designed to limit, reduce, or eliminate the prohibition on take of threatened species under the ESA 4(d) Rule. The Program Guidelines provide BMPs for maintenance work that reduces surface water impacts on receiving waters.
- The ESA guidelines and the BMPs listed in Tacoma's *Surface Water Management Manual* are implemented in maintenance of parking lots, streets, and highways that are owned or operated by the City, as well as for the maintenance activities listed in the NPDES Municipal Stormwater Permit Section S5.C.9.b.vi, including pipe cleaning, cleaning of culverts, ditch maintenance, street cleaning, road repair and resurfacing, snow and ice control, utility installation, vegetation management, dust control and pavement striping maintenance.
- The City provides documentation to DOE of the BMPs implemented under the ESA guidelines in the Annual NPDES Stormwater Report.
- Tacoma's Street Sweeping Program removes sediment and associated contaminants from street surfaces before it enters the municipal separate storm sewer system (MS4). The program provides street sweeping services on a scheduled rotation for major arterials, 12 business districts (including South

Downtown), and residential areas which are divided into 7 sweeping districts. The Sewer Transmission Maintenance Section also provides sweeping services as needed in response to emergency calls, special events, and customer requests.

- **Critical Areas Protection Ordinance**

The City's *Comprehensive Plan* policies on water-related critical areas are implemented through its Critical Areas Preservation Ordinance, which was updated in 2012, and in Chapter 13.11 of the Tacoma Municipal Code. The Growth Management Act requires local governments to protect critical areas, including critical aquifer recharge areas and wetlands. Best Available Science (BAS) was used to develop Tacoma's policies and development regulations to protect the functions and values of critical areas (WAC 365-195-900 through 365-195920). Typically, buffer zones are regulated around critical areas to preserve their functions.

- **Shoreline Master Program**

As shown by **Figure 2-3**, the North Downtown Subarea includes shoreline parcels along both sides of the Thea Foss Waterway. These areas fall into the City's Shoreline District and are subject to the City's Shoreline Master Program (SMP), including those areas located between the ordinary high water mark of Puget Sound and a line running parallel to and 200-feet upland of the ordinary high water mark. Section 6.82 of the SMP establishes regulations that pertain to water quality on the Foss Waterway.

The SMP provisions protect against adverse impacts to public health, to the land and its vegetation and wildlife, and to the waters of the state and their aquatic life. SMP policies and regulations prevent impacts to water quality and storm water quantity that would result in a net loss of shoreline ecological functions, or a significant impact to aesthetic qualities, or recreational opportunities. Relevant regulations include:

- Shoreline use and development shall incorporate measures to protect and maintain surface and ground water quantity and quality in accordance with all applicable laws and in such a manner as to ensure no net loss of ecological function.
- All proposed developments shall include measures to prevent contamination of surface waters, depletion and contamination of ground water supplies, and generation of increased surface runoff.
- All phases of development shall be consistent with TMC 12.08 and the City's current *Surface Water Management Manual* and shall provide an 'enhanced' level of surface water management.
- Best management practices (BMPs) for control of erosion and sedimentation shall be implemented for all development in shorelines through an approved temporary erosion and sediment control (TESC) plan, or administrative conditions.
- Low Impact Development (LID) techniques shall be considered and implemented to the greatest extent feasible throughout the various stages of development.
- All materials that may come in contact with water shall be constructed of materials that will not adversely affect water quality or aquatic plants or animals.

- Chemical pesticides using aerial spraying techniques within the shoreline jurisdiction shall be prohibited unless specifically permitted by the Washington Departments of Agriculture or Public Health.

- **Thea Foss Waterway Cleanup and Monitoring**

The Thea Foss Post-Remediation Source Control Strategy described above (Affected Environment) will provide ongoing assurance of water quality. Reduction of contaminant loads to the Foss Waterway is expected to continue through Tacoma’s implementation of stormwater source controls, as well as through the control of other sources (many of which are outside the city’s jurisdiction). In addition, through new development and redevelopment, stormwater runoff from industrial and commercial sites throughout Thea Foss Basin are being converted from untreated to treated runoff (i.e., removal of solids from stormwater runoff).

In 2010, as a result of a \$1,000,000 grant from DOE, the City began rehabilitating up to 25,000 linear feet of existing deteriorating stormwater collection and conveyance piping. Rehabilitation is focused on aging pipes that discharge into the Foss Waterway. The resulting reduction in inflow and infiltration is expected to reduce the contaminant load from existing defects (cracks, holes, etc.) in the aging system where potentially contaminated groundwater and soil from historic “hot spots” enter the system and ultimately discharge to the Foss Waterway.

- **Thea Foss Waterway Design Guidelines**

In 2011, the City adopted the *Thea Foss Waterway Design Guidelines*. These guidelines include a section on Low-Impact Development and standards to further mitigate stormwater runoff:

Guideline	Objective
3.10.1	Encourage the identification and characterization of all contaminated sites which adversely affect the City’s shoreline areas, surface waters, groundwater, and soils.
3.10.1	Minimize the amount of impervious surfacing (including the building footprint coverage) on a site through site planning and design.
3.10.2	Preserve existing and provide new vegetated areas to the maximum extent possible.
3.10.3	Maintain natural drainage patterns.
3.10.4	Seek to direct stormwater runoff from impervious areas into vegetated or pervious areas on the site rather than into the city stormwater system.
3.10.5	Stormwater control features, if required, should be located in close proximity to the impervious surfacing impact.
3.10.6	Small-scale stormwater control features that use natural systems, processes, and materials are preferred.
3.10.7	Site grading should encourage the sheet flow of stormwater runoff and lengthen runoff flow paths over permeable areas.
3.10.8	Ensure soils are appropriate for the intended stormwater control feature functions (such as runoff infiltration, flow control, and water quality treatment).
3.10.9	Green (vegetated) roofs and green walls are highly encouraged in the Thea Foss Waterway.

- **Washington State Department of Fish & Wildlife**

The Washington State Department of Fish & Wildlife (DFW) specifies guidelines for water quality (and sometimes quantity) impacts on downstream fish and shellfish resources that apply to projects of more than 5,000 square feet of impervious surface. DFW also requires pre- and post-development runoff rates be analyzed using a continuous simulation model (such as the US EPA HSPF computer program) or a rainfall event simulation model.

DFW guidelines also specify water quality best management practice guidelines for the development of bio-filtration channels for sedimentation and erosion control practices, and channel maintenance. DFW guidelines require cities bordering natural drainage features to develop stormwater runoff, operation, and maintenance ordinances. DOE has published a technical guidance manual for meeting DFW requirements.

3.3.4 Unavoidable Adverse Impacts

With application of water-related codes and regulations and mitigation measures noted above, no significant unavoidable adverse impacts to water resources are anticipated under any of the proposed alternatives.

3.4 PLANTS and ANIMALS

Information presented in this section addresses the effects of the proposed alternatives on plants and animals located within or proximate to the North Downtown Subarea. This information is based on readily available secondary sources of data; primary research has not been conducted for this analysis. The following information sources formed the basis of data that is presented in this section and are, hereby, incorporated by reference¹ into this Final EIS:

1. City of Tacoma Critical Areas Preservation Ordinance and Cumulative Impact Analysis;²
2. Washington State Critical or Priority Habitat and Species List³

3.4.1 Affected Environment

Plants

The North Downtown Subarea is an area that has been urbanized for well over 100 years. As depicted by **Figure 2-2** (in **Section II** of this Final EIS), the predominant land cover is urban surfaces (e.g., pavement and structures). The limited existing plant communities consist of a complex mixture of native, non-native and invasive plant species that are able to withstand exposure and competition with limited territorial requirements.

In the more residential portions of the Subarea (i.e. Stadium District and west hillside) vegetation is predominantly non-native trees and shrubs, ornamental herbs, and lawns. These landscaped areas are important as pervious surfaces where stormwater can infiltrate. However, they also represent non-point pollutant sources, because of chemicals commonly applied during landscape management and because of the presence of pet feces. In the wooded areas east of Stadium Way, vegetation is largely deciduous trees with an understory and ground cover of broadleaf shrubs, vines, herbs and grasses. Fern, moss, fungus and lichen species are also prevalent.

The extent and quality of tree coverage varies widely in North Downtown, but on average the Subarea is far below the City of Tacoma's target of 30 percent canopy coverage by the year 2030. In the Downtown Core and St. Helens, street trees are sparse on most streets, the most notable exceptions being the blocks along the east edge of Stadium Way and on the edges of Wright Park. Wright Park itself has a relatively high concentration of large trees. Various trees are also located in vacant and single-family private lots scattered throughout the Subarea. The Strategic Urban Forest Management Plan⁴ includes a street tree inventory in the Stadium Neighborhood Business District, finding that "Stadium has one of the highest tree populations among the districts." The study also estimated the total value of trees at \$487,000, and identified 107 potential planting sites.

¹ WAC 197-11-754 -- "Incorporation by reference" means the inclusion of all or part of any existing document in an agency's environmental documentation by reference (WAC 197-11-600 and 197-11-635).

² City of Tacoma, November 2011.

³ Washington Department of Fish and Wildlife, August 2008, revised December 2010.

⁴ The Strategic Urban Forest Management Plan and is available on the City of Tacoma website: <http://cms.cityoftacoma.org/enviro/UrbanForestry/sufmp-nbd.pdf>

Animals

Overview

The Open Space, Habitat and Recreation Element of the City's *Comprehensive Plan* has a section dedicated to Habitat Areas and Corridors. Open Space Habitat Areas are lands that support, nurture and preserve natural wildlife habitats and vegetation.

- **Habitat Areas** – These can range in size from a few hundred square feet to many acres and provide a broad range of benefits to the people of Tacoma, including low-impact recreation, health benefits, storm water retention, waterfront access, bird and wildlife observation, climate regulation, increased property values, improved air and water quality, and a greener more livable city. Many of the functions and values provided by habitat areas are dependent on connectivity with other habitat areas.
- **Habitat Corridors** – These areas contain Tacoma's most valuable undeveloped habitats. They are generally larger, geographically connected or contiguous areas that combine multiple habitat functions and features (such as streams, wetlands, slopes and larger contiguous habitat areas). The City's vision is to conserve and restore habitat for as much of these areas as possible. Reflecting their greater degree of habitat features and connectivity, designated Habitat Corridors are considered priority areas for habitat-related open space programs, including habitat acquisition and restoration. If feasible, Corridors that encompass existing development should be managed to enhance the habitat function of the overall Corridor via vegetation planting and maintenance and other approaches.

The Open Space, Habitat and Recreation Element of the City's *Comprehensive Plan* identifies Habitat Corridors; these are depicted in **Figure 3.4-1**. Within the Subarea, there is one designated Habitat Corridor that follows the heavily wooded hillside between Stadium Way and Schuster Parkway from South 7th Ave to beyond the northern boundary of the Subarea.

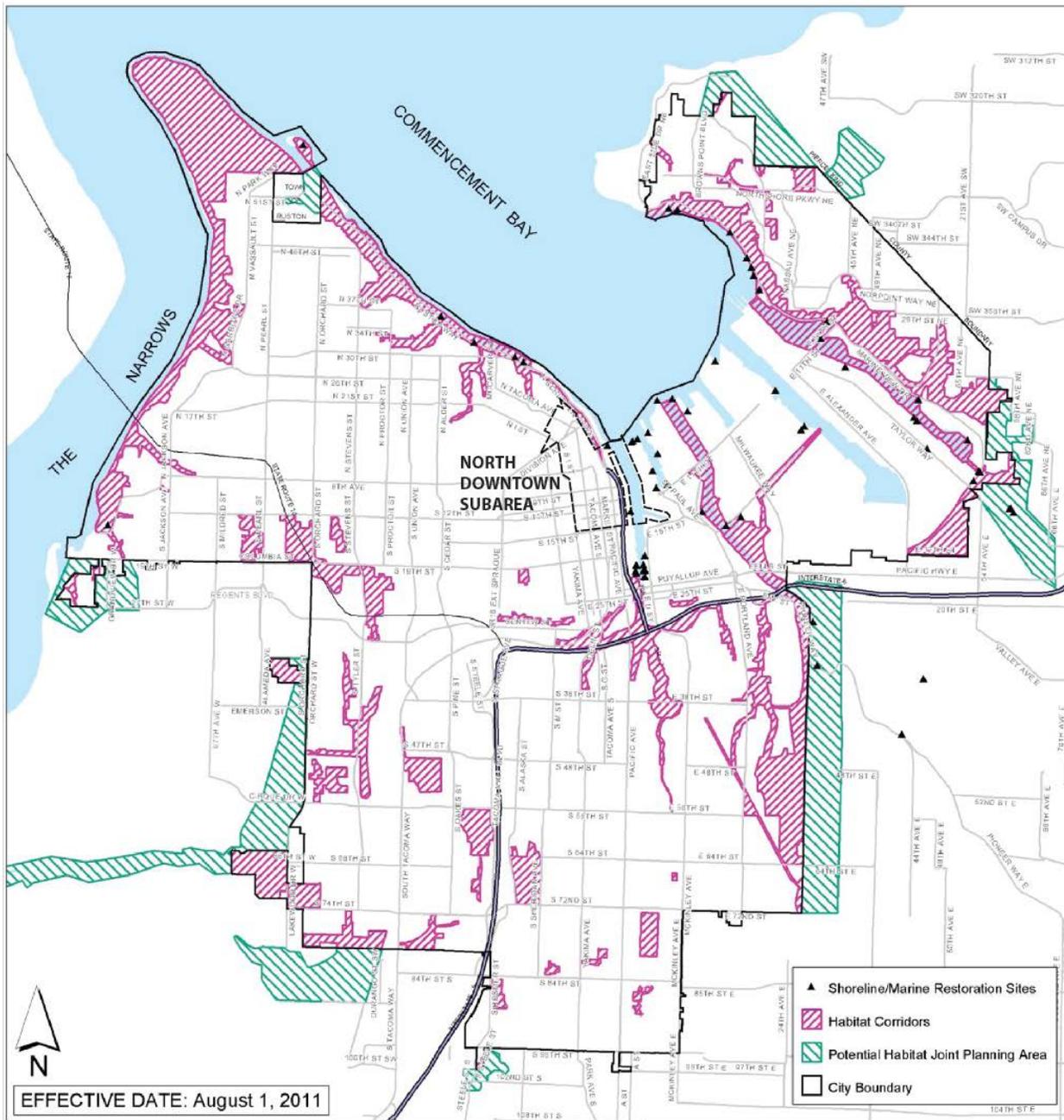
Policies of the City's *Comprehensive Plan* relating to Critical Areas are implemented through the City's Critical Areas Preservation Ordinance:⁵

"...sites that contain critical areas may be developed only if Tacoma officials determine that all significant environmental concerns and hazards have been eliminated or ameliorated. Such sites can only be developed with no more impact than a similarly unaffected site. Tacoma may impose mitigation measures restricting or eliminating development in areas outside of the sensitive area portion of the site if necessary in order to protect the sensitive portion of the site."

The Ordinance defines procedural measures for safeguarding sensitive areas, including the authority to require special studies and assurances should Tacoma officials deem appropriate.

⁵ Available on the City web site: <http://www.cityoftacoma.org/Page.aspx?cid=7451>

Figure 3.4-1: Habitat Corridors



Designated Habitat Corridors contain the City's most valuable undeveloped habitat areas - generally areas that are larger, connected or contiguous to other habitat areas, and combining multiple valuable functions and features (such as wetlands, streams, slopes and forests). Habitat Corridors will be the priority areas for Tacoma's habitat conservation and stewardship efforts. The vision is to conserve and restore habitat functions within the Corridors and, where appropriate, foster low-impact access and recreation. Restoration sites in shoreline and marine habitat areas are also shown. Potential Joint Habitat Planning Areas are areas where habitat features span the City's borders, calling for inter-jurisdictional planning and coordination.

**City of Tacoma
Community & Economic Development**



NOTE: This map is for reference only.



Existing Habitats

Along the shoreline of Thea Foss Waterway and Commencement Bay, numerous water birds are resident and large numbers of migratory birds feed and rest. Offshore, large numbers of marine diving birds and several marine mammals occur in season.

The lower Puyallup River provides migration and rearing habitat for several priority salmonid species, including Chinook, pink, chum, and coho salmon, steelhead and bull trout. Adult salmonids are typically found in Commencement Bay between August and November. Nearshore habitat is an important environment for juvenile salmonids, where the shallow water depth obstructs the presence of larger predator species. Juvenile Chinook salmon use the areas of Commencement Bay within 500 to 1,000 feet of the shoreline and in the Waterways. Juvenile salmonids are known to rear and forage within the delta areas at the mouth of the Puyallup River in Commencement Bay, in particular.

Critical habitat has been designated at the federal level for Pacific salmon and steelhead in Washington, Oregon, and Idaho, including the Puget Sound Evolutionarily Significant Unit (ESU) Chinook salmon. Designated Chinook Critical Habitat in Tacoma includes nearshore marine areas of both Commencement Bay and the Tacoma Narrows from the extreme high tide line to a depth of 30 meters relative to Mean Lower Low Water (MLLW). Critical Habitat has also been designated for bull trout, which may be present in the nearshore areas of Tacoma.

Designated Critical Habitat for bull trout includes marine waters of Commencement Bay and the Tacoma Narrows to a depth of 33 feet (10 meters) relative to MLLW.

Other protected species commonly found in the area include harbor seals, California and Steller sea lions, killer whales and other cetaceans, hawks, owls, songbirds, flying squirrels, chipmunks and turtles. Rare or endangered species occasionally found in shoreline areas are given special protection; examples are the peregrine falcon, sandhill crane, bluebirds, osprey, bald eagle and the western grey squirrel. A total of 203 bird species have been recorded in the Commencement Bay area.⁶ Of these species, 162 are found regularly, and 36 breed within the area. Two reptile species, the sharp-tiled snake and the western pond turtle, may possibly occur, but most likely in the Wapato Lake area of South Tacoma.

Vegetation in the North Downtown Subarea supports a variety of wildlife species including many birds, mammals, and amphibians. There are no streams in the Subarea and no wetlands (see **Section 3.3 – Water** of this Final EIS). Due to the highly urbanized nature of most of the North Downtown Subarea, mammal species are likely to primarily include species tolerant of human activity such as opossums, Pacific moles, big brown bats, Norway rats, eastern gray squirrels, deer mice, eastern cottontail rabbits, feral cats, raccoons, striped skunks, and perhaps coyotes. Common birds likely include Canada geese, mallards, California gulls, red-tailed hawks, northern flickers, American robins, and song sparrows. Common reptiles are likely to include northwestern salamanders, long-toed salamanders, Pacific tree frogs, and bullfrogs. Two species that may also occur in the North Downtown Subarea, which have special status designations as protected species or species of concern under state and/or federal regulations, are the western pond turtle and the bald eagle.

⁶ 1995 Commencement Bay Natural Resources Damage Assessment, Chapter 3. (also cited in the City of Tacoma Cumulative Impact Analysis)

3.4.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to plants and animals would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

Urban development, redevelopment, and associated construction activities, if not properly planned and regulated, can increase peak stormwater runoff, cause erosion, and result in siltation of surface waters with adverse effects on plant and animal populations. Any fish breeding and rearing areas that may be located near stormwater outflows into Thea Foss Waterway are especially sensitive.

The proposed development alternative would continue the redevelopment trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. As such, the potential exists for impacts or changes to plant and animal populations within the Subarea. However, considering the fact that this is an urbanized part of the City, that redevelopment is projected to occur over several decades and that plant and animal-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the North Downtown Subarea would not result in any significant plant and animal-related impacts. Such development would be required to fully comply with existing development regulations, as noted in part **3.4.3** of this section.

Site redevelopment would likely result in the removal of existing trees, shrubs and ground cover on individual lots and the displacement of animal habitats associated with that existing vegetation. However, it is expected that redevelopment would also involve the addition of new trees, shrubs and ground cover, consistent with the City's Land Use Code, which would result in an improvement in plant and animal populations and habitat compared to existing conditions.

3.4.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations, and other mitigation, as noted below.

City Policies

Comprehensive Plan -- Environmental Policy Element

The Environmental Policy Element of Tacoma's *Comprehensive Plan* was updated in 2011, and is intended "to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property." The Element complies with SEPA, which is intended to ensure that environmental values are considered, in addition to technical and economic considerations, when local

governmental decisions are made or interpreted with regards to environmental impact. The Element also complies with the State Growth Management Act,⁷ which requires local jurisdictions to identify critical areas and adopt regulations to protect such areas, including fish and wildlife habitat conservation areas.

The Environmental Policy Element addresses Fish and Wildlife Habitat Conservation Areas and states:

... it is possible to accommodate development needs and, yet, retain important vegetation. Where significant wooded areas occur, the application of innovative development techniques that cluster dwellings and maximize the acreage of undisturbed areas is an appropriate alternative for conventional grid subdivisions. Such projects can be designed to provide a green space buffer or vegetated habitat that will provide important functions for wildlife. Where existing vegetation is removed, extensive landscaping should be installed in appropriate locations. ...Habitat improvement is encouraged to intentionally improve the overall processes, functions and values of critical habitats, including wetland, stream and aquatic habitats. Such actions may or may not be in conjunction with a specific development proposal, and include, but not be limited to, restoration, creation, enhancement, preservation, acquisition, maintenance and monitoring.

Policy	Intent
E-FW-1 Wildlife and Natural Environment	<i>Support and enforce laws, regulations and programs designed to protect wildlife and natural resources.</i>
E-FW-2 Retain Vegetation	<i>Encourage the retention of native vegetation and the installation of landscaping designed to complement local wildlife and native vegetation and help mitigate the loss of wildlife habitat areas that results from development.</i>
E-FW-3 Landscaping Stabilization	<i>Ensure that sufficient and appropriate native landscaping be installed to stabilize and beautify areas and improve habitat where extensive removal of vegetation has occurred.</i>
E-FW-4 Specimen Trees	<i>Encourage the identification and preservation of specimen trees of historic merit and/or outstanding size.</i>
E-FW-5 Removal of Native Vegetation	<i>Discourage the indiscriminate removal of native vegetation to preserve green space and protect habitats.</i>
E-FW-6 Innovative Development Techniques	<i>Encourage innovative development techniques such as clustering to maximize the amount of open space and preserve habitats.</i>
E-FW-7 Habitat Protection	<i>Identify, locate and protect habitats of endangered, threatened, priority or sensitive species.</i>
E-FW-8 Maintain Habitat Diversity	<i>Encourage the preservation of large blocks of land around critical areas to ensure maximum habitat diversity.</i>
E-FW-9 Strengthen Habitat	<i>Encourage actions which protect and improve natural resources in both</i>

⁷ RCW Chapter 36.70A

Connections	<i>the upper and lower areas of the Puyallup River watershed and strengthen connections within and between them.</i>
E-FW-10 Integrate Development Projects	<i>Promote the integration of development projects into their surrounding environments, promoting a "greenbelt natural corridor" for movement and use by species.</i>
E-FW-12 Protect in Perpetuity	<i>Encourage the protection of habitat improvement project sites in perpetuity.</i>
E-FW-15 Improve Altered Habitats	<i>Encourage the improvement of habitat along the edges of shorelines and creeks, migration corridors, and productive areas that have been altered by past shoreline activities.</i>
E-FW-16 Sustainable Habitat	<i>Encourage acquisition, preservation and restoration of remaining sustainable habitat and improvement of existing habitat corridors.</i>
E-FW-18 Performance Standards	<i>Encourage design and performance standards that promote source control and habitat restoration efforts.</i>
E-FW-19 Integrate Improvement Actions	<i>Encourage the integration of habitat improvement actions with other regulatory efforts, including environmental remediation, source control, and site development actions, as well as long range planning activities.</i>

Policy	Intent
E-FW-20 Habitat Improvement Actions	<i>Encourage new development to provide or incorporate habitat improvement actions as appropriate.</i>
E-FW-24 Private Conservation Efforts	<i>Encourage community based or nonprofit local and regional trusts and private conservation efforts.</i>
E-FW-25 Cleanup Coordination	<i>Promote coordination among diverse cleanup and regulatory programs and agencies.</i>
E-FW-27 Habitat Zones	<i>Adopt a Habitat Zones map to identify locally important habitat areas in order to provide greater scrutiny and review of development proposals and to identify priority areas for restoration and enhancement programs and activities.</i>
E-FW-28 Habitats of Local Importance	<i>Establish regulations that will provide greater protection to areas designated as habitats of local importance.</i>

Comprehensive Plan – Urban Forestry and Agriculture Element

The **Urban Forestry and Agriculture Element of the Tacoma Comprehensive Plan** includes policies designed to promote preservation and augmentation of trees in Tacoma. Policies most pertinent include the following:

Policy	Intent
UF-15 Equity	<i>Provide equitable urban forest resources and services throughout the city regardless of geographic, racial or social differences.</i>

UF-PR-1 Retention of Trees	<i>Encourage and promote the retention of trees, whenever practicable and appropriate, through education, outreach and incentives.</i>
UF-PR-3 Protection of Trees During Development	<i>Promote the long-term health and survival activities of trees that are retained during construction.</i>
UF-PR-4 Heritage Trees	<i>Establish a Heritage Tree Program for the voluntary recognition and protection of trees with unusual or unique historical, ecological, cultural and/or aesthetic significance.</i>
UF-PCM-1 Planting Priorities	<i>Prioritize tree planting and landscaping in street and freeway rights-of-way, in particular in highly visible locations such as business districts and major corridors.</i>
UF-PCM-5 Tree Canopy Cover	<i>Achieve 30 percent citywide tree canopy cover by the year 2030 as an important step in becoming a healthy and sustainable city.</i>
UF-PCM-11 Partnerships	<i>Partner with federal, state, regional, tribal, and local governmental jurisdictions, community non-profits, the private sector and others to increase the reforestation of Tacoma.</i>

The **Urban Forestry and Agriculture Element of the Tacoma Comprehensive Plan** also contains policies aimed at promoting urban agriculture:

Policy	Intent
UF-UA-3 Community Gardens	<i>Establish a target level of service for community gardens. Identify and prioritize the establishment of new gardens in the UFMP for areas that do not meet this level of service.</i>
UF-UA-6 Land	<i>Identify existing and potential community garden sites and give high priority to community gardens in appropriate locations, in consideration of the full range of community benefits. Work to secure additional community gardening sites through long-term leases or through ownership as permanent public assets.</i>
UF-UA-7 Zoning	<i>Adopt zoning regulations that establish community gardens as a permitted or conditional use in appropriate locations.</i>
UF-UA-8 New Housing Developments	<i>Encourage new affordable housing units to contain designated yard or other shared space for residents to garden.</i>
UF-UA-9 New Construction	<i>Encourage development in Mixed-Use Centers, Downtown, and commercial areas to incorporate green roofs, edible landscaping, and the use of existing roof space for community gardening. Community garden space should count towards open space requirements.</i>

The **Open Space, Habitat and Recreation Element of the Tacoma Comprehensive Plan** includes policies designed regarding open space and vegetation/plantings. Policies most pertinent include the following:

Policy	Intent
OS-MUC-8 Public Streets as Linear Urban Parks	<i>Seek opportunities, including joint ventures with public or private partners, to create a park-like environment within public rights-of-way, incorporating features such as widened sidewalks, street amenities and furniture, and landscape planting.</i>
OS-GI-1 Green Neighborhoods	<i>Establish an achievable goal to increase the forest canopy cover by 2028 to a citywide percentage that achieves Tacoma’s vision as an environmentally sustainable community.</i>
OS-GI-2 Green Streets	<i>Designate specific streets, trails and other public rights-of-way which are the most appropriate for implementation of green infrastructure practices, based on their location, width, traffic volumes, adjacent uses, prominence, potential to enhance habitat connectivity, contiguity with open space areas and/or other considerations.</i>
OS-GI-5 Tree Planting and Maintenance	<i>Actively engage in tree planting, maintenance of native and climate-adapted trees and plants, and preservation of large trees city-wide.</i>
OS-CG-1 Community Gardens	<i>Support and develop existing and new community gardens within parks and on appropriate public and private lands. Consider creative approaches to managing community gardens, such as support by education institutions or volunteer management by community organizations.</i>
Policy	Intent
OS-GI-9 Highway Planting	<i>Partner with the Washington State Department of Transportation (WSDOT) to initiate and maintain landscape plantings along interstate and highway routes within the City.</i>

Comprehensive Plan -- Open Space, Habitat and Recreation Element – Habitat Policies

Policy	Intent
S-HA-1 OS-HA-1 Citywide Gain In Habitat Functions Citywide	<i>Proactively seek not only to reverse the decline but to achieve the greatest possible gain in habitat functions city-wide over the next 20 years.</i>
OS-HA-2 Habitat Corridors	<i>Target habitat-related resources and programs within the designated Habitat Corridors—the City’s priority areas for habitat conservation and stewardship depicted on the Open Space System Map.</i>
OS-HA-3 Delineate High Value Habitat Lands	<i>Work with the Green Tacoma Partnership and other partners to delineate and designate all habitat lands with high natural habitat values within the City, in order to guide their future land use and management.</i>

OS-HA-4 Acquire, Conserve and Restore Habitat Areas	<i>Acquire ownership or interest in all high value habitat lands depicted on the Open Space System map, or otherwise delineated, by 2028. Proactively seek permanent conservation and restoration.</i>
OS-HA-5 Funding for Habitat Acquisition	<i>Use innovative, creative methods to fund opportunities to conserve habitat areas. Consideration should be given to developing a fund that would provide match for any privately raised funds.</i>
OS-HA-8 Conserve Threatened Properties	<i>Partner with non-profits, private parties and public agencies to conserve habitat areas from development both permanently and temporarily, until such time as they may be permanently conserved.</i>

Comprehensive Plan -- Open Space, Habitat and Recreation Element -- Critical Areas Preservation Policies:

Policy	Intent
OS-CAPO-3 Streamlined Permitting Process for Restoration	<i>Review regulations to identify opportunities to streamline permitting for restoration projects, including invasive species control, hazard tree removal, and other standard restoration activities, while ensuring that impacts to critical areas and their buffers are avoided.</i>
OS-CAPO-4 Habitat Management Plans	<i>Develop regulations and a supporting review criteria and framework for Habitat Management Plans that support and streamline habitat restoration activities.</i>

Shoreline Master Program

The City of Tacoma recently completed an update to its Shoreline Master Program (SMP) in compliance with the State’s Shoreline Management Act.⁸ On October 1, 2013 the Department of Ecology issued Final Approval of the City of Tacoma Shoreline Master Program, accepting the City’s alternative intent statement for the S-6/7 Schuster Parkway Transition Shoreline District as proposed in Resolution 38734. The SMP took effect 14 days from Ecology’s final action, on October 15, 2013.

The SMP establishes polices and land use code provisions that regulate development in the shoreline areas on the Foss Waterway within the North Downtown Subarea and provide mitigation for impacts to plants and animals.

The Conservation Element of the SMP provides for the protection of natural resources, and shoreline ecological functions and processes. Resources to be conserved and protected include, but are not limited to: wetlands; riparian, nearshore, and aquatic habitats, and priority fish and wildlife habitats and species. The Restoration Element provides for the timely restoration and enhancement of ecologically impaired areas in a manner that achieves a net gain in shoreline ecological functions and processes.

⁸ WAC 173-26-201(2)(C)

Chapter 6.4 of the SMP addresses Marine Shoreline and Critical Areas Protection, providing policies and regulations that protect the shoreline environment as well as the critical areas found within the shoreline jurisdiction. These policies and regulations apply to all uses, developments and activities that may occur within the shoreline jurisdiction regardless of the SMP environment designation and require full mitigation of impacts to achieve no-net-loss of ecological functions.

Chapter 6.6 of the SMP addresses Vegetation Conservation, and includes activities to protect and restore vegetation along or near marine and freshwater shorelines that contribute to the ecological functions of shoreline areas. Vegetation conservation provisions include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species. Vegetation conservation provisions apply even to those shoreline uses and developments that are exempt from the requirement to obtain a permit.

The City's Cumulative Impacts Analysis for the City's Shoreline Master Program, prepared by the consulting firm ESA,⁹ found that the development regulations and mitigation standards of the SMP would result in no net loss of ecological functions associated with hydrology, water quality, large woody debris and organic contributions, and habitat, over the next 20 years.

Endangered Species Act (ESA), State Law, and City Code

The Endangered Species Act of 1972 addresses the protection of rare, endangered and threatened plant and animal species. Title 77 RCW revises and reorganizes the game code of the State of Washington to clarify and improve the administration of the state's game laws. Title 75 RCW addresses food fish and shellfish management in the State of Washington. Chapter 13.08 of the Official Code of the City of Tacoma addresses the maintenance, preservation and conservation of open space lands within the city.

The Growth Management Act declares that cities shall develop comprehensive plans that address "critical areas" management for preservation and protection. Engrossed Substitute House Bill 1933 that became effective on July 27, 2003, clarifies the relationship between the Growth Management Act and the Shoreline Management Act as it pertains to critical areas and it states that "the legislature intends that critical areas within the jurisdiction of the shoreline management act shall be governed by the shoreline management act and that critical areas outside the jurisdiction of the shoreline management act shall be governed by the growth management act." Fish and wildlife habitat conservation areas are one of several critical areas designated by Tacoma.

Washington State Critical or Priority Habitat and Species (PHS)

In accordance with the provisions of ESA and GMA, the Washington State Department of Fish & Wildlife (WDFW) developed minimum guidelines (WAC 365-190-080(5)(c)(ii) for classifying and designating critical or priority habitats and species (PHS). Priority species require protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority species include State Endangered, Threatened, Sensitive, and Candidate species; animal aggregations (e.g., heron colonies, bat

⁹ Available at the City web site:
http://cms.cityoftacoma.org/Planning/Shoreline/Planning_Commission/Public_Review_Document/Exhibit_G_CIA.pdf

colonies) considered vulnerable; and species of recreation, commercial, or tribal importance that are vulnerable.

Pierce County Priority Habitat and Species (PHS)

WDFW has compiled a list of the most important habitats and species and management recommendations that may be employed to protect and preserve critical habitat areas, along with maps that identify the location of critical habitats within Pierce County. The species and habitats for Pierce County were developed using the distribution maps found in the Priority Habitat & Species (PHS) List (<http://WDFW.wa.gov/hab/phslist.htm>). WDFW periodically reviews and updates the distribution maps in the PHS List.

Other Mitigation Measures

In general, redevelopment can be expected to involve the addition of significant numbers of new trees, shrubs and ground cover, consistent with the City's Land Use Code. This increase in planted area would help provide habitat for animals such as birds and insects. In particular, existing policies and regulations that apply to the North Downtown Subarea encourage the protection of existing trees, and in most cases require the addition of street trees when properties are developed. Thus, in most cases, it can be expected that the more development occurs, the more the tree canopy will be expanded in the North Downtown Subarea, especially if supplemented by funding for the *Strategic Urban Forest Management Plan*.

The Open Space chapter of the Subarea Plan includes recommendation that supports the preservation and restoration of native plant species in the habitat corridor on the Schuster hillside:

- RECOMMENDATION OS-7: Establish, adopt and implement design standards for the management of the Stadium/Schuster hillside.

At the regional scale, redevelopment in the North Downtown Subarea inherently provides mitigation for potential impacts on plants, animals and habitat elsewhere in the region. It is well established that growth is coming to the Tacoma region, and the more of that growth that can be accommodated in North Downtown Tacoma, the less development there will be in suburban and rural areas throughout the region. Compared to a highly urbanized area like North Downtown, surrounding suburban and rural areas typically have much more ecologically valuable plant and animal species and habitat. Development in North Downtown can be expected to have net positive effect on preserving and improving plant and animal populations regionally.

3.4.4 Unavoidable Adverse Impacts

With application of plant and animal-related codes and regulations noted above, no significant unavoidable adverse impacts to plant and animal resources are anticipated under any of the proposed alternatives.

3.5 ENVIRONMENTAL HEALTH

Information presented in this section addresses the effects of the proposed alternatives on sites with contaminated soils that are located within or proximate to the North Downtown Subarea. This information is based on readily available secondary sources of data; primary research has not been conducted for this analysis.

3.5.1 Affected Environment

Contaminated Soils

After nearly 140 years of settlement, areas within the North Downtown Subarea have contaminated soils – resulting from leaks associated with underground storage tanks (USTs), oils and fluid contamination from former vehicle maintenance facilities, and former industries (including laundries) that spilled or discharged chemical solvents. In addition, historically a wide variety of materials were used as structural fill throughout the area.

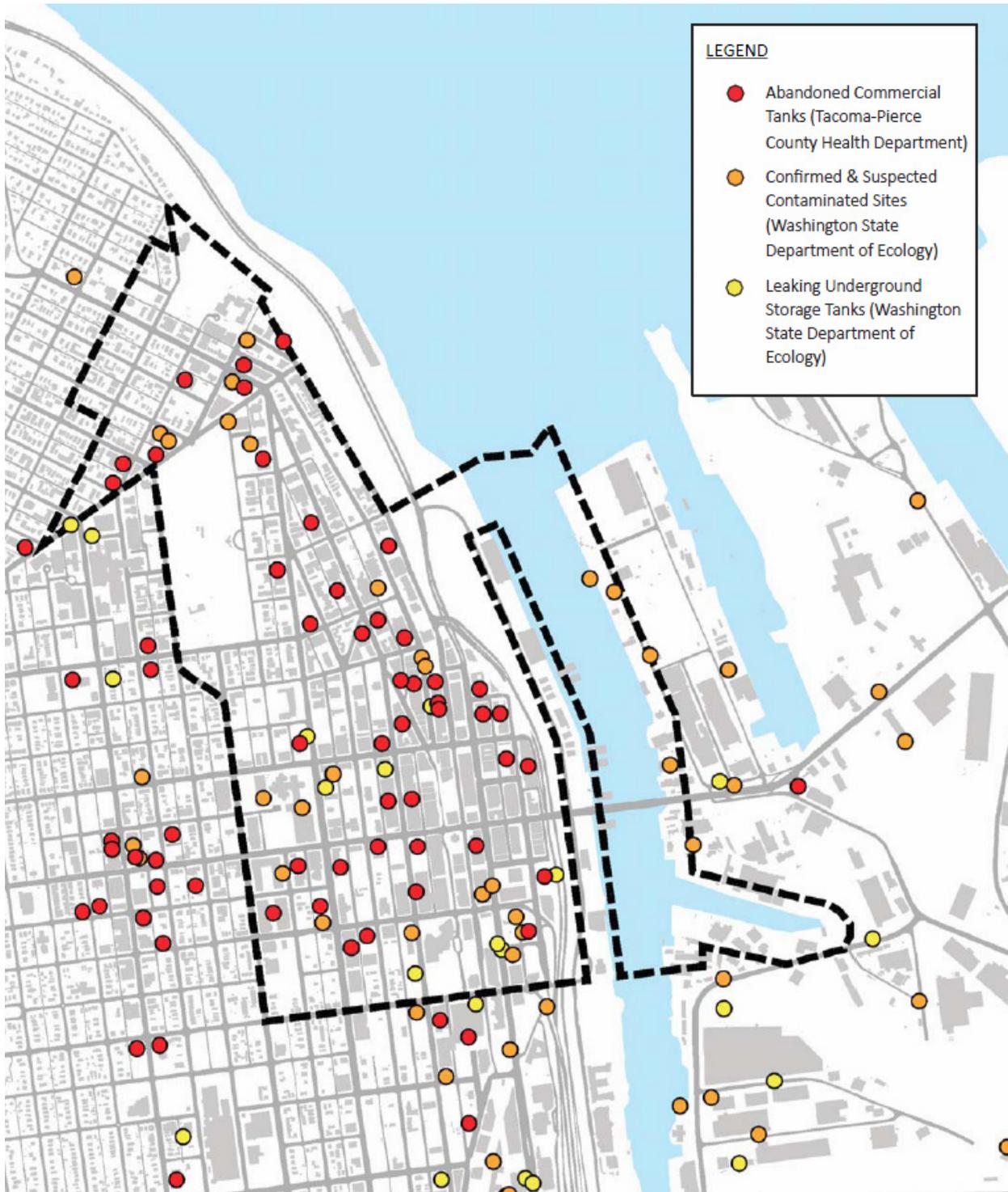
Available information on the location of known, potentially contaminated sites in the North Downtown Subarea is depicted in **Figure 3.5-1**. The possibility always exists that unidentified sources of contamination may exist (e.g., undocumented large heating oil USTs). The three types of sites identified on **Figure 3.5-1** include:

- **Abandoned Commercial Tanks** -- The Tacoma-Pierce County Health Department identified Abandoned Commercial Tank (ACT) sites at former gas station locations with the Subarea that are potentially contaminated from on-site historical activities for which there are no records of storage tank removal or environmental cleanup.
- **Confirmed and Suspected Contaminated Sites** -- The Tacoma-Pierce County Health Department has also identified sites that have had storage tanks removed, and sites for which DOE has recorded a cleanup. These cleanup sites may or may not have been gas stations and could have been industrial activities, such as laundries and vehicle maintenance shops that contributed contaminants.
- **Leaking Underground Storage Tanks (LUSTs)** -- DOE maintains a database¹ of leaking underground storage tanks (LUSTs). While many of these tanks have been removed, the status indicates contamination remains. DOE also tracks various “contaminated sites,” including USTs and other miscellaneous spills.

In most cases, particularly on level sites, possible contaminants may be contained on-site and can be remediated through soil excavation and replacement. In some instances, contaminants have infiltrated the soil and flowed downslope to collect in subsurface deposits. It is also possible that contaminants originally located outside the North Downtown Subarea have over time migrated into the Subarea.

¹ <https://fortress.wa.gov/ecy/tcpwebreporting/Default.aspx>

Figure 3.5-1: Known contaminated sites in the North Downtown Subarea

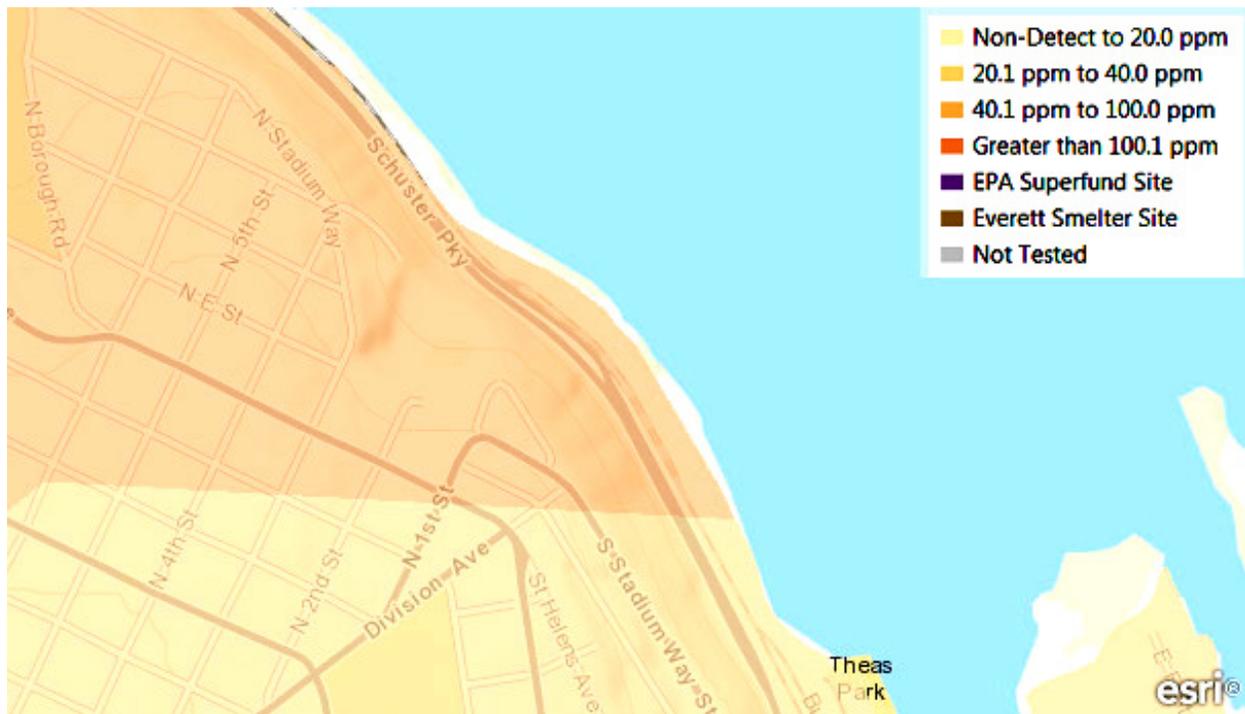


Source: Tacoma Pierce County Health Department

For nearly 100 years, the American Smelting and Refining Company (ASARCO) and its predecessors² conducted a smelting and refining operation at a site in the Ruston/North Tacoma area, which emitted arsenic and, to a lesser degree, lead pollutants. These emissions affected much of the region. An area known as the Tacoma Smelter Plume has elevated levels of arsenic in the soil and DOE has mapped contamination levels caused by the plume.³ Elevated levels of arsenic may be found in soils in these areas, generally impacting surface soils (0”–18”). Elevated arsenic levels are most commonly found in areas that have not been recently disturbed or developed.

As shown in Figure 3.5-2, most of the North Downtown Subarea is located outside the area in which arsenic levels in the soil exceeded a base detection level of 20 parts per million (ppm), at or below which is considered a safe level. A small portion of the Subarea in the Stadium District is located where arsenic contamination in soils is likely to be in the range between 20 and 40 ppm. The Washington State Department of Ecology and the United States Geological Survey have determined that the natural background level of arsenic in Puget Sound soil is 7 ppm.

Figure 3.5-2: Arsenic soil contamination levels from the Asarco smelter



Source: Washington State Department of Ecology

² Tacoma Milling and Smelting Co. (1888), Tacoma Smelting and Refining Co. (1890), and American Smelting and Refining Co. (1905)

³ <https://fortress.wa.gov/ecy/smeltersearch/>

Air Quality

Studies show that people spend 65 to 90 percent of their time indoors and indoor air quality can be two to five times more polluted than outside air.⁴ Poor building design (e.g., inadequacies in ventilation, building maintenance and operation, etc.) can affect indoor air quality. The most common indoor air contaminants that can have negative health consequences include:

- volatile organic compounds caused by building materials
- carbon monoxide
- mold
- environmental tobacco smoke and electronic smoking devices
- asbestos; given the age of existing buildings in the North Downtown Subarea, it is anticipated that some may contain asbestos, which is classified as a hazardous air pollutant by EPA

Land Use Patterns

Studies indicate that the layout and the density of the built environment can play a vital role in offering affordable and accessible healthy lifestyle choices to diverse populations. The burden of urban sprawl and automobile dependency on public health are well documented in many scholarly articles.⁵ People living in communities characterized by urban sprawl or land-extensive developments engage in less physical activity compared to those living in more compact and walkable communities. A related issue is access to healthy food. Research (Powell, Auld, Chaloupka, et al., 2007) suggests that individuals living near supermarkets have a higher quality diet, are more likely to eat the daily recommended amounts of fruits and vegetables, and less likely to be obese.⁶

In 2005, the Tacoma-Pierce County Board of Health passed Resolution 2005-3698 declaring obesity to be a serious threat to the health and well-being of Pierce County citizens. This resolution calls for community sectors, including community planners, to design environments conducive to active living and healthy eating. To meet the U.S. Department of Health and Human Services 2008 *Physical Activity Guidelines for Americans*' recommended "minimum 30 minutes per day of moderate physical activity," any development proposals should attempt to: **1)** integrate physical activity into people's everyday life; and **2)** make healthy food environments, including supermarkets, farmers' markets and community gardens, accessible and affordable to all segments of the community.

The overall goal of the ***North Downtown Subarea Plan*** is to create walkable, transit-oriented communities in which residents, workers, and visitors can meet most of their daily needs without relying on a private automobile. As noted above, the environmental health benefits of this type of land use pattern are well established. The North Downtown Subarea already has in place the infrastructure to support walkability and transit, including commuter rail, street car, and bus transit, along with a street grid well-suited for walking and numerous adopted plans and policies intended to improve walking and cycling options (see **Section 3.11 Transportation** and

⁴ Tacoma Pierce County Health Department

⁵ Measuring the Health Effects of SPRAWL, A National Analysis of Physical Activity, Obesity and Chronic Disease, Barbara A. McCann and Reid Ewing, Smart Growth America Surface Transportation Policy Project, September 2003

⁶ Powell LM, Auld MC, Chaloupka FJ, O'Malley PM, Johnston LD. Associations between access to food stores and adolescent body mass index. *Am J Prev Med.* 2007 Oct;33(4 Suppl):S301-7.

Section 3.7 Land Use -- Relationships to Existing Plans and Policies Elements in this EIS). The main ingredient that's lacking is sufficient numbers of people and jobs to provide the complementary uses that can take full advantage of the Subarea's existing assets.

Urban Forestry and Agriculture

As noted in the *Tacoma Strategic Urban Forest Management Plan*, in urban environments trees “boost property values, support retail activity, improve municipal health, protect water quality, reduce stormwater runoff, counter climate change, and ensure roadway safety.” Specifically regarding benefits to public health and well-being, the Plan states:

“Public spaces with trees receive more visitors, increasing the frequency of casual social interactions and strengthening the sense of community. Trees along transportation corridors narrow a driver’s field of vision, reducing traffic speeds, and increasing pedestrian safety by providing a natural, physical barrier. Studies have found that urban highways lined with trees decrease driver stress, resulting in fewer incidents of road rage. Trees foster safer, more sociable neighborhood environments and have been shown to reduce levels of crime, including domestic violence. Views of nature reduce the stress response of both body and mind when stressors of urban conditions are present. Hospital patients with window views of trees recover significantly faster and with fewer complications than comparable patients without access to such views.”

The extent and quality of tree coverage varies widely in North Downtown, but on average the Subarea is far below the City of Tacoma’s target of 30 percent canopy coverage by the year 2030. In the Downtown Core and St. Helens, street trees are sparse on most streets, the most notable exceptions being the blocks along the east edge of Stadium Way and on the edges of Wright Park. Wright Park itself has a relatively high concentration of large trees. Various trees are also located in vacant and single-family private lots scattered throughout the Subarea. The *Strategic Urban Forest Management Plan*⁷ includes a street tree inventory in the Stadium Neighborhood Business District, finding that “Stadium has one of the highest tree populations among the districts.” The study also estimated the total value of trees at \$487,000, and identified 107 potential planting sites.

Urban agriculture encompasses comprehensive and diverse food production—including community gardens and animal husbandry—involving the raising, cultivation, processing, marketing and distribution of food in urban areas. Urban agriculture offers multiple public health benefits, including providing food security for residents, preventing undesired or illegal activities through fostering community ownership of open spaces, creating a sense of community, and improving health, and providing residents with access to fresh produce while supporting physical activity and general well-being. The North Downtown Subarea currently has only one community garden, the Gallucci Learning Garden, located at the intersection of South 14th and G Streets in the far southwest corner of the Subarea. This demonstration garden is managed by the Tacoma Urban Land Trust, a non-profit organization that was formed to acquire and preserve green spaces within the city of Tacoma. The garden has an educational mission, and it provides gardening and cooking workshops for children and adults as well as hosting community events such as film-screenings and small concerts.

⁷ The Strategic Urban Forest Management Plan and is available on the City of Tacoma website: <http://cms.cityoftacoma.org/enviro/UrbanForestry/sufmp-nbd.pdf>

Environmental Justice

The United States Environmental Protection Agency defines Environmental Justice (EJ) as "the fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies." There are two interrelated components of EJ most relevant to the North Downtown Subarea Plan and EIS: **1)** participatory planning that meaningfully engages the full spectrum of affected populations; and **2)** reduction of potential adverse impacts that may disproportionately affect underserved populations.

As documented in **Section 3.8 – Population, Housing, and Employment**, the North Downtown Subarea has a concentration of minorities and lower-income households that is similar to the City as a whole and surrounding region. These circumstances call for careful consideration of the above two aspects of EJ. Involving all population groups—particularly the traditionally underserved populations—in efforts to address diverse health needs and create a common vision can help build social capital and community cohesion, reduce gentrification impacts, prevent displacement, mitigate health disparities, and promote overall quality of life.

Other Environmental Health-related Issues

Additional environmental health-related issues are covered in other sections of this EIS, including:

- Solid Waste and Recycling: Public Utilities Element
- Surface and Ground Water: Water Element
- Urban Design, Density, and Walkability: Relationships to Existing Plans and Policies Element, Land Use Element, Transportation Element
- Outdoor Air: Air Element
- Hazardous Areas (slopes, floods, etc): Earth Element
- Open Space: Public Services Element

3.5.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to environmental health would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible. Compared to the three development alternatives, the lower level of development expected with the No Action Alternative could result in greater risk of exposure to contamination from undeveloped brownfield sites, and in loss of potential health benefits provided by a walkable community.

Action Alternative

The proposed development alternative would continue the re-development trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. As such, the

potential exists for environmental health-related impacts within the Subarea. However, considering the fact that this is an urbanized part of the City, that re-development is projected to occur over several decades and that environmental health-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the North Downtown Subarea would not result in any significant environmental health-related impacts. Such development would be required to fully comply with existing development regulations, as noted in part **3.5.3** of this section. The following addresses environmental health mitigation relative to contaminated soils, indoor air quality, land use patterns, urban forestry and agriculture, and environmental justice.

Contaminated Soils

Excavation and other construction activities associated with development can lead to exposure of contaminated soils and present environmental health risks to construction workers and others proximate to the construction site. Uncertainty of whether contaminated soils exist, the chemical makeup of those contaminants, and the extent of contamination, presents financial risks for future site redevelopment and private investment, thereby impeding local economic redevelopment. Site redevelopment would comply with the mitigation measures noted in part **3.5.3** of this section (Mitigation Measures) and no significant environmental impacts are anticipated.

Before any redevelopment can occur, environmental conditions of concern relating to soil contamination -- whether suspected or encountered -- must be investigated and remediated according to existing local, State, and Federal standards, as noted in part **3.5.3** of this section. In almost all cases, contaminated soils would be identified before any development excavation could start, so it is unlikely that excavation would lead to the spread of contaminants off-site. In the unlikely event that contamination is encountered during construction, the following environmental impacts could occur:

- direct exposure (contact, inhalation, ingestion) of personnel to hazardous materials;
- improper containment and disposal of contaminated media;
- prohibited access for needed investigation and remediation;
- accidental migration of hazardous materials to surface water, groundwater, and stormwater or sewer conveyances;
- fire/explosion from abandoned underground storage tanks; and
- inadvertent violation of local/state/federal laws concerning management of hazardous materials.

Potential occurrence of the above impacts is reduced by existing regulations that require cleanup when contamination is unexpectedly encountered.

Arsenic is extremely poisonous. Long term exposure to small amounts of arsenic is known to cause a variety of cancers including skin cancer (non-melanoma type), kidney, bladder, lung, prostate and liver cancer. The 20 – 40 ppm arsenic soil contamination sampled in the small portion of the Stadium District in the North Downtown Subarea presents a relatively low risk. The Washington State Department of Ecology (DOE) sets cleanup levels based on state law—the Model Toxics Control Act. DOE has set the arsenic cleanup level to 20 ppm, which it considers “urban background.” DOE estimates that being exposed to 20 ppm arsenic in soils may increase cancer risk by 30 in one million. DOE’s “action” levels for child play areas is

average arsenic over 20 ppm, or highest value over 40 ppm. For residential yards, DOE's proposed action level is 100 ppm arsenic

Indoor Air Quality

Health effects caused by exposure to indoor air contaminants may include eye irritation, respiratory irritation, exacerbation of asthma, headaches, nausea/vomiting, dizziness; and, in the case of carbon monoxide or asbestos-containing materials, even death. New development in the North Downtown Subarea would not be expected to result in increased risk of exposure to indoor air contaminants, because new buildings would be constructed and operated in accordance with modern building codes, which in fact, can be expected to improve indoor air quality compared to existing buildings

Demolition or renovation of older buildings is highly regulated to reduce the risk of exposure to asbestos. Activities can cause asbestos to break down (become "friable") into tiny fibers and enable asbestos to become airborne, be easily inhaled, and settle deep into the lungs. Medical research indicates that asbestos fibers can cause lung cancer, asbestosis, or mesothelioma, a related terminal cancer of the tissue lining the chest cavity, years after inhalation. However, no significant, environmental health-related impacts are anticipated if mitigation measures noted in part 3.5.3 of this section are followed.

Land Use Patterns

Urban environments that force residents to rely on cars for most trips, and that lack recreation opportunities and grocery stores within easy walking distance, can exacerbate many chronic diseases, such as obesity, diabetes, heart disease, hypertension; and other forms of mental stress, such as depression and anxiety.⁸ The intended outcome of the **North Downtown Subarea Plan** is to create an urban environment in which residents can meet many of their daily needs via relatively short trips by walking, cycling, or transit—essentially the polar opposite of the built environment described above. If this outcome can be achieved, it will lead to a reduction in each of the adverse environmental health impacts listed above, and improve overall environmental health.

Urban Forestry and Agriculture

Development may result in the loss of existing trees on private lots. However, development will also result in the planting of additional street trees as required by the Tacoma land use code. Development could result in the loss of land that could be used for urban agriculture, however the City has already established policies in the Comprehensive Plan intended to promote urban agriculture, as listed below in Section 3.5.3.

Environmental Justice

Social and economic conditions can influence the risk of illness and the actions taken to prevent or treat illness. These conditions are shaped by the circumstances in which people are born, grow up, live, work and age, as well as by the systems put in place to deal with illness. They also can be influenced by larger forces, such as regional economics, social policies, and

⁸ Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities, Howard Frumkin, Lawrence Frank, Richard J. Jackson, Island Press, 2004.

politics. Lack of control over the conditions shaping one’s life can trigger a chronic stress response, which can weaken the body’s immune systems and increase the risk of disease, and these adverse health impacts may be exacerbated when people feel that they are not involved in urban planning and development decisions in their communities.

It is well established that urban development can lead to gentrification of neighborhoods and involuntary displacement of the poor and other underserved populations. Gentrification can segregate income groups, ethnicities, and life cycles. The social and physical isolation of underserved populations, particularly low-income minorities and the elderly, often limits access to jobs, healthy eating, and active lifestyles. Those living in areas of concentrated poverty disproportionately suffer from a variety of health impacts, including violence, sexually transmitted diseases, weather-related deaths, poor nutrition and traffic fatalities.⁹ Conversely, high social capital is associated with increased life expectancy.¹⁰

The Subarea Plan includes multiple components intended to address the potential impacts described above, including affordable housing strategies, and further details are provided below in Section 3.5.3. The overarching goal of the Subarea Plan to provide equitable access to the benefits of walkable, transit-rich communities can be expected to promote environmental justice.

3.5.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations, and other mitigation, as noted below.

City Policies

Comprehensive Plan -- Environmental Policy Element

The **Environmental Policy Element of the Tacoma Comprehensive Plan** has adopted the following policies for dealing with contaminated sites:

Policy	Intent
<i>E-ER-1 Comprehensive Cleanup Strategies</i>	<i>Encourage improvement of the environmental quality of Commencement Bay, its associated waterways, and the Tacoma watershed, including all nearshore and adjacent upland areas through comprehensive cleanup strategies.</i>
<i>ER-2 Contaminated Sites</i>	<i>Encourage the identification and characterization of all contaminated sites which adversely affect the City’s shoreline areas, surface waters, groundwater, and soils.</i>
<i>E-ER-3 Source Control</i>	<i>Encourage source control of all contaminated sites within and adjacent to the City’s shoreline areas or which impact shoreline areas or surface waters.</i>
<i>E-ER-4 Public/Private</i>	<i>Encourage public and public/private partnerships to ensure the most</i>

⁹ Anthony, C. *Suburbs Are Making Us Sick: Health Implications of Suburban Sprawl and Inner City Abandonment on Communities of Color*. Environmental Justice Health Research Needs Report Series. Atlanta: Environmental Justice Resource Center, 1998

¹⁰ Robert Putnam, *Bowling Alone*, (New York: Simon & Schuster, 2000)

Partnerships	<i>comprehensive, timely and cost-effective cleanup actions.</i>
E-ER-5 Best Management Practices	<i>Ensure the use of Best Management Practices by private industry and municipal government to prevent recontamination of wetlands, streams, shorelines, groundwater and other aquatic areas.</i>
E-ER-6 Best Available Science	<i>Ensure the use of Best Available Science Practices by private industry and municipal government to prevent recontamination of wetlands, streams, shorelines, groundwater and other aquatic areas. Special attention should be placed on anadromous fisheries.</i>
E-ER-7 Intergovernmental Partnerships	<i>Coordinate and cooperate with State and Federal programs (e.g., Department of Ecology, Environmental Protection Agency) in encouraging and monitoring the remediation of contaminated sites.</i>

In 2011, the City of Tacoma adopted the *Thea Foss Waterway Design Guidelines*. These guidelines include a policy concerning contaminated sites:

- 3.10.1: Encourage the identification and characterization of all contaminated sites which adversely affect the City's shoreline areas, surface waters, groundwater, and soils.

The Urban Forest Policy Element of the Tacoma Comprehensive Plan includes policies designed to promote the preservation and augmentation of trees in Tacoma. Policies most pertinent to providing mitigation for potential adverse impacts to environmental health are given in the table below:

Policy	Objective
UF-15 Equity	<i>Provide equitable urban forest resources and services throughout the city regardless of geographic, racial or social differences.</i>
UF-PR-1 Retention of Trees	<i>Encourage and promote the retention of trees, whenever practicable and appropriate, through education, outreach and incentives.</i>
UF-PR-3 Protection of Trees During Development	<i>Promote the long-term health and survival activities of trees that are retained during construction.</i>
UF-PR-4 Heritage Trees	<i>Establish a Heritage Tree Program for the voluntary recognition and protection of trees with unusual or unique historical, ecological, cultural and/or aesthetic significance.</i>
UF-PCM-1 Planting Priorities	<i>Prioritize tree planting and landscaping in street and freeway rights-of-way, in particular in highly visible locations such as business districts and major corridors.</i>
UF-PCM-5 Tree Canopy Cover	<i>Achieve 30 percent citywide tree canopy cover by the year 2030 as an important step in becoming a healthy and sustainable city.</i>
UF-PCM-11 Partnerships	<i>Partner with federal, state, regional, tribal, and local governmental jurisdictions, community non-profits, the private sector and others to increase the reforestation of Tacoma.</i>

The Urban Forest Policy Element of the Tacoma Comprehensive Plan has adopted the following policies that mitigate potential adverse impacts to environmental health by promoting urban agriculture:

Policy	Objective
UF-UA-3 Community Gardens	Establish a target level of service for community gardens. Identify and prioritize the establishment of new gardens in the UFMP for areas that do not meet this level of service.
UF-UA-6 Land	Identify existing and potential community garden sites and give high priority to

	community gardens in appropriate locations, in consideration of the full range of community benefits. Work to secure additional community gardening sites through long-term leases or through ownership as permanent public assets.
UF-UA-7 Zoning	Adopt zoning regulations that establish community gardens as a permitted or conditional use in appropriate locations.
UF-UA-8 New Housing Developments	Encourage new affordable housing units to contain designated yard or other shared space for residents to garden.
UF-UA-9 New Construction	Encourage development in Mixed-Use Centers, Downtown, and commercial areas to incorporate green roofs, edible landscaping, and the use of existing roof space for community gardening. Community garden space should count towards open space requirements.

The Open Space, Habitat, and Recreation Element of the Tacoma Comprehensive Plan has adopted the following policies that mitigate potential adverse impacts to environmental health by promoting urban forestry and agriculture:

Policy	Objective
OS-MUC-8 Public Streets as Linear Urban Parks	Seek opportunities, including joint ventures with public or private partners, to create a park-like environment within public rights-of-way, incorporating features such as widened sidewalks, street amenities and furniture, and landscape planting.
OS-GI-1 Green Neighborhoods	Establish an achievable goal to increase the forest canopy cover by 2028 to a citywide percentage that achieves Tacoma’s vision as an environmentally sustainable community.
OS-GI-2 Green Streets	Designate specific streets, trails and other public rights-of-way which are the most appropriate for implementation of green infrastructure practices, based on their location, width, traffic volumes, adjacent uses, prominence, potential to enhance habitat connectivity, contiguity with open space areas and/or other considerations.
OS-GI-5 Tree Planting and Maintenance	Actively engage in tree planting, maintenance of native and climate-adapted trees and plants, and preservation of large trees city-wide.
OS-CG-1 Community Gardens	Support and develop existing and new community gardens within parks and on appropriate public and private lands. Consider creative approaches to managing community gardens, such as support by education institutions or volunteer management by community organizations.
OS-GI-9 Highway Planting	Partner with the Washington State Department of Transportation (WSDOT) to initiate and maintain landscape plantings along interstate and highway routes within the City.

Other Mitigation

Contaminated Soils

In most cases, development itself is mitigation for the environmental impacts associated with contaminated soils. When contaminated sites remain undeveloped, their contaminants remain in the soil unremediated, creating the risk of exposure to people and the risk that such contaminants could spread offsite affecting groundwater, surface water, and Puget Sound. In contrast, when contaminated sites are redeveloped, existing regulations require that contamination be remediated, thereby removing the environmental hazards.

Development of a site with suspected or known contaminated soils is almost invariably precluded by investigation and remediation of the contamination. In nearly all cases, lenders will require a Phase I -- Preliminary Contaminated Site Investigation and, depending upon results of the Phase I analysis, possibly a Phase II -- Detailed Contaminated Site Assessment regardless of whether an area-wide EIS has been conducted.

In Washington, the Department of Ecology manages contaminated soil cleanups under the Model Toxics Control Act (MTCA),¹¹ which sets strict cleanup standards to ensure that the quality of the cleanup and the protection of human health and the environment are not compromised. At the same time, the rules that guide cleanup under the MTCA have built-in flexibility to allow cleanups to be addressed on a site-specific basis. Site cleanup typically involves the following steps:

1. Site Discovery;
2. Initial Investigation;
3. Site Hazard Assessment;
4. Hazard Ranking;
5. Remedial Investigation/Feasibility Study;
6. Selection of Cleanup Action; and
7. Site Cleanup.

Underground storage tanks (UST) are regulated by the Department of Ecology and the Tacoma-Pierce County Health Department.¹² UST removal is also regulated by the City of Tacoma (Chapter 5.47 of the Tacoma Municipal Code) and by Pierce County (Chapter 8.34).

The Tacoma – Pierce County Health Department's regulations for USTs are applicable when a tank is to be removed from the ground or there has been a leak of hazardous substances from a tank. A UST Decommissioning Permit must be obtained from the Health Department prior to the decommissioning (removal) of any regulated UST within all incorporated and unincorporated areas of Pierce County. If a UST is found to be leaking, the tank owner and/or property owner would be required to clean up the leaking material, as well as any soil or groundwater that has been impacted by that leak.¹³

A brownfield site is “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”¹⁴ The City of Tacoma has demonstrated a long-term commitment to addressing contaminated soils and brownfields and has been engaged in the following brownfield-related efforts:

- In 2011, the City of Tacoma was awarded a \$300,000 EPA Brownfields grant to provide job training to assess, manage and clean-up solid and hazardous waste sites. EPA established the Brownfields Job Training Program to help residents take advantage of jobs created by the assessment, as well as to spur cleanup and sustainable reuse of brownfields sites, and to ensure that the economic benefits derived from brownfields

¹¹ 173-340 WAC

¹² see Environmental Health Code, Chapter 4, Underground Storage Tanks, Board of Health Resolution 2010-4225

¹³ Costs to remediate contaminated soils on a development site can vary broadly. For example, a typical gas station cleanup can cost in the range of \$20,000 to \$50,000.

¹⁴ Section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601).

redevelopment remain in the affected communities.

- The Brownfields Coalition is a partnership of the WA Department of Commerce, King County/Seattle, Spokane, Tacoma, and the Department of Ecology. The coalition works together to make it easier for local governments, property owners and developers to return brownfields to a useful purpose by helping with the logistics and funding. The primary source of funding is the Brownfields Revolving Loan Fund (BRLF).
- The Evergreen Tacoma Initiative offers a whole systems model and a new organizational framework to address complex brownfields redevelopment. The initiative merges broad-based organization, integrated technical solutions, new policy and the business case for sustainable development into a unified strategy. Partners include the City of Tacoma, Tacoma-Pierce County Health Department, Department of Ecology, and the University of Washington Tacoma, in addition to Senator Maria Cantwell's office and Congressman Norm Dicks' office.
- In 2013, The City of Tacoma applied for an EPA Brownfields Assessment Grant for the South Downtown Subarea, and is awaiting notification. The City will continue to pursue funding opportunities to support brownfield assessment and remediation throughout the City, including the North Downtown Subarea.

Depending on the nature of future site-specific development, mitigation may be necessary to address site-specific impacts that could occur under any of the alternatives. Mitigation measures that could be required during future property redevelopment include:

- further site investigations to determine the potential for contamination to be present on the property;
- soil and groundwater investigations to evaluate the type, concentration, and extent of contamination, if present;
- cleanup of contamination sources (e.g., removal of underground storage tanks, excavation of contaminated soil); and
- handling and disposal of contaminated soil and groundwater according to local and state regulations.

The above mitigations would be implemented in collaboration with the Department of Ecology, and in compliance with existing Federal and State regulations. Existing policies and regulations that provide mitigation for the potential migration of contaminated soils to surface or groundwater are described in **Section 3.3 – Water** of this Final EIS.

Sites undergoing development in the area of the Stadium District where soil is may be contaminated with arsenic levels in the 20 – 40 ppm range (see **Figure 3.5-2** above) should be sampled. Site development may require additional cleanup or physical controls to minimize the impacts of the contaminated soil. Tacoma-Pierce County Health Department and/or Department of Ecology can provide information regarding soil sampling, advice regarding risk reduction, best management practices, advice for developers and site remediation.

Indoor Air Quality

New development in the North Downtown Subarea would be required to comply with following regulations relative to indoor air quality:

- *Washington State Building Codes* for ventilation requirements specific to the proposed development;
- The Addendum to the *WA Clean Indoor Air Act*, “Initiative 901 or I-901.” This includes, but is not limited to, the prohibition of smoking in all public places and places of employment. Retail stores and retail service establishments must post signs at each entrance and throughout the establishment; and
- The Tacoma-Pierce County Board of Health, *Environmental Health Code*, Chapter 8 “Smoking in Public Places”, and Chapter 9 “Restriction on Sale, Use, and Availability of Electronic Smoking Devices and Unregulated Nicotine Delivery Products.”

Asbestos is classified as a hazardous air pollutant by EPA and demolition and renovation projects must comply with asbestos removal regulations before they can proceed. For projects within the North Downtown Subarea, the Puget Sound Clean Air Agency is responsible for regulating the removal of asbestos containing materials.¹⁵ The Agency requires the following information and a permit for demolition projects that contain asbestos:

1. conduct an asbestos survey (if positive, continue with the following steps);
2. file an Asbestos/Demolition Notification;
3. verify that all asbestos is properly removed;
4. properly dispose of the asbestos; and
5. demolish the structure.

Existing policies and regulations that provide further mitigation for the potential adverse environmental impacts on air quality caused by demolition and construction activities are provided in **Section 3.2 – Air Quality** of this Final EIS.

Urban Forestry and Agriculture

Tacoma’s Comprehensive Plan policies are implemented in the following Title 13 Tacoma Land Use Code regulations:

- 13.06A.070.C Basic Design Standards for all Downtown Districts: *Street trees at a rate of 1 per 25 linear feet of frontage*
- 13.06A.080 Design Standards for Increasing Allowable FAR: *Exterior public space equivalent to at least 5 percent of the site area and including the following attributes: trees and other plantings (etc).*
- 13.06.502.D Landscaping Standards for X-Districts: *Street Trees – 3 per 100 feet of site street frontage*
- 13.06.502.B, Residential District Landscaping, Planting Requirements (R4 District):
 - *Tree size and quantity:*
 - *A minimum of 1 tree per 1,000 square feet of parking lot area shall be provided.*
 - *For parking areas behind buildings of 20 stalls or less that are shielded by buildings from public street view, a minimum of 1 tree per 2,000 square feet of parking lot area is required.*
 - *Interior landscaping distribution:*
 - *Trees and planting areas shall be at aisle ends and evenly distributed*

¹⁵ see Article 4: Asbestos Control Standards

throughout the parking lot with no stall more than 50 feet from a tree trunk.

- *At least 1 tree shall be located within 10 feet of required walkway for each 40 feet of said walkway.*
- *Street trees:*
 - *3 trees per 100 feet of site street frontage shall be provided.*

Environmental Justice

The Washington State Growth Management Act (36.70a RCW) prescribes procedural criteria for adopting comprehensive plans and development regulations (Chapter 365-196 WAC). In particular, WAC 365-196-600 requires early and continuous public participation. Development in the North Downtown Subarea will be guided and regulated by the Tacoma's Comprehensive Plan and the City's existing development regulations. These policies and regulations were developed with robust public engagement, as stipulated by the Growth Management Act. Pierce County's Countywide Planning Policies require municipalities and the county to promote physical, social and mental well-being so that all people can live healthier (HW1); and incorporate provisions addressing health and well-being into appropriate local planning and decision-making processes (HW-2).

Additional Mitigation: Action Alternative

The Action Alternative will result in the adoption of a Subarea Plan and Upfront SEPA process that is designed to facilitate development within the Subarea compared with the **No Action Alternative**. Increased development can be expected to provide enhanced mitigation for adverse impacts to Environmental Health in the following areas:

Contaminated Soils

Increased development provides increased opportunities for mitigation of contaminated soils. When contaminated sites remain undeveloped, exposure risks remain and contamination may spread offsite affecting groundwater, surface water and Puget Sound. In contrast, when contaminated sites are developed, existing regulations require that contamination be remediated, mitigating the environmental hazards.

The North Downtown Subarea Plan includes the following recommendations that support brownfield remediation and thereby provide mitigation for potential negative impacts of contaminated soils:

- RECOMMENDATION LU-8: Identify all known sites of hazardous materials including former gas stations and laundries, develop appropriate mitigation strategies, and create a funding source for proactively mitigating the sites to support redevelopment.
- RECOMMENDATION LU-9: Adopt a policy that commits the City of Tacoma to the pursuit of strategies for the generation and dissemination of information about brownfield sites on a Subarea-wide basis.
- RECOMMENDATION LU-10: Continue to pursue grants from the EPA and other sources to fund area-wide brownfield assessment work.
- RECOMMENDATION LU-11: Initiate an internal City program to begin consolidating and integrating all available sources of brownfield data with the govME GIS system.

- RECOMMENDATION LU-12: Based on an inventory compiled from existing brownfield data sources, identify key information gaps and prioritize sites for Phase I and Phase II ESAs.
- RECOMMENDATION LU-13: Pursue grants from the EPA and State sources (the State can only fund public or non-profit owned property) to fund Phase I and Phase II ESAs.
- RECOMMENDATION LU-14: Consider up front brownfield remediation for City-owned properties as a strategy to encourage redevelopment of high priority catalyst sites in North Downtown.
- RECOMMENDATION LU-15: Pursue partnerships with private landowners to enable brownfield remediation on high-opportunity private redevelopment sites in North Downtown.
- RECOMMENDATION LU-16: Pursue grants from the EPA, Department of Ecology, Department of Commerce and other sources to fund brownfield remediation on sites that have been identified as high-priority redevelopment sites in North Downtown.

Indoor Air Quality

Because new buildings must adhere to modern building codes, they would have better indoor air quality than many of the existing buildings in the North Downtown Subarea. Thus, the more new development occurs, average indoor air quality within the Subarea is expected to improve.

Land Use Patterns

This project's intention of creating a walkable, transit-oriented community in the North Downtown Subarea is itself a mitigation for adverse impacts to human health associated with car-dependent urban environments. This goal is supported by existing policies and regulations at the Federal, State, regional, County and local levels, as documented in **Section 3.7 – Land Use, Relationships to Existing Plans and Policies**. Additional documentation on policies and regulations that support various aspects of a walkable, transit-oriented community can be found in the **Aesthetics; Historic and Cultural Resources; Population, Housing, and Employment**; and **Transportation** sections of this EIS.

The **North Downtown Subarea Plan** establishes the following recommendations supporting the creation of walkable, transit-oriented communities that will help mitigate adverse impacts on environmental health that are caused by the lack of alternatives to travel by private automobiles:

- RECOMMENDATION M-3: Establish specific thresholds of significance for transit service.
- RECOMMENDATION M-6: Develop and implement a phased-in developer impact fee system to fund multimodal transportation infrastructure investments as North Downtown builds out.
- RECOMMENDATION M-8: As the Subarea redevelops, consider implementation of Universal Transit Pass Programs and/or a reduction of the employee threshold for the requirement of Commute Trip Reduction Programs.
- RECOMMENDATION M-9: Work with Sound Transit to secure Small Starts funding for the Tacoma LINK light expansion project.
- RECOMMENDATION M-11: Collaborate with Sound Transit to share responsibility for improvements that support multimodal access to the future stations on the Link expansion.
- RECOMMENDATION M-12: Establish a citywide policy that prioritizes projects to

- improve non-motorized access to Link stations.
- RECOMMENDATION M-13: Designate the following streets on the proposed Tacoma Link expansion alignment as Transit Priority Streets: Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr Way.
- RECOMMENDATION M-14: Apply the City of Tacoma’s Mixed-Use Center Complete Streets Design Guidelines to Transit Priority Streets on the Tacoma Link expansion alignment.
- RECOMMENDATION M-15: Actively engage Sound Transit to collaborate on station siting and design that will most effectively leverage the transit investment and support North Downtown’s vision and goals.
- RECOMMENDATION M-17: Implement the City’s proposed active bicycle infrastructure projects in North Downtown as identified in the Mobility Master Plan.
- RECOMMENDATION M-18: Implement pedestrian improvements to the North Downtown problem intersections identified in the in the Mobility Master Plan.
- RECOMMENDATION TION M-19: Implement the City’s proposed pedestrian connector projects in North Downtown as identified in the Mobility Master Plan.

Furthermore, walkable, transit-oriented communities provide the greatest environmental health benefits when the densities of population and jobs reach a certain critical mass that supports a rich mix of uses—including grocery stores—and frequent transit service. The **No Action Alternative** would not be expected to result in sufficient population and job growth to fully catalyze the environmental health benefits offered by a highly functioning transit-oriented community. In contrast, the development alternative is intended to significantly boost population and employment in the North Downtown Subarea, such that the benefits of a walkable, transit-oriented community are more likely to be realized.

Urban Forestry

Existing policies and regulations that apply to the North Downtown Subarea encourage the protection of existing trees, and in most cases require the addition of street trees when properties are developed. Thus, in general, it is expected that the more development occurs, the more the tree canopy will be expanded in the North Downtown Subarea, especially if supplemented by funding for the *Strategic Urban Forest Management Plan*.

Environmental Justice

Development of the **North Downtown Subarea Plan** and this EIS involved multiple efforts to engage all populations, including underserved populations. These efforts included:

- EIS Public Community Meeting (included stringent pre-notification requirements)
- EIS Scoping Public Meeting: 13 people provided oral testimony, including representatives of the New Tacoma Neighbor Council, the Cascadia Green Building Council, the Tacoma Sustainability Commission, the Guadeloupe Land Trust, and Pierce County
- EIS Scoping comment period: Written comments were received from 13 parties, including the Department of Ecology, the Tacoma-Pierce County Health Department, and a representative of the Gallucci Learning Garden.
- Monthly Steering Committee: Members comprised of local residents, workers, property owners, and businesses

- DEIS public hearing: Oral public comments were be solicited, reviewed, and responded to. The public hearing was held on May 29, 2014
- DEIS comment period: Written public comments were solicited, reviewed, and responded to. The DEIS comment period began on May 15, 2014, and extended through June 16, 2014

As detailed in **Section 3.8 – Population, Housing, and Employment**, the North Downtown Subarea currently has a relatively low density of households, with a demographic profile revealing a community that lacks a balanced range of family types. A primary goal of the **North Downtown Subarea Plan** is to encourage development that will create a more vibrant and balanced community, which will provide benefits to those who already live and work in North Downtown, as well as to those who may live and work there in the future.

By encouraging the creation of walkable, transit-oriented communities, the **North Downtown Subarea Plan** will help make not owning a car a viable option for North Downtown residents. This opportunity presents a significant potential benefit to lower-income households, because the cost of owning a car typically represents a large fraction of their household expenses. When households can lower their transportation expenses in this way, their total cost of living is reduced, leaving more of their income available for housing, food, and other non-transportation-related expenses.

3.5.4 Unavoidable Adverse Impacts

With application of the environmental health-related guidelines noted above, no significant unavoidable environmental health impacts are anticipated in conjunction with any of the proposed alternatives.

3.6 NOISE

Information presented in this section addresses the effects of the proposed alternatives relative to noise levels on sites that are located within or proximate to the North Downtown Subarea. This information is based on readily available secondary sources of data; primary research (e.g., noise monitoring, etc.) has not been conducted for this analysis.

3.6.1 Affected Environment

Noise is sometimes defined as unwanted sound and the terms noise and sound are used more or less synonymously in this section. The human ear responds to a wide range of sound intensities. The decibel (dB) scale that is used to describe and quantify sound is a logarithmic scale that provides a convenient system for considering the large differences in audible sound intensities. On this scale, a 10-dB increase represents a perceived doubling of loudness to someone with normal hearing. Therefore, a 70-dB sound level would seem twice as loud as a 60-dB sound level.

People generally cannot detect sound level differences (increases or decreases) of 1 dB in a given noise environment. Although differences of 2 or 3 dB can be detected under ideal laboratory conditions, such changes are difficult to discern in an active outdoor noise environment. A 5-dB change in a given noise source, however, would likely be perceived by most people under normal listening conditions.

When addressing the effects of noise on people, it is necessary to consider the "frequency response" of the human ear, or those frequencies that people hear best. Sound-measuring instruments are, therefore, often programmed to "weight" sounds based on the way people hear. The frequency-weighting most often used to evaluate environmental noise is A-weighting and measurements using this system are reported in "A-weighted decibels" or dBA. All sound levels discussed in this evaluation are reported in A-weighted decibels.

As mentioned above, the decibel scale used to describe noise is logarithmic. On this scale, a doubling of sound-generating activity (i.e., a doubling of the sound energy) causes a 3-dBA increase in average sound produced by that source, not a doubling of the loudness of the sound (which requires a 10-dBA increase). For example, if traffic along a street is causing a 60-dBA sound level at some nearby location, twice as much traffic on this same street would cause the sound level at this same location to increase to 63 dBA. Such an increase might not be discernible in a complex acoustical environment.

Relatively long, multi-source "line" sources such as roadways emit cylindrical sound waves. Due to the cylindrical spreading of these sound waves, sound levels from such sources decrease with each doubling of distance from the source at a rate of 3 dBA. Sound waves from discrete events or stationary "point" sources (such as a backhoe operating in a stationary location) spread as a sphere, and sound levels from such sources decrease 6 dBA per doubling of the distance from the source. Conversely, moving half the distance closer to a source increases sound levels by 3 dBA for line and 6 dBA for point sources.

For a given noise source, a number of factors affect the sound transmission from the source, which in turn affects the potential noise impact. Important factors include distance from the source, frequency of the sound, absorbency and roughness of the intervening ground surface,

the presence or absence of obstructions and their absorbency or reflectivity, and the duration of the sound. The degree of impact on humans also depends on existing sound levels and who is listening.

Federal regulatory agencies often use the equivalent sound level (Leq) to characterize sound levels and to evaluate noise impacts. The Leq is the level that if held constant over the same period of time would have the same sound energy as the actual, fluctuating sound. As such, the Leq can be considered an energy-average sound level. But this metric should not be confused with an arithmetic average which tends to de-emphasize high and low values; the Leq gives most weight to the highest sound levels because they contain the most sound energy.

Typical sound levels of familiar noise sources are presented in **Table 3.6-1**.

As noted previously in this Final EIS, the North Downtown Subarea covers an area of approximately 520 acres. The ambient sound level within the Subarea is typical of an urban setting and is the result of a broad range of factors both in and proximate to the North Downtown Subarea including:

- motor vehicles operating on I-5, I-705, the 11th St bridge, and City streets throughout the Subarea;
- transit buses, particularly along Pacific Ave.;
- passenger, commuter, and freight trains;
- aircraft overflights, principally from Joint Base Lewis-McCord and SeaTac International Airport;
- motorized watercraft on the Foss Waterway;
- industrial/manufacturing activities,
- heating, ventilating, and air conditioning (HVAC) equipment located on building rooftops; and
- site-specific construction activity.

**Table 3.6-1
Sound Levels Produced by Common Noise Sources**

Noise Source	DBA
Aircraft Carrier Flight Deck Operations	140
Threshold of Pain	130-140
Fireworks	130
Jet Takeoff (200 ft. distance)	120
Jack Hammer	120
Auto Horn (3 ft. distance)	120
Chain Saw/Noisy Snowmobile	110
Jet Takeoff (2,000 ft. distance)	105
Lawn Mower, Power Tools (3 ft. distance)	85-100
Noisy Motorcycle (50 ft. distance)	100
Heavy Truck (50 ft. distance)	90
Quiet Snowmobile, Motorcycle (50 ft. distance)	80
Busy Urban Street	80
Normal Automobile, Commercial Area	70
Seagulls and Crows	70
Normal Conversation (3 ft. distance)	60
Quiet Residential Area	50
Moderate Rainfall	50
Quiet Residence, Library	40
Bedroom at Night or Whisper	30
Background Level in a Concert Hall	30
Broadcasting Studio	10
Rustle of Leaves	10
Threshold of Hearing	0

Source: EPA, 1978; EPA, 1972

A major consideration for noise impact analyses is the effect that the proposal may have on noise sensitive land uses. These are land uses that require low levels of sound. Typical noise sensitive receptors include: schools, hospitals, long-term care facilities, residential uses, libraries, churches, passive recreational areas, etc. In the North Downtown Subarea, key noise sensitive land uses include the following:

- Multiple Bates Technical College, Stadium High School, Washington State Historical Research Center
- Churches: Christ Episcopal Church, Apostolic Faith Church, First Presbyterian Church/School, Center For Spiritual Living, Central Lutheran Church, Everlasting Love International Ministries, First United Methodist Church of Tacoma, Urban Grace, Christian Science Reading Room, Alzheimer Memorial Church God, St Leo's Church, Tacoma College Ministry
- Tacoma Public Library
- Wright Park
- Pierce County District Court
- Rialto and Pantages Theaters
- Foss Esplanade
- Numerous single-family homes and multifamily residential buildings

3.6.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Noise-related impacts would be evaluated on site-specific basis in conjunction with each proposed project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposed development alternative would continue the redevelopment trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. As such, the potential exists for noise-related impacts associated with new development that is consistent with the ***North Downtown Subarea Plan***. However, considering the fact that this is an urbanized part of the City, that redevelopment is projected to occur over several decades and that noise-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the North Downtown Subarea would not result in any significant noise-related impacts. Such development would be required to fully comply with existing development regulations, as noted in part **3.6.3** of this section.

Construction

Future site-specific development under any of the alternatives is expected to result in occasional, localized noise-related impacts from construction-related activities. Noise from project-specific demolition and construction activity, while typically short-term and temporary in nature, would cause the most noticeable and disruptive noise impacts and have the greatest potential to affect sensitive noise receptors. For daytime construction activities, the Tacoma Noise Ordinance limits construction hours from 7 a.m. to 9 p.m. The temporary nature of construction activity together with the timeframe limit is expected to lessen the potential for significant impacts from construction activities and equipment. Existing regulations adequately mitigate these impacts, as noted below in Section 3.6.3.

Table 3.6-2 lists typical noise levels from construction activities and equipment. As shown, construction activities at a distance of 50 ft. have the potential to exceed 85 dBA. Therefore, construction noise management plans should be conceived and implemented for construction projects within 50-100 ft. of potentially affected receivers, particularly those containing more sensitive residential uses. The lower portion of that table shows the range of sound levels (i.e., minimum to maximum levels) that can be expected from different kinds of equipment. As noted earlier, in the absence of intervening terrain or structures, sounds from construction equipment and activities (usually point sources) decrease about 6 dBA for each doubling in distance from the actual source.

**Table 3.6-2
Typical Noise Levels from Construction Activities and Equipment (dBA)**

Activity	Range of Hourly Leqs		
	At 50 ft.	At 100 ft.	At 200 ft.
Clearing	83	77	71
Grading	75-88	69-82	63-76
Paving	71-88	66-82	60-76
Erection	72-84	66-78	60-72
Construction Equipment	Range of Noise Levels		
	At 50 ft.	At 100 ft.	At 200 ft.
Bulldozer	77-96	71-90	65-84
Dump Truck	82-94	76-88	70-82
Scraper	80-93	74-87	68-81
Paver	86-88	80-82	74-76
Generators	71-82	65-76	59-70
Compressors	74-81	68-75	62-69
Pneumatic Wrenches	83-88	77-82	71-76
Jackhammers	81-98	75-92	69-86

Source: EPA, 1971

Operation

Mechanical Equipment

Rooftop HVAC units would likely be installed in support of commercial/retail uses and possibly new residences. Refrigeration units also may be required for potential, future restaurants and/or cafes. Specific noise levels generated by such equipment would depend on the location, height, and design of individual equipment and building systems. Noise from these sources would need to be controlled to comply with the City's noise limits that prohibit day time noise from any source to be no more than 10 decibels above background noise levels and night time noise levels to be no more than 5 decibels above background noise levels.¹ With proper placement and design, it is likely that future HVAC units and related mechanical equipment would meet these limits. If the development site is adjacent to a sensitive receptor, site-specific mitigation may be necessary.

Traffic

The overall aim of the ***North Downtown Subarea Plan*** is to create an urban environment that is less dependent upon motor vehicles. However, increases in population density and commercial activity associated with each of the alternatives would likely result in traffic increases on the local street network, which would increase traffic-related noise levels in the Subarea. As mentioned previously, a doubling of sound-generating activity – in this case traffic – causes a 3-dBA increase in average sound produced by a noise source.

Based on the traffic analysis that is contained in this Final EIS (**Section 3.11 – Transportation**), traffic-related noise is not expected to increase by up to 3 dBA on major arterials within the Subarea. As described previously, increases of up to 3 dB are difficult to discern in an active

¹ Tacoma Noise Ord. #27695

outdoor noise environment. Therefore, no significant noise-related impacts are anticipated from changes in traffic volumes as a result of any of the development alternatives.

3.6.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations and other mitigation, as noted below.

City Policies

The following policies, together with City codes and other more specific measures, can help mitigate impacts that are described in this section of the Final EIS.

Tacoma Comprehensive Plan

Section ST-8 of the Neighborhood Element of the Comprehensive Plan articulates strategies for noise reduction, stating that

“New residential development should be constructed using noise reduction measures to reduce noise levels within the structures to an acceptable level. Care should be exercised in locating land uses, particularly residential developments and other noise sensitive uses such as schools, nursing homes and churches, in high noise areas.”

Comprehensive Plan -- Environmental Policy Element and Neighborhood Element

These elements of the *Comprehensive Plan* contain the following policies regarding noise:

Policy	Intent
<i>E-N-1, ST-8.1 Buffer Noise Sources</i>	<i>Encourage the use of buffer areas and/or noise absorbing barriers between sources of noise and residential areas or other noise sensitive land uses.</i>
<i>E-N-2, ST-8.2 Noise Reduction Measures</i>	<i>Promote the use of construction techniques, building siting and other means that reduce the level of internal and external noise, particularly in high noise areas.</i>
<i>E-N-3, ST-8.3 Noise Impacted Areas</i>	<i>Discourage development in noise impacted areas that will significantly increase noise levels by either a direct contribution or by removing an existing natural feature that acts as a noise absorbing barrier.</i>
<i>E-N-4, ST-8.4 Noise Sensitive Land Uses</i>	<i>Discourage the development of noise sensitive land uses within or near high noise areas.</i>

Additional policies in the Comprehensive Plan intended to mitigate noise include:

Policy	Intent
<i>LU-MUD-1 Compatibility</i>	Ensure that new development within centers is compatible with existing development and/or the desired character of the area in terms of building location and orientation, pedestrian and vehicular access, building massing and scale, light and glare, outdoor storage areas,

	noise generating activities, service elements and mechanical equipment location and design, landscaping design, and signage. Compatible and sensitive design is most critical in areas bordering designated single-family areas.
H-NQ-5 Neighborhood Design Concepts	Develop standards to buffer the edges of residential areas from impacts of nonresidential uses and mixed-use center developments such as noise and glare.
T-ES-2 Noise and Air Pollution	Encourage the reduction of noise and air pollution from various modes of transportation.

The Growth Strategy and Development Concept Element of the Comprehensive Plan further reinforces policy T-ES-2 by stating

“Transportation plans and policies concerned with traffic congestion and related air and noise pollution will focus on a multi-modal transportation system and the curtailment of single-occupancy vehicle use.”

City Codes

Tacoma Municipal Code

Chapter 8.122 of the Tacoma Municipal Code addresses Noise Enforcement, and establishes the following limits:

8.122.080 -- General prohibitions.

A. No person shall make, continue, or cause or permit to be made or continued any sound attributable to any device that, increases the total sound level by the limits shown in the Table below when measured at or within a receiving property:

<u>Time</u>	<u>Outdoors</u>	<u>Indoors.</u>
7:00 a.m. to 10:00 p.m.	10 dBA	6 dBC
10:00 p.m. to 7:00 a.m.	5 dBA	3 dBC

B. No person shall make, continue, or cause or permit to be made or continued any impulsive sound, attributable to the source, that increases the total sound level by 15 dB(A) or more above the ambient sound level, when there are less than ten impulses per hour between the hours of 7:00 a.m. and 10:00 p.m., less than four impulses within one hour between the hours of 10:00 p.m. and 7:00 a.m.

8.122.090 -- Construction.

A. All construction devices used in construction and demolition activity shall be operated with a muffler if a muffler is commonly available for such constructing device.

B. Construction and demolition activity, excluding emergency work, shall not be performed between the hours of 9:00 p.m. and 7:00 a.m. on weekdays or between the

hours of 9:00 p.m. and 9:00 a.m. on weekends and federal holidays, except as otherwise provided in this code.

C. After hours work on weekdays and weekends shall be allowed, provided that no sound created by the work exceeds the limits in 8.122.080(a).

8.122.100 -- Commercial music.

A. No person shall make or cause or permit to be made or caused any music originating from or in connection with the operation of any commercial establishment or enterprise when the level of sound attributable to such music, as measured inside any receiving property dwelling unit:

1. causes a 6 dB(A) or more increase in the total sound level above the ambient sound level as measured in decibels in the "A" weighting network; or
2. causes a 6 dB(C) or more increase in the total sound level above the ambient sound level as measured in decibels in the "C" weighting network.

B. No person shall make or cause or permit to be made or caused any music originating from or in connection with the operation of any commercial establishment or enterprise when the level of sound attributable to such music is plainly audible from a distance of at least one hundred feet in any direction from the property line of the commercial establishment.

Chapter 8.12.060 of the Tacoma Municipal Code addresses Public Disturbance Noises:

A. It is unlawful for any person to cause, or for any person in possession of property to allow originating from the property, sound that is:

1. an unreasonable noise, as defined in subsection 8.122.010(KK) TMC; or
2. any sound that is plainly audible (as that term is defined in Chapter 8.122 TMC) within any dwelling unit; or
3. any sound produced by a sound reproduction device (as that term is defined in Section 8.122.010) that is plainly audible (as that term is defined in Section 8.122.010 TMC) 50 feet from the source of the sound; Provided, that this subsection c shall not apply to commercial music under TMC 8.122.100; or
4. Commercial music in excess of the limitations set forth in TMC 8.122.100.

B. In addition to the provisions of Section 8.12.060(1), the following sounds are determined to be public disturbance noises:

1. The frequent, repetitive, or continuous sounding of any horn or siren attached to a motor vehicle, except as a warning of danger or as specifically permitted or required by law;

2. The creation of frequent, repetitive or continuous sounds in connection with the starting, operation, repair, rebuilding or testing of any motor vehicle, motorcycle, off-highway vehicle or internal combustion engine within a residential district, so as to disturb or interfere with the peace, comfort, and repose of a reasonable person of normal sensibilities.

C. Yelling, shouting, hooting, whistling or singing on or near the public streets, particularly between the hours of 11:00 p.m. and 7:00 a.m., or at any time and place so as to unreasonably disturb or interfere with the peace, comfort and repose of owners or possessors of real property;

D. The creation of frequent, repetitive or continuous sounds which emanate from any building, structure, apartment, or condominium, which unreasonably interfere with the peace, comfort, and repose of owners or possessors of real property, such as sounds from audio equipment, musical instruments, band sessions, or social gatherings;

E. Sound from audio equipment, such as tape players, radios, and compact disc players, operated at a volume so as to be audible greater than 50 feet from the source, and if not operated upon the property of the operator. The foregoing provisions shall not apply to regularly scheduled events at parks, such as public address systems for baseball games or park concerts.

F. Noise from an animal that unreasonably disturbs one or more person's reasonable expectation of peace and quiet. Factors to be considered in making such a determination include, but are not limited to, the nature, duration, volume, frequency, time, and location of the noise.

Other Mitigation

Depending on the nature of future development, additional mitigation may be warranted in order to address site-specific impacts that could occur under any of the alternatives. With regard to potential long-term noise-related impacts associated with noise sensitive receptors, if HVAC units and related mechanical equipment are placed in areas proximate to the sensitive receptor, equipment vendors and contractors should ensure that the equipment would be installed with effective noise mitigating enclosures and/or directed away from sensitive areas.

3.6.4 Unavoidable Adverse Impacts

With application of the noise-related regulations noted above, no significant unavoidable noise impacts are anticipated in conjunction with any of the proposed alternatives.

3.7 LAND USE

Information presented in this section addresses the effects of the proposed alternative relative to land use patterns on sites that are located within or proximate to the North Downtown Subarea, as well as consistency of the proposed North Downtown Subarea Plan relative to adopted land use plans and development regulations. The analysis of Land Use Patterns is presented in **Part A** of this section and the consistency analysis is in **Part B**.

PART A – LAND USE PATTERNS

3.7.1 Affected Environment

The North Downtown Subarea comprises of roughly one-half of Tacoma’s downtown, covering a geographic area of approximately 520 acres. As depicted by **Figure 2-3** (in *Section II* of this Final EIS), the Subarea encompasses the northern portion of **Downtown Tacoma** and includes Bates Technical College Campus, the **Commercial Core**, the **Stadium District**, the northern portion of the **Hillside District**, the **St. Helens District**, and **Wright Park**. Properties located along the west edge of the Thea Foss Waterway between S. 15th St. and S. 4th St. are not included in the Subarea. The Subarea is bordered by Tacoma’s North End neighborhoods to the north, the Martin Luther King Jr. mixed-used residential district to the west, industrial lands and the Port of Tacoma to the east, and the UW-T/Museum District to the south.

The Subarea encompasses a wide range of existing land uses, as shown in the generalized land use pie chart in **Figure 3.7-1**, and the generalized land use map in **Figure 3.7-2** (based on standard City of Tacoma land use description designations at the parcel level). In general, land use in the Subarea transitions from primarily office and commercial in the downtown area to multifamily and neighborhood residential in the Stadium District. Institutions, including religious, health care and civic uses, are found scattered throughout the Subarea. Educational uses include the Bates Technical College campus on the west edge of the Downtown Core, and Stadium High School in the Stadium District. On the east edge of the Foss Waterway lie mainly industrial, maritime and shoreline uses.

Figure 3.7-1: Generalized Land Use Breakdown in the North Downtown Subarea

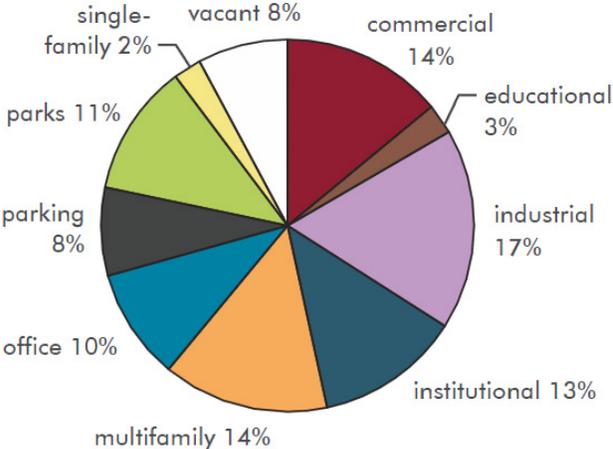
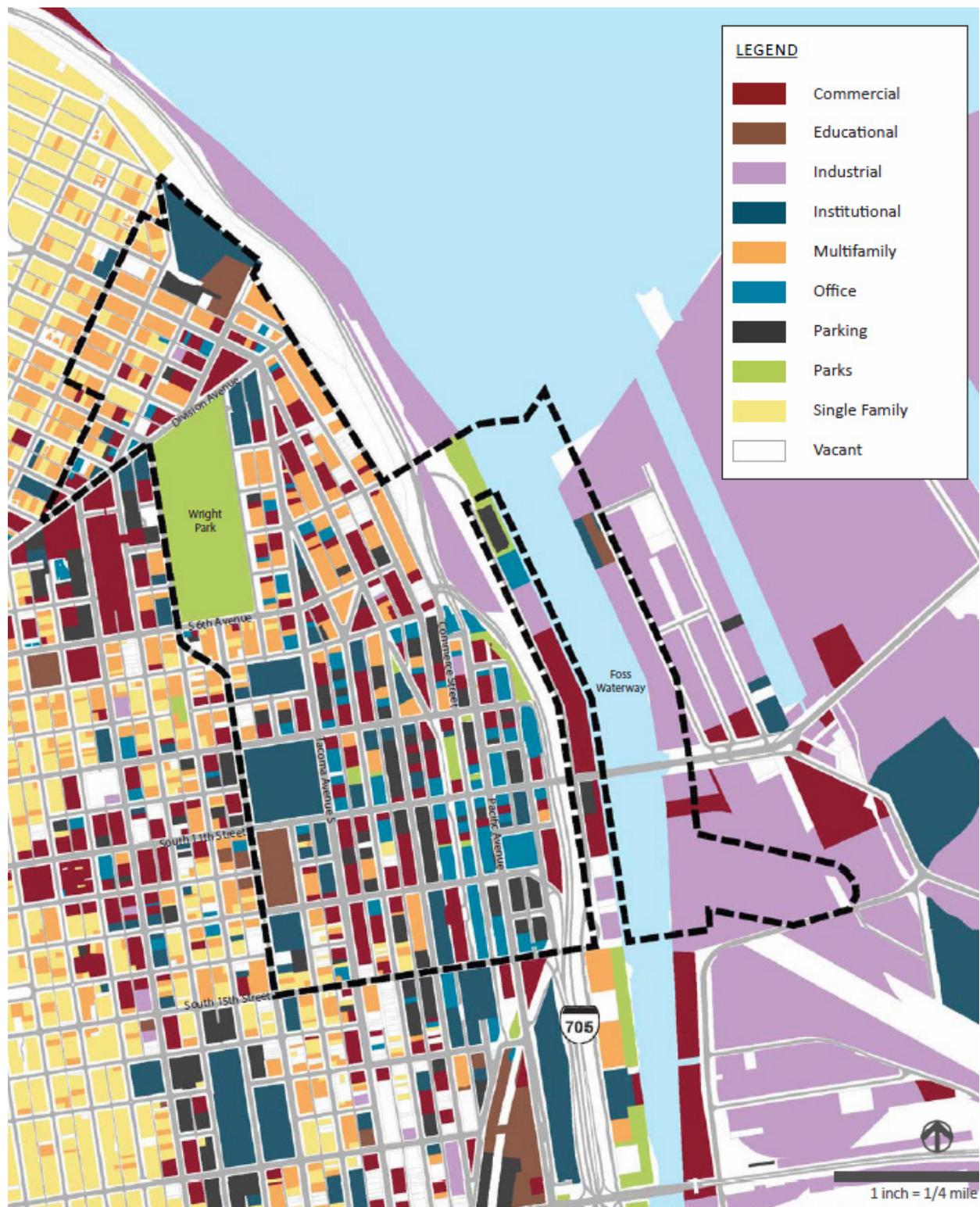


Figure 3.7-2: Land Use Map of the North Downtown Subarea



Source: City of Tacoma Department of Planning and Development Services

Commercial, industrial, institutional, office and multifamily uses are represented fairly equally in terms of land area, and make up 68% of the total parcel area within North Downtown. There is little single family housing within the Subarea. There is a large proportion of vacant parcels in the St. Helens District and a relatively high proportion of parking uses in the Downtown Core. The Subarea's unusually large share of parkland is due mostly to Wright Park, which provides approximately 27 acres of recreational parkland for downtown residents and visitors.

The pattern (location and distribution) of land uses within the North Downtown Subarea is based on City policies associated with the *Comprehensive Plan* and, more specifically, on zoning that has been adopted consistent with the *Comprehensive Plan* policies. The zoning districts that comprise the North Downtown Subarea are described below, illustrated in **Figure 3.7-3**, and key metrics are summarized **Table 3.7-1**.

The Stadium District, the most residential portion of North Downtown, comprises three zoning designations within the Mixed Use Center District category, which are described in Chapter 13.06 of the Tacoma Municipal Code (TMC). These zones are regulated to encourage greater integration of land uses and to support regional growth targets by making efficient use of infrastructure and allowing a variety of housing and employment options:

- Neighborhood Commercial Mixed-Use District (NCX): Intended primarily to provide areas with immediate day-to-day convenience shopping and services at a scale that is compatible and in scale with the surrounding neighborhood, including local retail businesses, professional and business offices, and service establishments.
- Residential Commercial Mixed-Use District (RCX): A primarily residential district intended to provide sites for medium- and high-intensity residential development in centers, with opportunities for limited mixed use.
- Urban Residential Mixed-Use District (URX): A primarily residential district that serves as a transition between more intensive MUC uses and surrounding residential areas. Intended to provide sites for medium intensity residential development, such as townhouses, condos and apartments.

Chapter 13.06A of the TMC defines the following downtown zoning districts within the Subarea, which account for most of the land area in the St. Helens and Downtown Core Districts:

- Downtown Mixed-Use (DMU): This district is intended to contain a high concentration of educational, cultural, and governmental services together with commercial services and uses.
- Downtown Residential (DR): This zone is intended to contain a predominance of mid-rise, higher density, urban residential development together with places of employment and retail services.
- Downtown Commercial Core (DCC): This zoning district is intended to focus on high-rise office buildings and hotels, street level shops, theaters, and various public services into a compact, walkable area, with a high level of transit service. The Old City Hall Historic District is located within the DCC zone. Within the historic district, exterior changes to contributing buildings must be reviewed for historical appropriateness by the Landmarks Preservation Commission.

Although most of the Subarea is comprised of downtown and mixed use zones, a few small areas fall within residential and commercial zones:

- The triangle of land between Schuster Parkway, Stadium Way, and the South 4th Street right of way is zoned R2 (Single Family Dwelling District). The development of this parcel seems unlikely as it is located on a very steep and inaccessible hillside.
- Wright Park, although not developable land is zoned R3 (Two-Family Dwelling District).
- The single parcel of land that is currently the site of the Hob Nob Restaurant (adjacent to Wright Park on South 6th Avenue) is zoned C2 (General Community Commercial District)

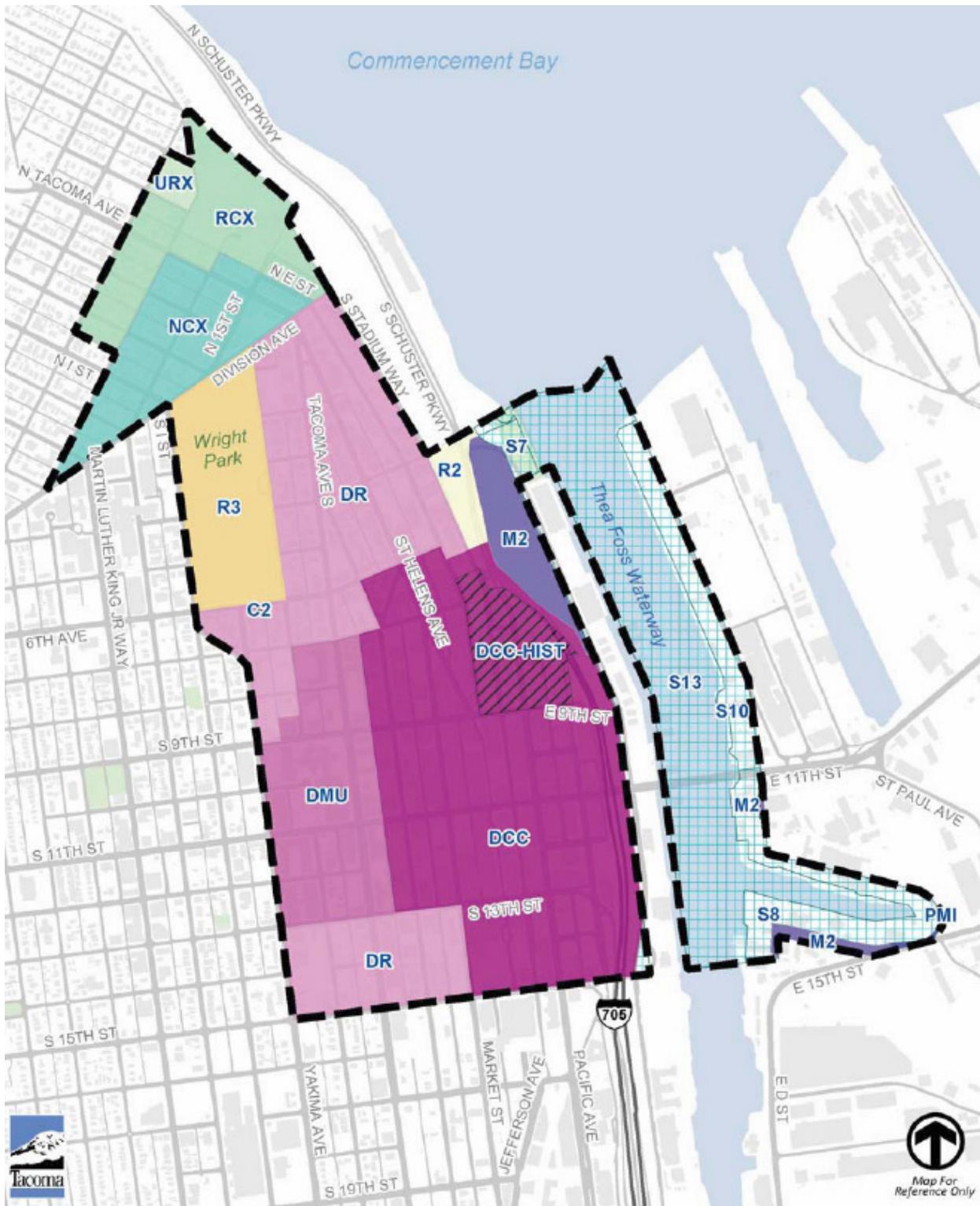
Chapter 13.10 of the TMC defines the Shoreline Districts, several of which are represented in the portion of the North Downtown Subarea along the edge of the Foss Waterway:

- Shoreline District - Schuster Parkway (S7): Intent is to allow development of deep water terminal and light industrial facilities, but to preserve the character and quality of life in adjoining residential areas, school and park properties.
- Shoreline District - Thea Foss Waterway (S8): Applies to the lands along the Thea Foss Waterway; intended to improve the environmental quality of the Waterway; provide continuous public access to the Waterway; encourage the reuse and redevelopment of the area for mixed-use pedestrian-oriented development; and to encourage existing industrial and terminal uses to continue their current operations and leases to industrial tenants.
- Shoreline District - Port-Industrial (S-10): Intent is to allow the continued development of the Port Industrial Area, with an increase in the intensity of development and a greater emphasis on terminal facilities within the City.
- Shoreline District - Commencement Bay and Tacoma Narrows (S-13): Intent is to maintain these bodies in substantially their natural state for use by the public for navigation, commerce, and recreation purposes.

The southeastern corner of the Subarea contains some land areas that are zoned for industrial use:

- Heavy Industrial District (M-2): This zone is intended to allow most industrial uses. The impacts of these industrial uses include extended operating hours, heavy truck traffic, and higher levels of noise and odors. This classification is only appropriate inside Comprehensive Plan areas that are designated for medium and high intensity uses.
- Port Maritime & Industrial District (PMI): This district is intended to allow all industrial uses and uses that are not permitted in other districts, barring uses that are prohibited by City Charter. The Port of Tacoma facilities, facilities that support the Port's operations, and other public and private maritime and industrial activities make up a majority of the uses in this district.

Figure 3.7-3: Zoning in the North Downtown Subarea



Source: City of Tacoma Department of Planning and Development Services

**Table 3.7-1
Zoning in the North Downtown Subarea**

Zoning District	Land Area Within the Subarea (acres)	Maximum Building Height (feet)
Downtown Mixed Use District (DMU)	43	100**
Downtown Residential District (DR)	103	90**
Downtown Commercial Core District (DCC)	158	400
Urban Residential Mixed-Use District (URX)	3	45
Neighborhood Commercial Mixed District (NCX)	32	45 (65 within Stadium MUC)*
Residential Commercial Mixed-Use District (RCX)	31	60*
General Community Commercial District (C2)	<1	45
Single-Family Dwelling District (R2)	5	35
Two-Family Dwelling District (R3)	32	35
Heavy Industrial (M-2)	14	100
Port Maritime & Industrial District (PMI)	<1	100
Schuster Parkway (S-7)	<1	100 (for deep water facilities; otherwise 35)
Thea Foss Waterway (S-8)	18	65 - 180
Port Industrial Area (S-10)	13	100
Marine Waters of the State (S-13)	67	35 (unless associated with Port/Industrial or transportation facilities)

**In NCX and RCX Districts, additional height above standard height limits may be allowed in certain areas through the X-District Height Bonus Program.*

***Maximum Building Height within 150' east of the centerline of the Yakima Avenue right-of-way is limited to 60 feet.*

3.7.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Land use-related impacts would be evaluated on a site-specific basis in conjunction with each proposed project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposed development alternative would continue the redevelopment trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. As such, the potential exists for land use-related impacts associated with new development that is consistent with the **North Downtown Subarea Plan**. Development under the action alternative would increase the land use intensity in North Downtown, in accordance with VISION 2040 and the goals of the City's *Comprehensive Plan*, which, in the Generalized Land Use Element, states:

“The Downtown Tacoma Center is to be the highest concentration of urban growth found anywhere in the City and within Pierce County. The center also is a designated regional growth center providing a focal point for new housing and employment for the Central Puget Sound region.”

The Action Alternative would create land use impacts associated with a build-out of up to a net increase of 30 million sq.ft. of development by the year 2030. This would correspond to an estimated 30,000 new residents and 30,000 new jobs in the Subarea (see **Table 2-1** in **Section II**). Considering the fact that this is an urbanized part of the City, that redevelopment is projected to occur over several decades and that land use-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the South Downtown Subarea would not result in any significant land use-related impacts. Such development would be required to fully comply with existing development regulations, as noted in part **3.7.3** of this section.

Based on existing land uses, land use regulations, location, topography, limited land area, and other site limitations, very little redevelopment can be expected to occur in the following zoning districts within the North Downtown Subarea under the action alternative:

- General Community Commercial District (C2)
- Single-Family Dwelling District (R2)
- Heavy Industrial (M-2)
- Schuster Parkway (S-7)
- Thea Foss Waterway (S-8)
- Port Industrial Area (S-10)
- Marine Waters of the State (S-13)

Development within the North Downtown Subarea would likely result in the construction of buildings on formerly vacant lots, surface parking lots, and demolition of single family and underutilized or devalued properties in order to accommodate higher density development.

Such would change the use patterns and aesthetic character at the block-scale and potentially even at the neighborhood-scale.

Redevelopment of surface parking lots could, depending on how much structured parking is provided in conjunction with the redevelopment project, reduce the amount of parking available in the vicinity of a redevelopment site. This would result in increased competition for on-street and off-street parking spaces in the vicinity of the redevelopment site. As noted in the proposed **North Downtown Subarea Plan**, a reduction in the amount of surface parking could create a more pedestrian-friendly environment that would encourage walking and transit use, and help reduce the use of single-occupant vehicles.

At the regional scale, redevelopment in the North Downtown Subarea would result in land use outcomes that would help achieve the regional land use intent of the PSRC's VISION 2040 regional plan. One of the primary goals of VISION 2040 is to focus the majority of regional growth in urban centers. It is well established that growth is coming to the Tacoma region, and the more of that growth that can be accommodated in the North Downtown urban center, the less growth there will be in suburban and rural areas elsewhere in the region. Compared to suburban and rural areas, typical land use patterns in urban centers such as North Downtown can be expected provide numerous beneficial environmental impacts, including:

- reduced energy use and GHG emissions
- less consumption of land and reduced development pressure on farms and forests;
- reduction of polluted water runoff
- lower cost of infrastructure such as roads and utility lines
- increased operational efficiency of transit

3.7.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations and other mitigation, as noted below.

City Policies

The following policies, together with City codes and other more specific measures, can help mitigate impacts that are described in this section of the Final EIS.

Tacoma Comprehensive Plan -- Generalized Land Use Element

This element of the *Comprehensive Plan* contains the following policies that can provide mitigation by supporting the land use changes necessary to achieve the growth goals of the proposed **North Downtown Subarea Plan**.

Policy	Intent
LU-MUDTC-1 Maximize Development	<i>Encourage maximum development of the downtown with diverse types of uses and facilities such as major financial, professional, office, cultural, retail and high density residential developments, giving the City of Tacoma a recognizable focal point that has continuous, vigorous use and affords maximum safety and convenience.</i>
LU-MUDTC-2 Preservation of Historical, Cultural and Scenic Resources	<i>Recognize the abundance and prominence of historical, cultural, and scenic resources within downtown and preserve these unique assets.</i>

LU-MUDTC-3 Parking	<i>Emphasize on-street parking and parking within structures to meet the majority of parking needs in the downtown area.</i>
LU-MUDTC-4 Residential Development	<i>Encourage quality residential development including high-rise apartments and other concentrated housing types that are designed not only to support compactness of the center but also to improve the livability of the urban area.</i>
Policy	Intent
LU-MUDTC-5 Integrated Downtown	<i>Encourage the development of an integrated transportation system consisting of automobile, transit, cycling, and pedestrian linkages that complements activities in the downtown center.</i>
LU-MUDTC-6 Parking/Transit Relationship	<i>Recognize the availability and cost of parking in downtown substantially influences public transit's viability as a transportation alternative.</i>
LU-RDHI-1 Locate Near or Within Regional Activity Centers	<i>High-density residential developments should be located near and within regional mixed-use centers where utilities, transit facilities, employment opportunities and commercial conveniences and services are available to accommodate developments of this nature.</i>
LU-RDHI-2 Maximize Marine View	<i>Locate new high-rise, high-density residential development within and in areas adjacent to the downtown in order to take maximum advantage of the marine and territorial views.</i>
LU-RDHI-4 Housing for a Variety of Incomes	<i>Encourage the construction of high, medium and low-income residential developments within high intensity areas.</i>
LU-RDHI-6 Mixed-use	<i>Promote residential development for the upper floors of commercial buildings to achieve greater densities and support transit use, particularly within mixed-use centers.</i>
LU-CDLA-4 Locate in Existing Commercial Areas and in Mixed-use Centers	<i>Encourage new commercial development to locate within existing commercial areas and in mixed-use centers in order to maximize the use of the land and maintain the economic viability of established commercial developments.</i>
LU-CDLA-9 Commercial Uses within Residential High-Rise	<i>Encourage commercial development that provides convenience goods to be situated within mid and high-rise residential structures in order to serve the needs of the persons within.</i>
LU-CDLA-13 Residential Development within Commercial Areas	<i>Encourage the development of residential uses within and near commercial areas, particularly within mixed-use centers.</i>
LU-CDD-3 Pedestrian-friendly Design	<i>Site and design commercial areas with safe, convenient, connected and attractive pedestrian access.</i>
LU-CDD-4 Bicycle Amenities	<i>Encourage commercial developments to provide bicycling facilities including paths, parking, employee showers, and changing areas in commercial areas.</i>
LU-CDHI-1 Open Space/Landscaping	<i>Open spaces, including parks, plazas and squares, and landscaping with street trees should be developed to complement and enhance high intensity commercial areas.</i>
LU-IDG-1 Industrial Land Needs	<i>Allow for concentrations of land of sufficient size and quantity to meet the needs of industry, provide employment opportunities, support economic development, and promote efficient use of land, utilities and transportation facilities.</i>
LU-IDG-2 Utilize Existing Industrial Areas	<i>Strongly encourage new industrial development to locate in existing industrial areas to limit land use and transportation conflicts.</i>

The *Public Services* Element of the Comprehensive Plan also includes policies that address potential adverse impacts and mitigation associated with land use and open space.

Regulations

Land Use Regulatory Code

The *Comprehensive Plan* policies noted above are implemented through Tacoma's Title 13 Land Use Regulatory Code. As established in Chapters 13.06 and 13.06A, existing zoning in the North Downtown Subarea provides a wide range of regulations that mitigate potential adverse impacts of development. Each zone in the Subarea has a set of allowed uses that are intended to reinforce the desired character of the zone. Zone-specific regulations are summarized below.

Mixed-Use Center Districts

The Mixed-Use Center Districts (URX, NCX, RCX) have established uniform development standards that provide mitigation for potential adverse impacts of development, including:

- 13.06.501 Building Design Standards
- 13.06.502 Landscaping and/or buffering standards
- 13.06.503 Residential transition standards
- 13.06.510 Off-street parking and storage areas
- 13.06.511 Transit Supportive Facilities
- 13.06.512 Pedestrian and bicycle support standards

Tacoma's mixed-use zoning districts incorporate a height bonus program to allow additional height in exchange for various public benefits provided by the developer within specifically designated areas. In the North Downtown Subarea, development within the NCX zone in the Stadium District is eligible to receive additional height through the height bonus program. Bonus heights are split into two levels, as shown in Table 3.7-2. To build to these increased heights, developers are required to provide one or more public benefit bonus features:

- Level 1
 - Pedestrian-oriented environment - ground floor retail/restaurant, public art, structured parking
 - Transit-oriented development - transit stop improvements and 50% residential use in mixed-use projects
 - Sustainability - LID stormwater management, green roof, solar energy collection, historic landmark designation, historic façade retention, and energy efficiency
 - Quality of life - affordable housing, affordable housing contribution, open space fund contribution, transfer of development rights
- Level 2
 - Quality of life – transfer of development rights (see below for discussion of TDR)

**Table 3.7-2
NCX District Bonus Program**

Zoning District	NCX
Base Allowable Building Height (ft.)	45'
Maximum Height Allowed Through Level 1 Bonuses (ft.)	65'
Maximum Height Allowed Through Level 2 Bonuses (ft.)	85' with TDR, for property within 200' of a Core Pedestrian Street ²
Maximum Non-residential Floor Area (max. sf)	30,000 per business 45,000 for full service grocery store (offices are exempt)
Minimum Density for Single-Purpose Residential (dwelling units)¹	40 DU on Core Pedestrian Streets; otherwise 30 DU

¹Projects that do not include residential uses, and mixed-use projects, are exempt from minimum-density requirements.

²Core Pedestrian streets are Division Avenue from North 2nd Street to Tacoma Avenue; Tacoma Avenue; North 1st Street.

The City of Tacoma has implemented a TDR program in the Downtown Districts and the Mixed-Use Center Districts, including the NCX district in North Downtown. Transfer of Development Rights (TDR) is a regulatory strategy by which development rights are transferred from places that are appropriate for preservation (sending areas) to places that are appropriate for increased development (receiving areas). Sending areas are typically rural, undeveloped locations for which the preservation of natural resources or farmland is a goal, but also can be open space or historic structures in urban areas. Receiving areas are typically in urban areas where there is a market demand for development capacity beyond what is normally allowed.

Development projects in the NCX District can incorporate TDR in compliance with Chapter 1.37 Transfer of Development Rights Administrative Code, to increase allowable FAR. TDRs are the only means to achieve the "Level 2" height bonuses (see Table 3.7-2). The City's TDR Program allows for crediting TDRs toward in-city open space and historic buildings. The success of a TDR program hinges on real estate market conditions that support development at densities requiring bonus development capacity. One of the primary goals of the North Downtown Subarea Plan is to improve market conditions in the Subarea, and this can be expected to support the successful implementation of TDR as development occurs over future years.

Downtown Districts

The downtown zoning districts (DCC, DMU, DR) are subject to the following basic design standards that support the intended pedestrian-oriented mixed-used environment and provide mitigation for potential adverse impacts of development:

- rooftop mechanical screening
- one street tree per each 25 linear ft. of frontage
- surface parking lot perimeter landscaping strip

- ground-level facades of parking garages designed to obscure the view of parked cars
- on Pacific Ave., at least 25 percent of the linear sidewalk level frontage shall consist of specified active uses
- on Pacific Ave, at least 20 percent of the area located between 2 ft. above grade and 12 ft. above grade be transparent, through the use of windows, doors, or window displays
- more stringent standards apply in the DCC zone on the west side of Pacific Ave

The downtown zoning districts also have design standards for increasing the allowable floor-area-ratio (FAR),¹ as shown in **Table 3.7-3**. This mechanism provides additional mitigation for development at higher intensities. For each of the following Design Standards that are incorporated into a development, the allowable FAR can be increased by 0.5, up to the Maximum with Design Standards:

1. Enhanced pedestrian elements at the sidewalk level including decorative lighting (free-standing or building-mounted), seating or low sitting walls, planters, or unit paving in sidewalks.
2. Exterior public space equivalent to at least 5 percent of the site area and including the following attributes:
 - a. Seating in the amount of one sitting space for each 100 sf of area.
 - b. Trees and other plantings.
 - c. Solar exposure during the summer.
 - d. Visibility from the nearest sidewalk.
 - e. Within 3' of the level of the nearest sidewalk.
3. Incorporation of works of art into the public spaces, exterior facade, or entrance lobby.
4. Landscaping covering at least 15 percent of the surface of the roof and/or the use of “green roofs” which reduce storm water runoff. Access by building occupants is encouraged.
5. Including a Public Benefit Use within the development.
6. Within the Downtown Commercial Core, at least 60 percent of the linear frontage along those portions of Pacific Avenue, Broadway, and Commerce Street defined as a Primary Pedestrian Street shall be occupied by retail, restaurants, cultural or entertainment uses, hotel lobbies, or Public Benefit Uses.
7. Retention and renovation of any designated or listed historic structure(s) located on the site.

For each of the following Design Standards that are incorporated into a development, the allowable FAR can be increased by 2, up to the “Maximum with Design Standards:

1. Provide a “hill climb assist” in the form either of a landscaped public plaza or an interior public lobby with an escalator or elevator. Such space shall be open to the public during daylight hours or shall be open during the times detailed in a management plan approved by the City of Tacoma, Building and Land Use Services Department.
2. Provide works of art or water features equivalent in value to at least 1 percent of construction costs within publicly accessible spaces on site or off site within the downtown zoning district where the development is located.
3. Provision of public rest rooms, open to the public at least 12 hours each weekday.

¹ **Floor Area Ratio (FAR)** -- Tacoma Municipal Code 13.06.700F -- The amount of floor area within a building as a multiple of the lot area. Right-of-way that has had its air rights vacated shall be considered as lot area for calculating FAR. For the purposes of calculating allowable FAR within the downtown area, floor area shall exclude the following areas when calculating the maximum FAR: **1.)** Spaces below grade; **2.)** Space used for retail uses or restaurants that front the sidewalk; **3.)** Space devoted to special features; **4.)** Area used for parking; **5.)** Mechanical equipment, elevators, and stair shafts; and **6.)** Exterior decks, balconies, and corridors open to the air.

4. Contribution to a cultural, arts organization or to the Municipal Art Fund for a specific development or renovation project located downtown, in an amount equal to at least 1 percent of the construction cost of the development.
5. Parking contained entirely within structures or structures on site.

Transfer of Development Rights (TDR) is the only mechanism for achieving the highest tier of FAR bonus in the Downtown Districts. Development projects can incorporate TDR in compliance with Chapter 1.37 Transfer of Development Rights Administrative Code, to increase the as-of-right allowable FAR up to the “Maximum for TDR.” The City’s TDR Program allows for crediting TDRs toward in-city open space and historic buildings.

**Table 3.7-3
As-of-Right FAR and Allowed Increases for Downtown Districts**

District	Residential FAR			Commercial FAR		
	As-of-right	Maximum with Design Standards	Maximum with TDR	As-of-right	Maximum with Design Standards	Maximum with TDR
DMU	3	5	7	2	4	6
WR	4	5	7	3	4	6
DR	2	4	6	1	2	4
DCC	3	6	12	3	6	12

Designated Primary Pedestrian Streets (TMC 13.06A.052)

The City of Tacoma designates Primary Pedestrian Streets, subject to policies and regulations that provide mitigation for development. “Primary pedestrian streets” are considered key streets in the intended development and utilization of the area due to pedestrian use, traffic volumes, transit connections, and/or visibility. The streetscape and adjacent development on these streets should be designed to support pedestrian activity throughout the day. They are designated for use with certain provisions in the Downtown zoning regulations, including setbacks and design requirements. Within the North Downtown Subarea, the designated primary pedestrian streets are:

- Pacific Avenue between S. 7th and S. 25th Streets.
- Broadway between S. 7th and S. 15th Streets.
- Commerce Street between S. 7th and S. 15th Streets.
- “A” Street between S. 7th and S. 12th Streets.
- Tacoma Avenue between S. 7th and S. 15th Streets.

Live-Work and Work-Live

The City recently adopted new Land Use Code that applies to Live-Work and Work-Live uses in Downtown and mixed-use centers, which covers the majority of the North Downtown Subarea. The City wishes to encourage these uses in order to promote the following positive outcomes:

- Stimulate additional economic activity in conjunction with residential uses;
- Reduce vacant space and underutilized buildings;
- Help preserve architectural and cultural past;
- Establish a live-work and residential community;
- Create a more balanced ratio between housing and jobs in the region's primary employment center;
- Facilitate the development of a "24-hour city;" and
- Improve air quality and reduce vehicle trips and vehicle miles traveled by locating residents, jobs, hotels and transit services near each other.

The new *Live-Work* code allows buildings (with some exceptions) to add a home occupation (pursuant to TMC 13.06.100 E) without being subject to the limitation in TMC 13.06.100 E(6) that no employees outside the members of the family residing on the premises be involved in the home occupation.

Under the new *Work-Live* code, adding a minor residential component to an existing or historic building does not trigger change of use requirements under the City's Land Use Code. A Work-Live unit is a combined living and work unit that includes a kitchen and a bathroom that occupies no more than 33 percent of the total floor area of the legal non-residential use and is not separated from the work space. The residential use must be clearly incidental and subordinate to the work space use and must not generate impacts to any greater extent than what is usually experienced in the surrounding area. New roof structures are not considered as adding new floor area or to trigger change of use requirements provided that they are used solely for accessory uses. Adding a "work-live" unit is not subject to density requirements in the underlying zone.

Additional features of the new code that apply to both *Live-Work* and *Work-Live* uses include:

- No additional parking spaces are required;
- Up to 10 percent of new floor area may be added without triggering a change in use;
- External additions are exempt from all prescriptive design standards;
- Non-conforming floor area, Floor Area Ratio (FAR), setbacks, height, and site landscaping are "grandparented in;"
- Mezzanine spaces may be added so long as they do not exceed a 10 percent increase in floor area or one third the area of the floor below;
- These provisions do not extend to adaptive reuses that involve more than 20 dwelling units or more than 12,000 sq. ft. of commercial space in a particular building.

Subarea Plan Goals

The ***North Downtown Subarea Plan*** will guide redevelopment of the North Downtown area over the long-term. This Plan, along with individual project review by the City, would serve as mitigation to preclude potential significant land use-related impacts from future redevelopment and ensure compatibility between uses. Mitigation measures for indirect land use impacts (i.e., noise, aesthetics, transportation/parking, etc) are addressed in their respective sections of this Final EIS and through existing, applicable City codes.

The proposed ***North Downtown Subarea Plan*** is intended to accommodate the amount of

growth that is projected to occur as a result of the proposed action alternative. An overall objective of the Subarea Plan is to improve the economic vitality and quality of life in North Downtown. The Plan is grounded in a stakeholder-created Vision that establishes goals for the following categories:

- Center of Opportunity
- Open Spaces and Natural Systems
- Cultural and Heritage District
- Place-Based Identity
- Urban Livability
- Partnerships to Promote Economic Vitality
- Walkability and Transportation Choices:
- Promote Education and Lifelong Learning

Together, these goals and their associated policies and actions will provide the framework for implementing regulations, programs, and public investments that will mitigate adverse impacts of intensified land use in North Downtown.

3.7.4 Unavoidable Adverse Impacts

With application of the land use-related mitigation noted above, no significant unavoidable land use impacts are anticipated in conjunction with any of the proposed alternatives. Proposed redevelopment within the North Downtown Subarea would result in an intensification of development, additional employment opportunities, and increased population in the North Downtown area. While the intensity of redevelopment in this area would be substantially greater than the amount of existing development, such redevelopment would be consistent with the **North Downtown Subarea Plan** (if adopted), the intent of the City's *Comprehensive Plan* and zoning.

PART B – RELATIONSHIP TO PLANS and POLICIES

The objectives and policies of the **North Downtown Subarea Plan** are consistent with existing plans and policies at the State, regional, and local levels. The following is a synopsis of applicable plans and policies, together with an analysis of project consistency with each.

Washington State Growth Management Act

Adopted in 1990, the Growth Management Act (GMA) sets forth 13 goals, including the following that are most directly aligned with the overall objectives of the **North Downtown Subarea Plan**:

- Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
- Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
- Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.
- Promote economic opportunity... especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses... encourage growth in areas experiencing insufficient economic growth.
- Protect the environment and enhance the state's high quality of life, including air and water quality...
- Identify and encourage the preservation of lands, sites, and structures that have historical... significance.

The GMA requires municipalities to plan for accommodating growth, and grants counties, in consultation with cities, authority to assign growth allocations for population and employment. In general, the goals of the GMA will be most successfully achieved by maximizing the portion of growth that can be accommodated in urbanized areas with adequate infrastructure. Assigned by the Pierce County Regional Council (within parameters set by the Puget Sound Regional Council), the City of Tacoma's growth allocations are 78,600 new residents and 64,200 new jobs between 2008 and 2030.

Discussion:

*The **North Downtown Subarea Plan** is intended to play a key role in helping the City accommodate the growth allocations that are projected. Within Tacoma, GMA goals would be best served by maximizing accommodation of the growth allocations in the downtown core where there is plentiful development capacity, a concentration of employment, and significant infrastructure, including a regional transit hub. A 2009 Pierce County study² estimated that downtown Tacoma has the capacity for an additional 62,400 people and 42,200 jobs, which represents a large portion of the growth allocations.*

*In accordance with the intent of GMA, a key component of the **North Downtown Subarea Plan** and this EIS is to assess the upper limits of how much growth can be accommodated in North*

² Identifying Redevelopable Lands, Application of a Land Value Potential (LVP) approach in Urban Centers, Pierce County, 2009

Downtown, in particular. It is felt that an understanding of these upper limits will help ensure that the City is fully leveraging opportunities for the sustainable accommodation of growth and the potential of North Downtown to contribute to the realization of a sustainable region, in accordance with the primary goals of GMA.

VISION 2040

VISION 2040 is the PSRC's vision and strategy for accommodating the 5 million people and 3 million jobs that are expected in the Puget Sound region by 2040, while promoting the "well-being of people and communities, economic vitality, and a healthy environment." VISION 2040 is also the policy document that provides the rationale for assigning growth allocations to meet the requirements of GMA, as noted above.

One of the six overarching goals of VISION 2040 is to "focus growth within already urbanized areas to create walkable, compact, and transit-oriented communities that maintain unique local character." Even more pertinent to North Downtown Tacoma, VISION 2040 establishes the following policy: "Encourage efficient use of urban land by maximizing the development potential of existing urban lands, such as advancing development that achieves zoned density."³ One of VISION 2040's key strategies is to concentrate growth in *urban centers*, defined as "locations identified to take a greater proportion of future population and employment in order to curb sprawl." Centers are characterized by "compact, pedestrian-oriented development, a mix of different office, commercial, civic, entertainment, and residential uses," along with "improved accessibility and mobility for walking, biking, and transit."

At the top of VISION 2040's hierarchy of Centers are *Regional Growth Centers*, "envisioned as major focal points of higher density population and employment, served with efficient multimodal transportation infrastructure and services."

Discussion: *Downtown Tacoma is one of the 27 designated Regional Growth Centers within the region. The North Downtown Subarea comprises most of the northern half of Tacoma's downtown area. The objectives of the **North Downtown Subarea Plan** are consistent with VISION 2040's intention to target growth and leverage the potential of Regional Growth Centers. North Downtown has exceptional physical and cultural assets and plenty of development capacity. The Plan will develop strategies for how growth and livability can be maximized in tandem, an outcome that supports both the local and regional goals of VISION 2040, and that results in attracting significantly more residents and jobs.*

Pierce County Countywide Planning Policies

In accordance with GMA, the Pierce County Regional Council maintains the Pierce County Countywide Planning Policies (PCCPP) to coordinate planning countywide., PCCPPs were updated in 2012 and the include a wide range of policies; the most relevant policies are summarized below:⁴

- **COMMUNITY AND URBAN DESIGN:** Each municipality in the County will develop high quality, compact communities that:
 1. Impart a sense of place;

³ <http://psrc.org/growth/vision2040>

⁴ <http://www.co.pierce.wa.us/pc/abtus/ourorg/pcrc/index.htm>

2. preserve local character;
 3. provide for mixed uses and choices in housing types; and
 4. encourage walking, bicycling, and transit use.
- **ECONOMIC DEVELOPMENT AND EMPLOYMENT:** The County, and in each municipality in the County, will work to achieve a prospering and sustainable regional economy by supporting business and job creation, investing in all people, sustaining environmental quality, and creating great central places, diverse communities, and high quality of life... by:
 - providing ... an adequate supply of housing with good access to employment centers;
 - determining a reasonable "jobs/housing" balance and then coordinating land use and development policies to help achieve the designated balance of adequate affordable housing accessible to employment centers;
 - providing opportunities and locations for incubator industries;
 - marketing development opportunities;
 - encouraging redevelopment of underutilized commercial areas;
 - encouraging the location of economic development activities in areas served by public transit and adequate transportation facilities;
 - reducing inefficient, sprawling development patterns;
 - reducing transportation demand;
 - promoting development in areas with existing available public facility capacity;
 - encouraging joint public/private development as appropriate;
 - concentrating a significant amount of economic growth in designated centers;
 - promoting infill development to assist in maintaining a viable market for existing businesses;
 - utilizing redevelopment or other public financing mechanisms, where appropriate, to maintain existing businesses; and
 - streamlining permit processing.
 - **HEALTH AND WELL-BEING :** The County, and each municipality in the County, will be designed to promote physical, social, and mental well-being so that all people can live healthier and more active lives by:
 - designing communities to provide an improved environment for walking and bicycling;
 - developing and implementing design guidelines to encourage construction of healthy buildings and facilities to promote healthy people; and
 - developing and implementing community plans and programs, such as community gardens and farmer's markets, that provide support for agricultural, farmland, and aquatic uses that facilitate the production of fresh and minimally processed healthy foods, and encourage community access to those resources.
 - **NATURAL RESOURCES, OPEN SPACE, PROTECTION OF ENVIRONMENTALLY SENSITIVE LANDS AND THE ENVIRONMENT:**
 - *Air Quality:* Strengthening efforts to reduce pollutants from transportation activities by:
 - reducing vehicle miles traveled and auto dependence;
 - designing and prioritizing compact communities and neighborhood accessibility for goods and services;
 - *Climate Change:*

- direct development into urban areas and compact centers to prevent and reduce the urbanization of ecologically sensitive areas and natural resources;
 - increase alternatives to driving alone; and
 - encourage private and public development of transit-oriented development throughout the country to reduce the need for personal vehicle use.
- TRANSPORTATION FACILITIES AND STRATEGIES
 - The County, and in each municipality in the County, shall address substandard LOS for existing facilities by:
 - using transportation demand management; and
 - promoting nonmotorized travel.
 - The County, and in each municipality in the County, shall address compatibility between land use and transportation facilities by:
 - using land use regulations to increase the modal split between automobiles and other forms of travel;
 - designating high densities in transit and transportation corridors and designated TOD sites;
 - requiring pedestrian-oriented design; and
 - encouraging or requiring mixed use development and TOD.
 - OVERALL POLICIES FOR NON-INDUSTRIAL CENTERS:
 - *Design Features of Centers:* The County and each jurisdiction that designates a center within its comprehensive plan shall encourage density and development to achieve targeted growth:
 - [by] encouraging higher residential densities within centers
 - [by] allowing for greater intensity of use within centers
 - Designated centers are expected to receive a significant share of projected growth in conjunction with periodic disaggregation of countywide population allocations.
 - *Transportation, Parking and Circulation:*
 - Locate higher densities/intensities of use close to transit stops within centers and seek opportunities to:
 - create a core area to support transit and HOV use;
 - establish incentives for developers to provide transit and transportation demand management supportive amenities.
 - *Implementation Strategies:* Jurisdictions should consider incentives for development within centers such as:
 - streamlined permitting;
 - financial incentives;
 - density bonuses or TDR;
 - using SEPA Planned Action provisions to streamline environmental review by conducting environmental analysis during planning and providing permit applicants and public with more certainty of how impacts will be addressed;
 - REGIONAL GROWTH CENTER: Regional Growth Centers are targeted for employment and residential growth, and provide excellent transportation service, including fast, convenient high capacity transit service, as well as investment in major public amenities. Regional Growth Centers shall plan to meet the following criteria:
 - a minimum of 25 employees per gross acre of non-residential lands; and

- a minimum of 10 households per gross acre; and/or
- a minimum of 15,000 employees;
- planning recognizing the need to receive a significant share of the regional growth.

Discussion: *The proposed North Downtown Subarea Plan is consistent with Pierce County's Countywide Planning Policies.*

Tacoma Comprehensive Plan

The *Comprehensive Plan* is Tacoma's 20 year plan for physical growth, development and improvement. Its various Elements include a wide range of policies that are aligned with and support the objectives of the North Downtown Subarea Plan, the most relevant of which are summarized below:⁵

- **Growth Strategy and Development Concept Element:** This Element articulates several relevant policy goals, including:
 - "Growth will be directed toward compact mixed-use centers and in nodes along major transportation corridors including primary transit routes."
 - "Support of the high-capacity transit system, including light rail and commuter rail, will be a top priority of the City."
 - "Concentrating growth within mixed-use centers will... strengthen the existing development pattern, protect neighborhoods and the environment and create attractive urban living and working environments which encourage walking, cycling and public transit."

Also defined are minimum densities appropriate for "High Intensity in Mixed-Use Centers" such as North Downtown:

- "Minimum site densities should range from 25 to 80 dwelling units per net acre... Higher minimum densities are envisioned in other parts of the mixed-use centers depending on the established height limit."

Discussion: *The proposed North Downtown Subarea Plan is consistent with this Element of the City's Comprehensive Plan.*

- **Generalized Land Use Element:** In the Generalized Land Use Element the Mixed-use Centers Goal is spelled out as follows:
 - "To achieve concentrated centers of development with appropriate multimodal transportation facilities, services and linkages that promote a balanced pattern of growth and development, reduce sprawl, foster economies in the provision of public utilities and services, and yield energy savings."

Also provided is the following description of Transit-Oriented Development (TOD) that describes desired outcomes for South Downtown:

- "Multi-family housing and mixed-use projects that support the public investment in fixed route transit service... TODs increase the density of people near transit, including residents, employees, visitors, and customers in a built environment that is pedestrian-friendly and connected to transit. Mixed-use buildings, projects,

⁵ <http://www.cityoftacoma.org/Page.aspx?hid=2241>

or areas with a mix of uses are active from early in the morning to late in the evening, making the environment safer for pedestrians and providing peak- and off-peak customers for transit service.”

***Discussion:** The proposed **North Downtown Subarea Plan** is consistent with this Element of the City’s Comprehensive Plan.*

- **Downtown Element:** In 2008, the City of Tacoma adopted an updated Downtown Element that applies to the entirety of the North Downtown. The Downtown Element has seven goals; the following three of which are most relevant to the vision and objectives of the North Downtown Subarea Plan:
 - Resolve the questions of how to responsibly increase density while laying the groundwork for a long-term, high quality city environment and maintaining Tacoma’s unique character.
 - Encourage links between economic vitality and environmental quality through an awareness of the regional effects of growth management, land use and transportation decisions.
 - Generate new partnerships to promote infill development and link land use policy with economic revitalization strategies.

The Downtown Element includes a range of policies that focus on several specific areas within South Downtown as noted below:

- **Commercial Core:** The Downtown Core contains significant potential. In particular, the International Financial Services Area (ISFA) located to the east of Commerce Street is envisioned to have the greatest intensity and height and may provide the location for new iconic towers... The comprehensive approach to transit is intended to help mitigate the effects of growth, and limit the need for employees to park downtown. By introducing a streamlined system of Transportation Demand Measures, tied to a parking strategy, new opportunities for redevelopment become feasible, and developers may benefit by eliminating onerous parking requirements from their pro formas. Furthermore, as part of a walkable downtown the City will begin to implement measures to improve the pedestrian orientation of streets including: traffic calming, pedestrian crossings and mid-block connectors.
- **St. Helens:** Within this neighborhood the City is focused on sensitive infill strategies, the introduction of sustainability concepts, catalyst projects within the public right-of-way, and other identified community amenities traded for high quality development. St. Helen’s is the entryway to downtown from neighborhoods to the North. Its urban design should emphasize the area’s connections between downtown and residential neighborhoods to the north, with an emphasis on pedestrian/cycling amenities and on-street parking.
- **Hillside:** Well served by transit and in close proximity to the UWT and major employment centers, Hillside is an ideal location for residential and mixed-use growth taking advantage of the views.

***Discussion:** The proposed **North Downtown Subarea Plan** is consistent with this Element of the City’s Comprehensive Plan.*

- **Transportation Element:** Key policies in this Element that align with the transportation vision for South Downtown include:

- *T-LUT-9 Transit Oriented Development:* Encourage and promote transit-oriented development (TOD) and provide incentives for development that includes specific TOD features.
- *T-TSM-6 Level of Service Standards:* Establish level of service standards that are consistent with regional and state standards for roadways that reflect arterial functional classifications and the differing development patterns, growth objectives, accessibility for vehicles, transit, pedestrian and bicycle use.
- *T-MS-12 Complete Streets:* Apply the Complete Streets guiding principle....
- *T-ES-3 Congestion Management:* Encourage the use of alternative modes, and thereby slow the increase in the use of single occupant vehicles and the increase of environmental degradation associated with their use.

As part of the Transportation Element, in 2010 the City of Tacoma adopted the *Mobility Master Plan*, an implementation plan for improving “conditions for pedestrians and bicyclists citywide over the next fifteen years,” providing “recommendations for developing a nonmotorized network that reduces auto travel, increases the number of nonmotorized users of all ages and abilities...”⁶ The main goals of the plan are to:

- “Complete a safe and comfortable bicycling system that connects all parts of the city (north to south/east to west) and accommodates all types of cyclists by 2025.
- “Complete an accessible network of pedestrian supportive infrastructure, including sidewalks, curb ramps, accessible pedestrian signals and shared-use paths, in high-priority pedestrian areas.
- “Increase the nonmotorized mode split to 5% by 2015 and continue gains thereafter
- “Increase transit use by enhancing pedestrian access and bicycle support facilities through the development of bikeways and walkways that serve transit hubs.”

A particularly relevant policy of the Mobility Master Plan is to “Prioritize infrastructure improvements that connect residential areas to local retail, business, and community services, so residents can access more of the services they need close to home by walking, biking, and using assistive devices.” The corresponding Action is to “Prioritize funding and construction of non-motorized facilities in recognition of the livability, environmental and health benefits these forms of mobility provide,” with priority given to projects that:

- “Provide the greatest connectivity to the greatest number of people or neighborhoods;
- “Provide connections to transit;
- “Connect major employers or employment areas to residential areas in order to increase commute trips by bike or walking; and
- “Connect residential areas to local retail, business and community services so residents can access daily.”

Regarding Level of Service, the Plan states, “The focus of arterial corridors in this transportation plan is on moving people as opposed to moving vehicles. As such, we are suggesting that a lower level of service (LOS E) be provided to vehicular traffic within the identified arterial corridors.”

⁶ <http://www.cityoftacoma.org/Page.aspx?hid=12894>

Discussion: *The proposed North Downtown Subarea Plan is consistent with this Element of the City's Comprehensive Plan.*

- **Transfer of Development Rights** -- The Downtown Element of the Tacoma Comprehensive Plan establishes the following policies on Transfer of Development Rights (TDR):
 - The City should explore the restoration and adaptive re-use of historically significant structures within the Brewery District through the creation of a 'Historic District Transfer of Development Rights program.
 - The City should consider allowing 'Density Transfers' to raise the current existing maximum heights to provide redevelopment potential on non-historic infill sites.
 - The City should work with owners of selected assembled infill sites to promote participation in the TDR program.
 - The City should consider providing identified historic property owners grants and/or loans to complete seismic and other upgrades to their properties.

A TDR program was also a recommendation in the 2008 Tacoma *Climate Action Plan* (see below), because "TDR is a market-based way to conserve resource lands, control sprawl and encourage good development in our urban core where community infrastructure already exists."

In 2012, the City of Tacoma published a report entitled *Transfer of Development Rights Market Study*. The purpose of the study was to assess "whether a TDR program for Tacoma can assist in achieving regional conservation priorities while, at the same time, providing local benefits in encouraging new development in some areas and conserving resources elsewhere in the City." With the adoption of the South Downtown Subarea Plan in 2013, the City of Tacoma expanded its TDR program to the Downtown Districts.

The TDR program would help further the goals of the North Downtown Subarea Plan/EIS by providing a mechanism to preserve historic buildings or open space in habitat corridors. Under existing zoning and real estate market conditions in North Downtown, there is likely to be limited demand from developers to purchase additional development capacity through TDRs. But when the real estate market improves, TDR will be in place and ready to be applied to projects.

Discussion: *The proposed North Downtown Subarea Plan is consistent with the City's TDR Program.*

- **City of Tacoma Climate Action Plan** -- In 2006, the Tacoma City Council adopted a resolution⁷ called for reducing greenhouse gas emissions in city operations and pursuing reductions in community emissions through cooperative programs and policies, including reusing older buildings, pursuing regional transfer of development rights and enhancing compact and walkable neighborhoods. In 2007, Council appointed the Green Ribbon Climate Action Task Force, which published Tacoma's *Climate Action Plan* in 2008. One of the five recommended strategies in this plan is "Enhancing Compact/Livable Neighborhoods," which is also essentially the primary goal of the **North Downtown Subarea Plan**. The *Climate Action Plan* states:

⁷ Resolution 36835

“City should implement smart growth principles – including compact, transit-oriented development within the City’s mixed-use centers – to promote mixed-use developments, affordable housing, green building, green site development, and bike- and pedestrian-friendly neighborhoods. Policies should increase mobility while decreasing dependence on private vehicles.”

This strategy to reduce Tacoma’s greenhouse gas emissions is completely aligned with the regional goals for smart growth that are fundamental to VISION 2040, as described above.

Discussion: *The proposed North Downtown Subarea Plan is consistent with the City’s Climate Action Plan.*

- **Washington State Policy on Greenhouse Gas Emissions** -- In 2008, the Washington State Legislature passed House Bill 2815 mandating reductions in vehicle miles traveled (VMT).⁸ Intended as a strategy to reduce greenhouse gas emissions from automobiles, the legislation sets targets of 18 percent reduction in per capita VMT by 2020, 35 percent by 2035, and 50 percent by 2050. Numerous studies have shown that households in walkable, transit-rich neighborhoods tend to drive less than comparable households located in more car-dependent environments.⁹ Focusing new household and employment growth in North Downtown will help the State meet its VMT reduction goals.

Discussion: *The proposed North Downtown Subarea Plan is consistent with Washington State policy on greenhouse gas emissions.*

Other Applicable Plans and Studies

The **North Downtown Subarea Plan** is also consistent with and builds upon the following additional plans and studies:

- South Downtown Subarea Plan
- Hilltop Subarea Plan
- Bates Technical College Master Plan
- Tide flats Area Transportation Study, 2011
- Foss Waterway Master Redevelopment Strategy, 2011 Update
- Downtown Tacoma Economic Development Strategy, 2008
- Artist Survey of Live and Work Spaces, 2003
- Downtown Tacoma Economic Development Strategy, 2008
- Artist Survey of Live and Work Spaces, 2003

⁸ <http://apps.leg.wa.gov/documents/billdocs/2007-08/Pdf/Bills/Session%20Law%202008/2815-S2.SL.pdf>

⁹ Transit-Oriented Communities: A Blueprint for Washington State...

3.8 POPULATION, HOUSING and EMPLOYMENT

Information presented in this section addresses the effects of the proposed alternatives relative to population, housing and employment within the North Downtown Subarea.

3.8.1 Affected Environment

Population

Selected demographic, household, housing, and economic data for the North Downtown Subarea and other areas are shown in **Table 3.8-1**. Demographic and household characteristics of the Subarea that stand out from the City of Tacoma as a whole and from the greater region are summarized below:

- Demographics
 - Much lower percentage of children
 - Slightly higher percentage of elderly
 - Higher percentage of Blacks
 - Male/female split that is somewhat skewed towards male
 - Lower educational attainment
- Households
 - Very low average household size
 - Very high percentage of single-person households
 - Very low percentage of households with children
 - Very high percentage of households in group quarters
 - Very high percentage of renter-occupied units and very low percentage of owner-occupied units

Housing

Housing in North Downtown consists of a mix of housing types, from larger multifamily developments in the Downtown Core area transitioning to midrise apartment buildings and single-family dwellings in the St. Helens and Stadium Districts. Selected housing data for the South Downtown Subarea and other areas are shown in Table 3.8-1. One characteristic of the Subarea that stands out from the City of Tacoma as a whole and from the greater region is a high percentage of renting versus ownership.

Market Rate Housing

According to the 2010 American Community Survey, the 2010 median monthly rent for the entire City of Tacoma was \$856. According to the website rentjungle.com, as of February, 2014, the average apartment rent within 10 miles of Tacoma, WA was \$1,282.¹ More specifically, one bedroom apartments in Tacoma rent for \$1,143/month on average and two bedroom apartment rents average \$1,265.

¹ <http://www.rentjungle.com/average-rent-in-tacoma-rent-trends/>

**Table 3.8-1
Demographic Data for the North Downtown Subarea**

Parameter	South Downtown	Tacoma	Pierce County	King County	WA State	USA
DEMOGRAPHICS						
Population	7,550	198,397	795,225	1,931,249	6,724,540	308,745,538
Median Age	36.7	35.1	35.9	37.1	37.3	37.2
Percent Less than 18 yrs. of Age	9%	23%	24%	21%	24%	24%
Percentage Age 65 or Older	13%	11%	11%	11%	12%	13%
Percent Male	55%	49%	50%	50%	50%	49%
Percent Female	45%	51%	50%	50%	50%	51%
Population by Race						
White	69%	65%	74%	69%	77%	72%
Black	15%	11%	7%	6%	4%	13%
American Indian	2%	2%	1%	1%	2%	1%
Asian	6%	8%	6%	15%	7%	5%
Pacific Islander	1%	1%	1%	1%	1%	<1%
Hispanic	8%	11%	9%	9%	11%	16%
other	1%	5%	4%	4%	5%	6%
Percent Foreign Born						
	n/a	13%	9%	20%	13%	13%
Percent non-English Spoken at Home						
	n/a	18%	14%	26%	18%	21%
Educational Attainment (age 25+)						
High School Graduate (or higher)	82%	87%	90%	90%	90%	86%
Bachelor's Degree (or higher)	25%	24%	23%	31%	31%	28%
Graduate/Professional Degree	9%	9%	8%	17%	11%	10%
HOUSEHOLDS						
Average Household Size	1.57	2.44	2.59	2.41	2.51	2.58
Percent Householder Living Alone	69%	33%	25%	31%	27%	25%
Percent Households with Children	9%	31%	35%	29%	32%	33%
Percent Households in Group Quarters	17%	3.4%	2.3%	1.9%	2.1%	2.6%

Table 3.8-1 (continued)
Demographic Data for the South Downtown Subarea

Parameter	South Downtown	Tacoma	Pierce County	King County	WA State	USA
ECONOMICS						
Median Household Income	\$20,529	\$47,862	\$57,869	\$66,174	\$57,244	\$50,046
Per capita Income	\$23,952	\$25,377	\$27,466	\$36,410	\$29,733	\$26,059
Poverty Rate	n/a	16%	12%	12%	13%	15%
EMPLOYMENT						
Unemployment Rate	13%	13%	12%	9%	11%	11%
Not in Labor Force	n/a	37%	34%	30%	35%	36%
Occupation						
Mgmt, business, science, and arts	41%	34%	32%	48%	39%	36%
Service	25%	22%	19%	15%	18%	18%
Sales and office	21%	25%	26%	22%	23%	25%
Natural resources, constr, maint.	4%	8%	10%	6%	10%	9%
Production, transp, material moving	9%	11%	12%	9%	11%	12%
HOUSING						
Number of Units	4,523	85,786	325,375	851,261	2,885,677	131,704,730
Occupancy Rate	88%	92%	92%	93%	91%	89%
Renter Occupied	89%	46%	37%	41%	36%	35%
Owner Occupied	11%	54%	63%	59%	64%	65%
Median Home Value	\$262,795	\$230,400	\$252,000	\$385,600	\$271,800	\$179,900
Median Gross Rent	n/a	\$856	\$964	\$1,036	\$908	\$855
Percent Single-family Detached	n/a	62%	66%	56%	64%	61%

The most significant recent market-rate housing developments in the North Downtown Subarea include:

- 505 Broadway Condominiums: 61 units at 505 Broadway; constructed in 2008
- Hanna Heights Condominiums: 35 units at 415 6th Avenue; constructed in 2008
- The Roberson: 39 condos and 8 live/work units at 708 Market Square; constructed in 2007
- Triangle Townhomes: 26 condos at Fawcett/6th Avenue/Baker; constructed in 2005
- Bella on Broadway Apartments: 100 units at 436 Broadway; constructed in 2012
- Villagio II Apartments: 125 units at 1328 Market Street; constructed in 2008
- MidTown Lofts: 50 apartment units at 1142 Fawcett Avenue; constructed in 2009

Affordable Housing

Housing affordability is typically assessed relative to area median income (AMI). As of 2012 in Pierce County, the annual income limits to qualify for 80 percent of countywide median income

is \$40,150 for a single person and \$57,350 for a family of four.² Assuming a maximum of 30 percent of income can be spent on rent that corresponds to maximum monthly rents of \$1,004 (studio) and \$1,434 (3-bedroom), respectively.

The following subsidized affordable housing projects area located in the Subarea:

- Wright Park House (401 G Street): 54 units of assisted living housing
- Winthrop Apartments (776 Commerce Street): 194 units, 175 of which are assisted living units
- 1400 Market Street: 125 assisted living units, intended for the Family (S8NC) housing program
- Harbor View Manor (919 South Fawcett): 167 units of affordable senior housing
- Low-Income Housing

The following low-income housing projects area located in the Subarea:

- Conservatory Place I & II (203 & 319 South G Street): total of 89 units of affordable senior housing
- Rembrandt Apartments (219 St. Helens Avenue): 29 efficiency and studio units
- Metropolitan Development Council (721 Fawcett Avenue): 59 low-income 1-3 bedroom units
- Hotel Olympus (815 Pacific Avenue): 49 studio, 1-bedroom and 2-bedroom units
- Rialto Apartments (311 South 9th Street): 52 units operated by Pioneer Human Services

The above lists add up to a total of 301 units of subsidized and low-income housing, which corresponds to 6.5% of the total number of housing units in the Subarea, as recorded by the 2013 Census.

In 2013, the Baywatch Apartments at 502 South 7th Street were purchased by the Metropolitan Development Council to be renovated and reopened as transitional housing for those unemployed due to disability. The historic 1919 building, which had been vacant for years, will be retrofitted to provide 33 additional affordable residential units in North Downtown.

There are also several significant low-income housing projects located near the Subarea, including:

- Annobee Apartments (323 North I Street): 43 low-income units, 33 of which are set aside with rent lower than the rent/income ceiling
- Emmons Apartments (1010 South 8th Street): 22 units set aside with rent lower than the rent/income ceiling
- Liberty Apartments (corner of South 12th and South J Streets): 13 units
- New Tacoma Senior Housing (1709 South G Street): 58 units at 30% AMI, 16 units at 80% AMI

Assisted Housing

There is one assisted housing facility within the Subarea:

² Federal Department of Housing and Urban Development, 2012

- Guadalupe Vista (1305 South G Street): 50 units of affordable housing for families and individuals

There are several assisted housing facilities in nearby areas:

- Hillside Gardens Townhomes (1708 South G Street): 10 units at 30% AMI, 10 units at 50% AMI, 5 units at 60% AMI; Mercy Housing Northwest
- Matsusaka Townhomes: (1314 South Yakima) 26 units of family housing sponsored by Catholic Community Services (CCS) and funded with Low Income Housing Tax Credits
- Catalina Apartments (1616 South Yakima Avenue): 25 units at 30% AMI, 13 units at 40% AMI, 12 units at 50% AMI; Catholic Community Services of Western Washington
- Campbell Court Apartments: (1210 South Yakima) 12 units of homeless/disabled housing sponsored by the Metropolitan Development Council (MDC) and funded with HOME funds
- New Look Senior Housing (1102 South 11th Street): a 49-unit elderly housing project located at sponsored by MLK Housing Development Association, New Look LLC and funded with HOME/CDBD and Low Income Housing Tax Credits
- EB Wilson Apartments (1202 South M Street): A 77-unit elderly housing project funded with Public Housing monies

Homelessness and Social Services

The following homeless support and transitional housing facilities are located in or near the North Downtown Subarea:

- Catholic Community Services Men’s and Women’s Shelter: located at South 11th Street and Tacoma Avenue
- YMCA Domestic Violence Center: (location undisclosed)
- Pioneer Human Services: Located at 758 St. Helens Avenue; offers a fully integrated array of housing, employment, training reentry and treatment services
- Tacoma Rescue Mission: transitional shelter at 15th and Tacoma Avenue provides temporary emergency and transitional housing as well as supportive services

Economics and Employment

Data for the Subarea are noted in **Table 3.8-1**. Characteristics of the Subarea that stand out from the City of Tacoma as a whole and from the greater region include:

- Low median household income and per capita income
- Relatively high proportion of management/business/science/arts and service occupations
- Relatively low proportion of natural resources/construction/maintenance occupations

One measure of employment is ‘covered employment.’ This refers to jobs “covered” under the state’s Unemployment Insurance program and constitutes approximately 85-90% of total employment. Data on covered employment in various sectors in the South Downtown Subarea

are presented in **Table 3.8-2**.³ The jobs-housing ratio is approximately 3.6, which is very high compared to typical urban areas in which a ratio closer to 1 would be expected.

**Table 3.8-2
Covered Employment in the South Downtown Subarea**

Sector	2000		2011	
	Jobs	Workplaces	Jobs	Workplaces
Const/Res	107	12	70	19
FIRE	2,868	104	1,432	98
Manufacturing	509	17	219	15
Retail	322	30	208	28
Services	7,842	358	7,365	444
WTU	161	14	106	19
Government	3,177	64	2,778	63
Education	877	9	600	3
Total	15,863	608	12,779	689

Covered employment in the South Downtown Subarea dropped by 24 percent between 2000 and 2011. In comparison, covered employment in the entire City of Tacoma dropped from 99,810 in 2000 to 95,318 in 2011, corresponding to a much smaller decline of five percent. These declines can be largely attributed to the Great Recession, although apparently the South Downtown Subarea was more vulnerable than the City on average. The manufacturing sector was particularly hard hit, losing 741 jobs, a drop of 64 percent.

Job sector percentages in South Downtown compared to other cities are shown in **Table 3.8-3**.⁴ Compared to other cities, the South Downtown has a very low percentage of retail jobs, a relatively low percentage of service-sector jobs, and a relatively high percentage of Finance, Insurance, and Real Estate jobs.

**Table 3.8-3
2011 -- Covered Employment by Sector Percentage**

City (2011)	Const/Res	FIRE	Mfg	Retail	Svc	WTU	Gov't	Edu
North Downtown	<1%	11%	2%	2%	57%	1%	22%	5%
Tacoma	3%	4%	6%	11%	51%	5%	13%	6%
Bremerton	3%	7%	6%	8%	52%	6%	10%	7%
Everett	2%	3%	42%	7%	29%	4%	9%	3%
Bellevue	3%	9%	4%	10%	59%	7%	3%	3%
Seattle	3%	7%	6%	8%	52%	6%	10%	7%

³ Puget Sound Regional Council, personal communication with Michael Hubner, September 2012.

⁴ Puget Sound Regional Council, personal communication with Michael Hubner, September 2012.

As of 2013, the largest employers in North Downtown were Pierce County Government (2,873 employees), the City of Tacoma (2,125 employees), and State Farm Insurance (1,060 employees). Other significant employers within the North Downtown Subarea include Davita Kidney Care, Columbia Bank, Trueblue Blue-collar Staffing, KeyBank, and JP Morgan Chase. Important large employers adjacent to the North Downtown Subarea are the University of Washington-Tacoma, the Port of Tacoma, and the hospitals along the “medical mile” on MLK Jr. Way in the Hilltop District.

3.8.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Land use-related impacts would be evaluated on a site-specific basis in conjunction with each proposed project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposed development alternatives would continue the redevelopment trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. As such, the potential exists for population, housing and employment-related impacts associated with new development that is consistent with the **North Downtown Subarea Plan**. However, considering the fact that this is an urbanized part of the City, that re-development is projected to occur over several decades and that population, housing and employment-related impact mitigation presently exists and will continue, it is anticipated that the increased amount of urban activity within the South Downtown Subarea would not result in any significant population, housing and employment-related impacts.

Development under the proposed development alternative would increase the population, housing and employment intensity in North Downtown, in accordance with the goals of the City’s *Comprehensive Plan*, which, in the Generalized Land Use Element, states:

“The Downtown Tacoma Center is to be the highest concentration of urban growth found anywhere in the City and within Pierce County. The center also is a designated regional growth center providing a focal point for new housing and employment for the Central Puget Sound region.”

Greater population, additional housing and increased employment in the North Downtown Subarea can be expected to have a wide range of positive impacts, including:

- greater local economic opportunity, as the market for businesses and services grows;
- enriched educational, cultural, shopping, entertainment, and recreational opportunities for residents, local employees, and visitors;
- reduction of single occupant vehicle use, as nearby services would become more prevalent, and alternative transportation modes become more convenient for more people;
- reduced crime, as there would be more “eyes on the street;”

- reduced development pressure on lower density residential areas of the City; and
- potential reduction of urban sprawl on a region-wide basis.

Currently in the North Downtown Subarea, the balance of jobs-to-housing is approximately two. If proportionally more housing growth occurs (which is the expected outcome), a better jobs-to-housing balance would result, which may help reduce commuting to and from surrounding communities. At the same time, development itself is an engine for creating employment growth in the North Downtown Subarea. Initially there are those jobs associated with construction of new buildings and infrastructure. Over the long term, more residents and employees create added demand for more local businesses, which spurs job creation.

It is possible that existing residents and/or businesses could be displaced as existing buildings are redeveloped consistent with any one of the development alternatives. If existing low-rent housing or commercial space is replaced by new buildings with different land uses or higher rents, businesses and low income residents may be challenged to find suitable buildings or adequate, affordable housing options within the Subarea. As noted in **Land Use (Section 3.7)** of this Final EIS, the North Downtown Subarea has a relatively high amount of undeveloped property, surface parking lots and vacant buildings that could be redeveloped without displacement impacts.

At the regional scale, redevelopment in the North Downtown Subarea would result in population, housing, and employment outcomes completely in line with intent of the PSRC's VISION 2040 regional plan. One of the primary goals of VISION 2040 is to focus the majority of regional population and employment growth in urban centers such as North Downtown Tacoma. As described in VISION 2040, this goal is based on a wide range of social, economic, and environmental benefits that would be shared in North Downtown and broadly across the region if the desired growth patterns can be achieved.

3.8.3 Mitigation Measures

Growth in population, housing, and employment is the core goal and primary “action” of the proposed **North Downtown Subarea Plan**. Accordingly, several elements of this EIS – in addition to **Population, Housing and Employment** -- address potential impacts and mitigation associated with growth in population, housing, and employment, including: **Environmental Health** (Section 3.5), **Land Use and Relationship to Plans/Policies/Regulations** (Section 3.7), **Transportation** (Section 3.11), **Public Services** (Section 3.12), and **Public Utilities** (Section 3.13). As noted previously in this EIS, future population and employment increases in the North Downtown Subarea, as a result of the proposed development alternative, is expected to occur incrementally over a long period of time.

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations and other mitigation, as noted below.

City Policies -- Housing

The following policies, together with City codes and other more specific measures, can help mitigate impacts that are described in this section of the Final EIS.

Tacoma Comprehensive Plan -- Generalized Land Use Element

This element of the *Comprehensive Plan* contains the following policy that can provide mitigation by supporting the land use changes necessary to achieve the growth goals of the proposed **North Downtown Subarea Plan**.

Policy	Intent
<i>LU-MUDTC-1 Maximize Development</i>	<i>Encourage maximum development of the downtown with diverse types of uses and facilities such as major financial, professional, office, cultural, retail and high density residential developments, giving the City of Tacoma a recognizable focal point that has continuous, vigorous use and affords maximum safety and convenience.</i>

Tacoma Comprehensive Plan -- Housing Element

This element of the *Comprehensive Plan* contains the following policies that can provide mitigation by supporting the creation of diverse and high quality housing in the North Downtown Subarea.

Policy	Intent
<i>H-HC-1 Innovative Development Techniques</i>	<i>Promote innovative development techniques to better utilize land, promote design flexibility, preserve open space and natural features and conserve energy resources.</i>
<i>H-HC-2 Jobs-Housing Balance</i>	<i>Promote construction of housing units in the downtown, Tacoma Mall and other mixed-use centers to enable people to live near employment, shopping and other services.</i>
<i>H-HC-4 Adaptive Reuse for Housing</i>	<i>Support the conversion of nonresidential buildings (e.g. schools, hotels, storage buildings) to residential uses.</i>
<i>H-HC-6 “Green” Housing Construction</i>	<i>Promote “green” housing construction methods that support more sustainable, affordable and healthier home design and landscaping through use of low toxic materials and better ventilation, especially in mixed-use centers.</i>
<i>H-HC-7 Land Use Incentives</i>	<i>Consider land use incentives (e.g. density or development bonuses, transfer of development rights, height increases, and tax incentives) to facilitate the development of housing in designated areas, particularly within mixed-use centers.</i>
<i>H-HC-8 Other Construction Factors</i>	<i>Promote new housing that maximizes nuisance abatement techniques, is designed to provide safety and security from natural and manmade hazards, and encourages privacy from nearby units and public areas.</i>

(The Housing Element also establishes a set of actions to implement the above policies, classified as legislative, regulatory, financial, administrative, and planning.)

Tacoma Comprehensive Plan -- Downtown Element

This element of the *Comprehensive Plan* contains the following policies that can provide mitigation by supporting the creation of diverse and high-quality housing in the North Downtown Subarea.

Policy	Intent
2.3B.A	<i>Stress mixed-income housing solutions where affordable units are integrated with market rate units to achieve a balanced neighborhood.</i>
2.3B.B	<i>Provide a range of housing types from low to high-rise and provides housing opportunities for various groups including youth, single adults, couples, families, seniors, people with special needs, artists and others</i>

The following Housing policies provide mitigation by supporting the creation of affordable, equitable housing in the North Downtown Subarea.

Policy	Intent
H-HA-1 Affordable Housing Supply	<i>Support both public and private sector development and preservation of affordable housing (e.g. Section 8, LIHTC) especially for lower income and special need households.</i>
H-HA-2 Home Ownership	<i>Facilitate home ownership (both single-family homes and condominiums) for all segments of the community, including lower income households.</i>
H-HA-3 Public-Private Partnership	<i>Work in partnership with for-profit and non-profit housing developers to facilitate the provision of new permanent affordable rental and owner housing.</i>
H-HA-4 Special Needs Housing/ Support Services	<i>Encourage and support emergency and transitional housing as well as needed support services for persons with special needs (e.g. frailty, family size and disability).</i>
H-HF-1 Housing Discrimination	<i>Ensure the local housing market provides adequate housing opportunities to renters or purchasers of housing regardless of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status or the presence of any sensory, mental or physical disability.</i>

City of Tacoma Affordable Housing Policies

The City of Tacoma proposed 2013 *Affordable Housing Policy and Code Amendment* includes the following policies:

Housing Preservation

Preservation of Existing Subsidized Housing

Track private subsidized housing contracts with HUD and their expiration dates. Facilitate efforts to renew the contracts or the sale of the buildings to nonprofit or public owners who will preserve the subsidized housing.

Housing Choice

Rooming House/Boarding House/Single Room Occupancy

Encourage new development of these housing types, which are valuable for low-wage workers and persons living on fixed income.

Housing Affordability

Voluntary Housing Incentive Program

Offer incentives to for-profit developers of new construction and rehabilitation of pre-existing housing so they include units affordable to a range of incomes. The incentives could include, but would not be limited to, the following:

- density bonuses;
- reduction in lot sizes;
- height or bulk bonuses;
- fee waivers;
- permitting priority; and
- reduction in parking requirements.

Regulatory Assistance to Developers of Affordable Housing

Offer incentives to non-profit developers of housing dedicated to affordable housing. The incentives could include, but would not be limited to, those listed in Policy H-HA-5, above.

Voluntary Housing Incentive Program for Rehabilitation Purposes

Offer incentives to owners to rehabilitate their properties in need of repair. The incentives could include, but would not be limited to, those listed in Policy H-HA-5, above. In exchange for these incentives, the owner would agree to set aside units for affordable housing.

Inclusionary Requirements for Voluntary Residential Up-zones

Condition rezone proposals that would permit a higher residential density upon a developer's agreement to include at least 10% affordable units in the market rate mix.

Limited Mandatory Affordable Housing Bonus Program for City Initiated Up-zones

Require developers of market rate residential developments to include at least 10% of the units as affordable to a range of incomes when the City up-zones property other than at the formal request of the owner or developer and when the developer builds at the higher density allowed by the up-zone. A change in the Comprehensive Plan's allowed intensity would not be considered an up-zoning for this purpose.

These proposed City of Tacoma policies are to be adopted in the Subarea Plan as guiding affordable housing policy for North Downtown, as stated in the following Subarea Plan recommendation:

- RECOMMENDATION H-6: Adopt the affordable housing policies of the proposed 2014 Affordable Housing Policy and Code Amendment.

Pierce County Affordable Housing Policies

The 2011 Pierce County Countywide Planning Policies establish the following policy that provides mitigation for any future shortage of affordable housing:

Policy	Intent
AH-3.3	<i>It shall be the goal of each jurisdiction in Pierce County that a minimum of 25% of the growth population allocation is satisfied through affordable housing.</i>

This Pierce County policy is to be adopted in the Subarea Plan as guiding affordable housing policy for North Downtown, as stated in the following Subarea Plan recommendation:

- RECOMMENDATION H-3: Adopt a policy that twenty-five percent of the total housing units in North Downtown shall be affordable to households earning up to 80 percent of the countywide median income.

Employment

Tacoma Comprehensive Plan -- Downtown Element

This element of the *Comprehensive Plan* contains the following policies that support robust, diverse, and high-quality employment growth in the North Downtown Subarea.

Policy	Intent
2.1A.A	<i>Implement economic development strategies to become a location of choice for the following identified target sectors: Business and Professional Services; Creative Arts and Design; Financial Services; IT and Software Design Trade and Logistics Services</i>
2.1A.B	<i>Generate a broad base of workforce development strategies that results in a downtown that is a 'Talent Magnet' for identified target sectors.</i>
2.1A.C	<i>Prioritize cross-disciplinary partnering to leverage assets such as the Center for Urban Waters, the Puget Sound Partnership, Institute of Technology and Port of Tacoma</i>
2.1B.A	<i>Develop and expand programs to recruit creative entrepreneurs associated with target sectors, both building an entrepreneurial culture internally, and encouraging relocation from higher cost locations</i>
2.1B.B	<i>Extend the community's current business assistance programs and build a robust network of entrepreneurs and independent local businesses</i>
2.4B.1	<i>Continue to establish creative arts and design as a primary target sector for Downtown Tacoma</i>
2.4C.A	<i>Establish a public-private partnership for an arts accelerator or cultural</i>

	<i>arts center</i>
2.4D.A	<i>Consider the creation of a private arts development association, 501c3, or umbrella organization, to help advocate for artists</i>

Additional support for retail employment is provided by the Downtown Element in its definition of “Pedestrian Retail Streets,” which are designed to support vibrant pedestrian street life. In the North Downtown Subarea, Pacific Ave, Commerce St, and South 7th Ave are identified as Pedestrian Retail Streets.

Other Mitigation

The **North Downtown Subarea Plan** will guide redevelopment of the North Downtown area over the long-term. This plan, along with standard individual project permitting by the City, would serve as mitigation to preclude potential significant population, housing and employment-related impacts from future redevelopment and ensure compatibility between uses. Mitigation measures for indirect population, housing and employment impacts (i.e., noise, aesthetics, transportation/parking, etc) are addressed in their respective sections of this Final EIS and through existing, applicable City codes.

The Housing Chapter of the Subarea Plan includes the following recommendations intended to ensure sufficient affordable housing in North Downtown:

- RECOMMENDATION H-4: Establish an affordable housing monitoring system for the North Downtown Subarea.
- RECOMMENDATION H-5: Explore the creation of a system that activates policies and regulations designed to promote the production of new affordable housing when affordability trends project a future shortfall.
- RECOMMENDATION H-7: Consider geographically prioritizing Affordable Housing Loans to areas with high quality transit access.
- RECOMMENDATION H-8: Identify the most promising mechanisms for providing assistance to developers in exchange for the inclusion of affordable housing in developments, and pursue partnerships to implement these mechanisms.
- RECOMMENDATION H-9: Collaborate with the PSRC to support the creation of a Regional TOD Affordable Housing Fund and identify parcels in North Downtown that should be targeted for affordable housing development and application of the Fund.

Live-Work and Work-Live Code Updates

The City recently adopted new Land Use Code that applies to Live-Work and Work-Live uses in the Downtown Districts and mixed-use centers (further details are provided in **Land Use** Section 3.7 of this Final EIS). Live-Work uses provide residents the economical option to reduce small business rent expenses by operating a business out of their home. This helps promote entrepreneurship job creation and economic development throughout the neighborhood. Conversely, Work-Live uses provide an economical housing option for small business owners to live in the same commercial space in which they operate their business. This helps increase and maintain the supply of affordable housing options in the Subarea.

3.8.4 Unavoidable Adverse Impacts

With application of the population, housing and employment-related mitigation noted above, no significant unavoidable impacts are anticipated in conjunction with any of the proposed alternatives. Proposed redevelopment within the North Downtown Subarea would result in an intensification of development, additional employment opportunities, and increased population in the North Downtown area. While the intensity of redevelopment in this area would be substantially greater than the amount of existing development, such redevelopment would be consistent with the ***North Downtown Subarea Plan*** (if adopted), the intent of the City's *Comprehensive Plan* and zoning.

3.9 HISTORIC AND CULTURAL RESOURCES

Information in this section addresses the effects of the proposed alternatives on historic and archaeological resources located within or proximate to the North Downtown Subarea. This information is based on the following sources:

- *ESA Adolfson. 2007 Tacoma Shoreline Inventory and Characterization. Prepared for the City of Tacoma, July 2007.*
- *BST Associates. 2008 Tacoma Waterfront Lands Analysis Final Draft Report. Prepared for the City of Tacoma. November 2008.*

3.9.1 Affected Environment

Regulatory Overview

Federal, Washington State, and City of Tacoma regulations and processes that govern the designation of historic resources are described in this section. Designated landmarks are those properties/structures/objects that have been recognized locally, regionally, or nationally as significant resources to the community, the city, state, or the nation.

National Register of Historic Places

The National Register of Historic Places (NRHP) is administered by the National Park Service and is the official federal listing of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology, engineering and culture. Eligible properties must be at least 50 years old,¹ possess integrity of physical characteristics, and meet at least one of four criteria of significance, including: **1)** association with events that have made a significant contribution to the broad patterns of our history; **2)** association with the lives of persons significant in our past; **3)** embodies the distinctive characteristics of a type, period or method of construction or represents the work of a master, or possesses high artistic values, or presents a significant and distinguishable entity whose components lack individual distinction; and/or **4)** has yielded, or is likely to yield, information important in prehistory or history.

Washington State Heritage Register

The Washington Heritage Register (WHR) is administered by the WA Department of Archaeology and Historic Preservation (DAHP) and is the official listing of historically significant sites, districts, buildings, structures and objects within the state. WHR-eligible properties must meet certain criteria to be designated as significant, including: **1)** be at least 50 years old, **2)** have a medium to high level of integrity, and **3)** have a documented historical significance at the local, state or federal level. Properties that are listed in the NRHP are automatically added to the WHR.

¹ Properties less than 50 years old can be eligible if part of a district or meet special criteria in 36 CFR 60.4.

Tacoma Landmarks Designation

The City of Tacoma maintains a Tacoma Register of Historic Places, which presently has over 130 individual properties listed, in addition to Historic Districts. Properties are nominated to the Tacoma Register by the City's Landmarks Commission and are designated by City Council resolution. The Landmarks Commission must approve changes to the exteriors of City Landmark properties. In order to be designated as a Landmark, properties/resources must be 50 years or older; and retain integrity of location, design, setting, materials, workmanship, feeling and association. As well, one of the following six criteria must be met:

1. Is associated with events that have made a significant contribution to the broad patterns of our history; or
2. Is associated with the lives of persons significant in our past; or
3. Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or
4. Has yielded or may be likely to yield, information important in prehistory or history; or
5. Is part of, adjacent to, or related to an existing or proposed historic district, square, park, or other distinctive area which should be redeveloped or preserved according to a plan based on a historic, cultural, or architectural motif; or
6. Owing to its unique location or singular physical characteristics, represents an established and familiar visual feature of the neighborhood or City.

Historic Resources

North Downtown Historic Context

In 1873, Tacoma was selected as the western terminus of the Northern Pacific Railroad, in large part due to the convenience and utility of Commencement Bay's deep-water harbor. This decision would prove to be the catalyst that transformed Tacoma from a small milling village into a booming port of industry and commerce by the turn of the century. The final railway link between the Great Lakes and the Pacific coast began construction, and regional operations begin in 1883. Transcontinental service followed in 1887 with the opening of the Stampede Pass tunnel through the Cascades. The arrival of the railroad spurred the city's rapid development during the next several decades, earning Tacoma the nickname "City of Destiny." Although Tacoma's first businesses had located on the bluff above Commencement Bay, the center of commerce quickly shifted to "New Tacoma" - present-day downtown - with the arrival of rail and the development of related waterfront industry.

As industry was dependent on access to the shoreline and Port (a Public Port was established by vote in 1918), the rail company continued to expand into the tide flats, damming one arm of Puyallup River and eventually filling the area in to establish the working shoreline of the Thea Foss and Wheeler Osgood Waterways. During this era, uses in Downtown Tacoma included mills, grain terminals, and a mile of warehouses and wharves that lined the Foss Waterway and loaded their products onto Northern Pacific freight trains.

The Subarea's eclectic collection of landmark residential, commercial and theater buildings reflects the late 19th-century boom that transformed Tacoma from a small village to a thriving center of commerce. The 1870s and 1880s were characterized by wood-frame commercial

buildings, false fronts, and wooden sidewalks. However, a series of fires in the years 1884 and 1885 destroyed much of downtown Tacoma's early wood-frame construction, and the City began to require more resilient building materials. Commercial brick and stone buildings appeared by the 1890s along with industrial warehouses to serve the growing network of rail corridors. Old City Hall (1893), designed to house the Chamber of Commerce, and the Northern Pacific Headquarters office building (1888), constructed facing one another across Pacific Avenue, became early architectural icons of North Downtown. The invention of the elevator and the advancement of construction technology enabled high-rise construction, and the surrounding commercial business district began to develop a distinctive urban form.

In addition to freight and passenger rail, Tacoma also had two streetcar lines that were constructed in 1888 connecting the lengths of Pacific Avenue and Tacoma Avenue. By the turn of the century, Tacoma had an extensive rail transit system. The horse-drawn vehicles were immensely popular from the start, and more lines were built, extending into surrounding Tacoma neighborhoods. By 1912, Tacoma had constructed approximately 125 miles of streetcar tracks – most of which were electrified - and almost 30 streetcar lines as well as an electric interurban rail connection to Seattle. Tacoma also had a simple cable car loop running between South 11th and 13th Streets and (present-day) Martin Luther King Jr. Way, and 'A' Street that integrated trolley lines at higher and lower street elevations. Several of the historic streetcar routes traversed the North Downtown Subarea and connected it with centers of development beyond downtown via the McKinley Avenue Line, the Old Town Line, the Point Defiance Line, the Portland Avenue Line, the Tide Flats Line, and others.

During the 1910s and 20s, cars and trucks became integral to City operations and settlement patterns expanded away from the core areas served by the railroad. Tacoma's economy expanded and diversified in response. Major industrial development of the Port was authorized by the federal government in the 1940s, and local jobs and housing followed as the Port grew. Around this time, local transit technology shifted from streetcars to buses, and the downtown streetcar tracks were paved over. Local transportation shifted from rail and ferry to highways, fueling suburbanization. The 1960s and 70s saw a lack of investment in downtown fueled by the construction of I-5 and changing commercial patterns. Many historic structures in downtown were lost to a 1965 earthquake and the 'urban renewal' movement that followed.

A historic preservation movement headed by Tacoma architect Alan Liddle arose in response, resulting in the creation of the Tacoma Landmarks Preservation Commission and five historic districts. These include North Downtown's Old City Hall Historic District, which is listed on the Tacoma Register, the Washington Heritage Register and the National Register of Historic Places; and its Stadium/Seminary Historic District, which is listed on the National Register only.

Tacoma has faced significant challenges in regard to protecting its historic resources in recent years. Old City Hall and other historic structures within and beyond North Downtown have suffered from deferred maintenance and are in danger of being lost. The 2009 demolition of the historic Luzon Building (designed by notable Chicago architects Burnham and Root) due to neglect caused an outcry within the Tacoma preservation community and spurred action to prevent future losses of character buildings. In 2013, a Historic Property Maintenance Code was adopted to prevent "demolition by neglect" of historic properties. The code amendment defines neglect as a public nuisance and gives the City the ability to enforce repairs and assess fines in order to prevent deterioration and loss of historic structures.

Designated Historic Districts

Figure 3.9-1 depicts designated historic districts and buildings within the Subarea, and the key for this map is provided in **Table 3.9-1**. Portions of the North Downtown Subarea are officially listed in the National Register of Historic Places, the Washington Heritage Register or the Tacoma Register of Historic Places. Registered buildings and conservation areas are subject to preservation policies and supplementary project review. The Old City Hall Historic District lies within the North Downtown Subarea, as does part of the Stadium/Seminary Historic District. Each is described below.

Old City Hall Historic Review Special District

Established in 1977, the Old City Hall Historic Special Review District encompasses seven city blocks on a bluff overlooking Commencement Bay and the Port of Tacoma. It was added to the National Register of Historic Places in 1977 and to the Tacoma Register in 1978. The collection of historic architecture in the District reflects the height of boomtown Tacoma, when the economic boost from the completion of the transcontinental railroad supported the construction of handsome brick and stone buildings to house downtown shops and offices. This area of North Downtown served as Tacoma's center of commerce, government and entertainment from the mid-1800s through the 1920s. Most of the "contributing" structures that comprise the historic district were built between 1886 and 1925.

The District includes some of the City's most architecturally important buildings, such as Old City Hall (1892) and the Northern Pacific Headquarters Building (1888), two examples of the Italianate style. The Beaux Arts Elks Temple and adjacent Spanish Steps (1915) sit slightly further up the bluff, and the Bostwick (1889) and Winthrop (1925) Hotels anchor the character area around Broadway and Pacific Avenue historically known as "Whiskey Row." Many of the District's historic structures have been rehabilitated as office, retail or residential spaces, maintaining the character of old Tacoma in what has become an architecturally eclectic mixed-use area. A full building inventory is available online.²

Stadium Seminary Historic District

The Stadium Seminary Historic District, which contains many significant high-style residential buildings from the late 19th and early 20th centuries, was listed on the National Register in 1977. This neighborhood, located on a bluff with sweeping views of Puget Sound, was where Tacoma's first lumber barons and railroad executives chose to build their homes. The historic district is bounded by North I Street, the Commencement Bay shoreline, and N 1st and 10th Streets. The portion of the District within North Downtown (east of N 4th Street) is a mix of residential, commercial and educational uses. The remainder of the District is a primarily residential neighborhood of quiet, tree-lined avenues.

Although listed on the National Register, the Stadium-Seminary District is not listed on the Tacoma Register of Historic Places, so changes to buildings within the district do not require

² http://www.tacomaculture.org/historic/resource/2008/HP_Pub%20OCH%20Inventory%202008.pdf

Figure 3.9-1 – Historic Properties and Districts

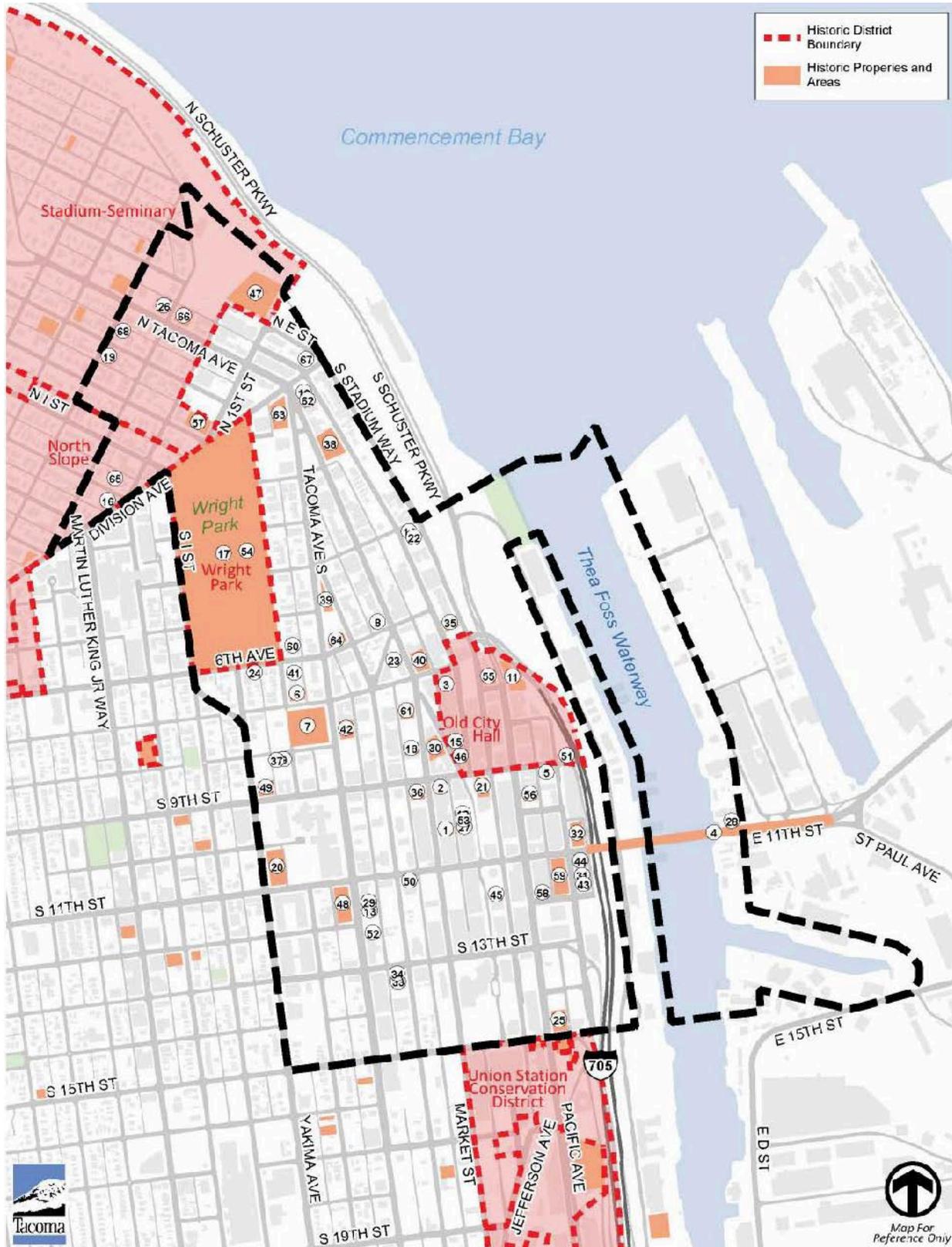


Table 3.9-1 – Key for Historic Properties and Districts Map (Figure 3.9-1)

No	Property Name	No	Property Name
1	Tacoma Nash Sales Company Building	41	Hilltop - Agnew House
2	Rialto Theatre	42	Lynn Funeral Home
3	Abbott/Passages Building	43	Commencement Bay Building
4	Bridge - 11th Street Bridge	44	Perkins Building
5	Bowes Building (Tacoma Savings and Loan)	45	New York & Ted Brown Building
6	Marymac/Carlton Apartments	46	Bostwick Building
7	Central Administration / Central Elementary	47	Stadium High School
8	Walker Apartments	48	Carnegie Library (Tacoma Public Library)
9	Hilltop - Thomas Carroll Double House	49	Hilltop - St. James Apartments
10	Thompson, Walter J Residence	50	Sunset Telephone and Telegraph Company
11	Northern Pacific Railroad Headquarters Building	51	Totem Pole
12	Pythian Temple	52	Hammer Building
13	National Shuffleboard Sales Company	53	Gardener, C.N. Building
14	Blackwell, William House	54	Seymour Conservatory (Wright Park)
15	Eldridge Hotel/Y. M. C. A. Building	55	Old City Hall
16	Park Universalist Church	56	Provident Building
17	Wright Park	57	Rutland and Woodstock Apartments
18	Bridge Clinic (Marcourt Building)	58	National Bank of Tacoma
19	Crescent Apartments (New York Apartments)	59	Federal Building
20	Armory	60	Yuncker, John F. House
21	Pantages Theatre/Jones Building	61	YMCA (The Kensington Apartments)
22	YWCA	62	Drum, Henry House
23	Wagner Motors Building	63	First Presbyterian Church
24	Hilltop - Hob Nob Restaurant	64	Fire Station - Electrical Maintenance Shop
25	Sandberg-Schoenfeld Building	65	Shackleford, John A. House
26	Dorothy Apartments	66	Ansonia Apartments
27	Kress Building	67	Edgecliff Apartments
28	Fire Station - Fire Station No. 18 (Fireboat)	68	Ella and John Snyder House
29	Fraternity Hall		
30	Medical Arts Building (Tacoma Municipal Building)		
31	Watermark Building		
32	Tacoma Building		
33	Auditorium Dance Hall		
34	Manley-Thompson Ford Agency		
35	University Union Club		
36	First Baptist Church (Urban Grace Church)		
37	Hilltop - Buren/Holden Apartments		
38	Masonic Temple and Temple Theater		
39	Fire Station - Fire Communications Center		
40	Webster Apartments		

Source: City of Tacoma

review by the Landmarks Preservation Commission or the Historic Preservation Office. The institutions that give the district its name continue to serve as Tacoma landmarks.

Tacoma's Stadium High School was originally designed as a resort hotel in the style of a French chateau for the Northern Pacific Rail Company and the Tacoma Land Company. Construction began in 1891 but was halted by the Panic of 1893. The partially completed building was used as a temporary storage facility but was eventually gutted by a fire in 1898. The remains of the building were purchased by the Tacoma School District in 1904, and it was reconstructed for use as a school, opening in 1906 as Tacoma High School. The structure has served as a public high school since that time and received a major renovation in 2005-2006. The adjacent gulch was filled in for the construction of the stadium "bowl" in 1910. The dramatically-sited playfield and stadium originally seated 24,000 people. Its capacity was reduced to approximately half in the 1970s due to the inability of the slopes to support the original structure.

The Annie Wright Seminary, a private school for girls, opened in September of 1884 in a stately, Queen Anne-style structure at 611 Division Ave. The school was financed by early Tacoma magnate Charles Wright, who served as president of both the Tacoma Land Company and the Northern Pacific Railroad Company. It was named after his daughter, Annie, and served to provide a "Christian education" for the daughters of the pioneers that had moved to the City of Destiny. Successful from the start, it eventually outgrew its original North Downtown location and moved in 1924 to 827 Tacoma Avenue, where it remains today. The original building was demolished.

Historic Resources in Other Areas of North Downtown

Theater District

Although not an officially listed historic district, the Theater District is comprised by an assemblage of theaters and performing arts venues that have long contributed to the character and culture of North Downtown. This mixed-use district, which is located along Broadway (between S 9th and S 11th Streets) and South 9th Street (between Market and Commerce Streets) reflects both the importance, both historic and present, of entertainment and the arts within the City of Tacoma.

The Broadway Center for the Performing Arts, a non-profit arts organization, manages the Pantages and Rialto Theaters (both constructed in 1918) as well as the more modern Theatre on the Square (1993). These venues, together with the Ben Gilbert and Theatre on the Square parks, are home to Tacoma's "core" performing arts organizations, including the Tacoma Opera, Tacoma Philharmonic, Tacoma City Ballet, Tacoma Youth Symphony Organization, and the Northwest Sinfonietta, among others.

The restoration of the historic Pantages and Rialto theaters (in 1983 and 1991, respectively), together with the arrival of Tacoma's Link Light Rail in 2003 has helped to make the Theater District more accessible and welcoming to both residents and tourists. The Theater District Association, a non-profit organization, has worked to promote the development of community and arts projects to help revitalize the downtown, including the Rialto Theater Art Wall, Ben Gilbert Park and Historic Photo Mural, and Opera Alley.

Wright Park and Seymour Conservatory

In 1886, Tacoma Land Company president Charles B. Wright donated a 20-acre parcel of land to the on the strict condition that the land be used for a public park. Wright Park quickly expanded to 27 acres, filling out the 10 city blocks bounded by Division and Sixth Avenues and South G and South I Streets. The park functions as an arboretum within a heavily-developed urban context and contains a collection of more than 630 trees as well as a loop trail, bowling lawn and bocce ball green. Designed by E. O. Schwagerl and Ebenezer Rhys Roberts, Wright Park has largely maintained its original character of a pastoral, bucolic landscape in the style of traditional English parks.

William W. Seymour, an early figure in the history of Tacoma's Metropolitan Parks District, donated the funding for the construction of the W. W. Seymour Botanical Conservatory, which opened in Wright Park in 1908. The conservatory, which displays exotic plants from around the world, is made of more than 3,000 panes of glass and features a twelve-sided central dome. It is listed on the City of Tacoma, Washington State and National historic registers.

Wright Park and the Seymour Conservatory were listed on the National Register in 1976. In 2005, the Wright Park Master Plan was created to guide the maintenance and enhancement of the facilities in a way that would reflect the original intent of the park design. A series of subsequent park improvements took place between 2006 and 2011, including safety and security improvements as well as the installation of a new playground and sprayground, the addition of bike racks and picnic tables, and the creation of a new outdoor performance area. This work was funded by the 2005 Parks Improvement Bond Measure and the fundraising efforts of the Greater Metro Parks Foundation.

Firemen's Park & Totem Pole

Fireman's Park, a wedge-shaped open space perched above Schuster Parkway between South 7th and 9th Streets, offers an impressive vista of Commencement Bay and the Port of Tacoma. The location provides a unique view of the sun rising from the center of Mt. Rainier on the winter solstice and was regarded by the Puyallup Tribe as a sacred site. A city park was created at the location in 1894 adjacent to Tacoma's first brick fire station.

The park's landmark totem pole, carved by Alaskan natives, was commissioned in anticipation of a 1903 visit by Theodore Roosevelt. Meant to brand Tacoma as the "gateway to Alaska," the totem pole was originally located at South 10th and A Streets and was later relocated to Fireman's Park at South 9th and A Streets.

Although the totem pole has been restored on multiple occasions throughout its lifetime, it was determined in early 2013 that it had become structurally weak as a result of rot and insect infestation. In September of the same year, the Tacoma Landmarks Commission approved a plan to install a steel support system next to the pole to lend it needed support as temporary solution to the structural problem. The permanent fate of the pole remains undetermined.

Thea Foss Waterway and Shoreline

The Thea Foss Waterway is named for the woman who founded Foss Tug and Barge on the Waterway in 1894. Access to the eastern shoreline of the Waterway was limited by the Puyallup

Indian Reservation. Congress passed the Dawes Act in 1887 that allowed the sale of the allotments granted to the reservation and opened up the area to port development. The railroads and then the U.S. Army Corps of Engineers excavated and dredged the Foss Waterway, largely completing the work by 1905. During this era, the Waterway developed into a thriving industrial center with sawmills, cedar shingle mills, boat yards, wharves, granaries and warehouses. Railroads served the flat foreshore where fish works and processing plants were established.

Today there are two remaining wooden warehouses originally built as a mile-long complex in 1900 located on the west side of the Waterway that represent the last historic period structures on the Waterway. These warehouses were built to accommodate cargo carrying square-rigged ships that frequented the port during the early years of Tacoma's history, and hosted steam- and diesel-powered cargo traders well into the 20th century. Located opposite S. 7th St., the Balfour Dock building is a former wheat transfer facility, last commercially active in the 1970s. It is now home to the Foss Waterway Seaport and is being redeveloped under a public/private partnership. To the north of Balfour Dock, the second remaining historic warehouse is known as the Dock Building, and is currently being used for offices. In 1911, the City built the State's first publicly-owned dock on the western shore of the Waterway near S. 15th St. Known as the Municipal Dock, it was a massive heavy timber, frame and truss structure with 200-foot continuous beams and an uninterrupted interior space of 300 ft. by 100 ft., with a total shoreline length of about one mile. The dock was razed in 2001.

Over the first half of the 20th Century, the Waterway saw major industrial uses, including lumber, petroleum and chemical processing. But by mid-century, activity on the Waterway began to decline due to global economic trends that were shifting manufacturing and industrial uses off shore to take advantage of cheaper labor. By the 1980s, the eastern shores of the Foss Waterway were almost entirely abandoned. In 1983, EPA designated a Superfund site that included the Thea Foss Waterway; major clean up and dredging was conducted through 2006.

The Foss Waterway Development Authority (FWDA) was established in 1996 and is currently overseeing redevelopment of the Waterway. Completed projects include two mixed-use residential buildings, renovation/relocation of marinas, the Museum of Glass, the Museum of Modern Art of Tacoma, a pedestrian "Bridge of Glass" and a public esplanade.

Murray Morgan Bridge

The Murray Morgan Bridge, originally known as the 11th Street bridge, opened in 1913. The vertical lift bridge was designed to enable larger ships to access the Foss Waterway and served as the only non-rail transportation link between Tacoma and the port for many years. Two streetcar lines were integrated into the bridge design but were later removed. In the 1950s, the bridge was acquired by the Washington State Department of Transportation as a part of the SR 509 route.

In 1982, the bridge was added to the National Register of Historic Places, and it was renamed to honor local historical and bridge tender Murray Morgan in 1997. In 2007, the bridge was deemed unsafe, and ownership was transferred to the City of Tacoma in 2009. Rehabilitation work began two years later and was completed in early 2013, just in time for a celebration of the bridge's centennial. The renovation included structural repairs, a new drainage system and the conversion of two automobile lanes to lanes for bicycles and pedestrians.

Cultural Resources

Cultural Resources within the shoreline area of the North Downtown Subarea were inventoried for the update to the *Tacoma Shoreline Master Program*. The following studies were completed:

- *ESA Adolfson. 2007 Tacoma Shoreline Inventory and Characterization. Prepared for the City of Tacoma, July 2007.*
- *BST Associates. 2008 Tacoma Waterfront Lands Analysis Final Draft Report. Prepared for the City of Tacoma. November 2008.*

Downtown Tacoma has served as an economic and cultural location for thousands of years. The first people in the area, the Puyallup Indians, had settlements in what is now Tacoma and the surrounding region and consider the area to be an important part of their culture's history and heritage. The Puyallup peoples made their villages on the shores Commencement Bay, along the Puyallup River, and in other nearby places. Commencement Bay and the Puyallup River delta served as prime food sources and as the economic basis for the Puyallup peoples who were coastal fisherman, gatherers, and hunters. Access to these bodies of water and nearby lands were vital to their survival as salmon served as their main food source and the Western red cedar tree, which grew in the forests where the City of Tacoma is now developed, was used for shelter, clothing, and basketry.

Many of the Puyallup peoples' settlements were located within the boundaries of the Subarea. European settlers arrived in the area in the 1830s and the Puyallup Tribe established relations with the United States Government soon after. In 1854, the Treaty of Medicine Creek was signed and the Puyallup Tribe was moved from their historic fishing and hunting settlements onto reservation lands to the north and east of the Subarea.³

In early planning for the Tacoma Convention Center, an archaeological resources survey was conducted, which noted that six of 34 known Puyallup village sites were located within Tacoma's city limits.⁴ One of the sites was believed to have been located at least partially in the North Downtown, in the vicinity of S. 15th St. and Pacific Ave. The following is derived from that resource survey:

A village [was] located at the mouth⁵ of the Puyallup River, subsequently known as Galligers Gulch.⁶ The house sites were at the intersection of S. 15th St., A St. and Pacific Ave. in downtown Tacoma. The sites included a large pool extending to Pacific Ave., which is today covered by Schoenfield Furniture warehouse. A small stream fed by springs and surface drainage emptied into the pool from the north. A long sandspit extended between the pool and the river mouth with a water entrance provided from the south. The people of this village were referred to by the earliest Euro-American settlers as the "real" Puyallup. After the establishment of the Puyallup Indian Reservation at Commencement Bay in 1854, the name of this village site was extended to include all those people who took up residence on the Reservation. Puyallup headsmen Shillawilton and Squatahan returned to this site with their families after the Puyallup Reservation was established in a show of refusal of the government relocation.

³ presently situated in Thurston County near the Nisqually River delta

⁴ Palmer et al, 1996

⁵ Before the tide flats were filled, the mouth of the Puyallup River was at the foot of S. 15th St.

⁶ also spelled as Gallagher Gulch

As a result of the Puyallup peoples' use of the land along the Foss Waterway in the North Downtown Subarea, evidence of camp sites, burial sites, tools, implements, or other artifacts may still exist today. As noted previously, there have been extensive dredging and fill activities on the Foss Waterway and its shoreline that can be expected to have caused major disturbances and loss of archaeological resources that may have been left behind by the Puyallup Tribe. However, there is still potential for the discovery of as-yet unrecorded archaeological resources when redevelopment occurs in these areas.

3.9.2 Impacts

Historic Resources

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to historic resources would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The action alternative would continue the redevelopment trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities. Development could result in the loss of historic structures or degradation of historic character in certain areas of North Downtown. The majority of properties within the Subarea are not required to coordinate with the City Design Review program or Landmark's Preservation Commission, a situation that could result in aesthetically incompatible structures that could detract from the historic character of the neighborhood. Dissolution of cohesive historic character could result in a loss of Tacoma's history and unique identity.

There are buildings in the Subarea that may be appropriate for historic preservation, but have not undergone a nomination process, or are located outside of an existing Historic District. The risk of loss of such buildings is exacerbated by several complicating factors, including:

- often perceived high cost to renovate deteriorated buildings and bring them into compliance with code;
- small lot sizes and unconsolidated properties that make it difficult to consolidate funding for building upgrades; and
- lack of code flexibility and/or interpretation of regulations that create unnecessary barriers to the rehabilitation of historic buildings.

Archeological Resources

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to cultural resources would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposal analyzed in this EIS consists of several related decisions by the Tacoma City Council regarding the proposed **North Downtown Subarea Plan**. By itself, this proposal would not directly result in impacts to cultural resources. However, future site-specific development proposals under the action alternative could result in impacts to cultural resources.

There is the potential for the Subarea to contain historic period and/or pre-contact archaeological resources, particularly in shoreline areas. Construction of new buildings within the North Downtown Subarea would require excavation, which has the potential to encounter archaeological deposits.

3.9.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations, and other mitigation, as noted below.

City Policies

The City of Tacoma has established policies, regulations, and programs that provide mitigation for potential adverse impacts on historic and cultural resources. The City's goal is to be a national leader in historic preservation and adaptive re-use. City policy is grounded in the belief that preservation and renovation of historic properties are critical components of sustainable development in Tacoma and can provide a range of community benefits, including:

- creation of catalysts and anchors for the redevelopment of a district, block or street;
- enhancement of sense of place, which helps to maximize prior investments in infrastructure and development, and encourages ongoing infill development; and the
- promotion of energy efficiency by preserving the embodied energy already represented by existing buildings.

Comprehensive Plan – Historic Preservation Element

The City of Tacoma Comprehensive Plan contains multiple policies in its Historic Element, Downtown Element and Generalized Land Use Element that provide mitigation by encouraging adaptive-re-use and preservation. Relevant policies are summarized in the tables below.

Policy	Intent
HP-1	<i>Preserve archaeological resources as part of Tacoma’s rich history.</i>
HP-2	<i>Integrate historic resource into community planning efforts. Encourage neighborhood-level preservation and conservation programs.</i>
HP-3	<i>Promote preservations’ role in community sustainability efforts and provide tools to encourage cooperation between advocates for historic preservation and sustainability.</i>
HP-6 HP-6A HP-23A HP-26B HP-33C	<i>Encourage active use of historic resources</i> <i>Promote adaptive re-use of historic properties</i> <i>Consider establishing a TDR program for historic properties</i> <i>Explore context-sensitive zoning</i> <i>Extend the range of zoning incentives for historic resources and conservation areas</i>
HP-7A HP-7B HP-7C	<i>Market Tacoma for Heritage tourism,</i> <i>Coordinate preservation efforts with local business and</i> <i>Use Historic and Conservation districts as ways to increase property values.</i>
HP-8 HP-26B HP-29A	<i>Incorporate new trends and issues in preservation and neighborhood conservation in creative ways that establish Tacoma as a leader.</i> <i>Use Zoning tools to promote historic preservation goals, and support an overall heritage conservation system.</i> <i>Schedule designation of historic resources according to clearly defined priorities.</i>
HP-11	<i>Capitalize on and promote historic resources in community planning efforts, and promote urban development strategies that are compatible with historic preservation.</i>
HP-33 HP-33B	<i>Enhance regulatory incentives to encourage preservation and conservation</i> <i>Promote the use of Mixed-Use Center and Downtown zoning incentives for preservation projects.</i>

Comprehensive Plan – Downtown Element

The Historic Preservation Section (2.2F) of the Downtown Element articulates the following intent:

“The collection of remaining historic buildings downtown should be championed as one of Tacoma’s key strategic assets. The preservation of historic buildings should be supported through a range of City-led initiatives and public/private projects as catalysts for downtown revitalization.”

The Downtown Element establishes the following policies and actions:

Policy	Intent
2.2F.A	<i>The City should continue to enrich and expand programs to encourage adaptive re-use and preservation of, and design compatibility with, downtown historic buildings, with the intent of creating environments of distinctive character and quality.</i>
2.2F.B	<i>Incentives for historic preservation should continue to be expanded to: (a) Motivate land owners; (b) Reduce the overall financial burden of downtown development; and (c) Provide building code flexibility and special designations for identified structures.</i>
2.2F.C	<i>Pro-actively list historically eligible buildings on historic registers with the understanding that progress will be dependent on funding.</i>
2.2F.D	Safeguard historic structures through code enforcement and inspection to adequately protect historic buildings from demolition by neglect.
2.2F.1	Develop a collaborative plan to discourage tearing down the remaining significant historic structures.
2.2F.2	Revise Pierce County’s public use rating system for current use tax assessment for historic properties to encourage adaptive re-use.
2.2F.3	Evaluate city-owned properties and develop preservation guidelines for their rehabilitation or alternate reuse.
2.2F.4	Expand the existing Historic Preservation Program to provide recommendations for Transfer of Development Rights (TDR) for historic structures. Identify designated sending (identified eligible properties) and receiving properties (infill) as a tool to fund the renovation and adaptive re-use of signature buildings. Revise the historic “special features” bonus provision for additional height to make the TDR program for historic structures viable.
2.2F.5	Collaborate with non-profit and government agencies such as Washington Trust, Historic Tacoma, DAHP and CTED to develop a cultural tourism plan that focuses on Tacoma’s heritage properties.

Comprehensive Plan – Land Use Element

The Land Use Element includes the following general policy: LU-MUDTC-2 - Preservation of Historical, Cultural and Scenic Resources: Recognize the abundance and prominence of historical, cultural, and scenic resources within downtown and preserve these unique assets.

Shoreline Master Program

Tacoma's Shoreline Master Program (SMP) regulates development of sites on the Foss Waterway within the North Downtown Subarea. The current SMP, adopted in October 2013, includes the following relevant goals and objectives:

SMP 3.7.1 Archaeological, Historic and Cultural Resources Goal:

Protect and enhance shoreline features of archaeological, historic, and cultural value or significance and to preserve these features for the public benefit through coordination and consultation with the appropriate local, state and federal authorities, including affected Indian Tribes.

SMP 3.7.2 Archaeological, Historic and Cultural Resources Objectives:

1. Recognize the importance of the waterfront to Tacoma's history and character.
2. Recognize the high probability that development may encounter archaeological, historic and cultural resources, and ensure that appropriate measures are taken to protect, preserve, and enhance sites and features of archaeological, historic, and cultural value or significance.
3. Collaborate on cultural resource management issues with the appropriate tribal, state, federal and local governments and entities.
4. Encourage cooperation between public and private entities in the identification, protection and management of cultural resources.
5. Where appropriate, make access to such sites available to parties of interest, provided that access to such sites must be designed and managed in a manner that gives maximum protection to the resource.
6. Provide opportunities for education related to archaeological, historical and cultural features where appropriate and incorporated into public and private programs and development.

State Regulations

Archaeological sites located in North Downtown are subject to chapter 27.44 RCW (Indian graves and records) and chapter 27.53 RCW (Archaeological sites and records). Development or uses that could impact these sites must comply with the State's guidelines on archaeological excavation and removal (WAC 25-48).

City Regulations

Historic Preservation Program

Tacoma's Historic Preservation Office administers the Historic Preservation Program, which is supported by non-profits and other organizations such as the University of Washington and Tacoma Culture. Historic Preservation staff review nominations to Tacoma's Landmarks Register, process applications for changes to historic landmarks, support the Landmarks Preservation Commission, and assist the public and other government agencies with historic preservation issues. The City's preservation staff consists of one full-time preservation planner. As designated in the Comprehensive Plan Historic Preservation Element, the preservation program components are:

- Administration: The framework for operating the preservation program
- Identification: The survey and recognition of properties with cultural or historic significance
- Management Tools: The specific mechanisms for protecting historic resources
- Incentives and Benefits: Programs that assist property owners and support preservation
- Education: The tools to build awareness and strengthen skills to support preservation
- Advocacy: The promotion of policies and partnerships that support preservation

Landmarks Preservation Commission

Tacoma's Historic Preservation Program is governed by two ordinances: The Landmarks Preservation Commission (TMC 1.42) and the Landmarks and Historic Special Review Districts (TMC 13.07). The Landmarks Preservation Commission is an eleven-member volunteer commission made up of Tacoma residents and professionals appointed by the City Council. The Commission reviews and approves applications for changes to registered landmarks and buildings within local historic districts, reviews nominations, advises City Council regarding additions to the Landmarks Register, and participates in the planning process.

Historic Design Review

In Tacoma, buildings on the historic register and buildings within Historic Districts must complete a design review approval process prior to the start of work or issuance of permits. The same design review process and guidelines are used to evaluate projects in both Historic Special Review Districts and Conservation Districts. Tacoma's Landmarks Preservation Commission reviews projects at regular public meetings, and projects that meet their standards are issued a certificate of approval.

The design review process is based upon standard City zoning standards that regulate the character of building and neighborhoods, including form, massing and scale, height limitations, and coverage. Evaluation standards and guidelines include:

- The Secretary of the Interior's Standards for the Treatment of Historic Properties
- The National Park Service's Preservation Briefs
- Historic District Design Guidelines for the Union Depot/Warehouse Historic District.

Historic Resource Surveys

The City of Tacoma conducted a series of Community Cultural Resources Surveys between 1977 and 2005. These surveys define the key character-defining features of an individual historic property and provide the foundation for a building's nomination process. Once a property is surveyed, the City of Tacoma collects all information, including maps, aerial photos, historical descriptions and photographs, in a publicly-accessible digital inventory maintained by Tacoma Culture.

Designated Buildings

Numerous buildings in the North Downtown Subarea have successfully undergone an individual nomination process and are tracked by the City's Historic Preservation Program. A digital building inventory and historic inventory database are maintained by Tacoma Culture.^{7,8} Properties and districts are placed on the Tacoma Register of Historic Places through a nomination process. Nominations received and reviewed by the Landmarks Commission. If found to meet the criteria for designation, they are recommended to City Council for designation.

Shoreline Master Program

Section 2.4.6 of Tacoma's 2013 Shoreline Master Program stipulates the following requirements for development proposals in shoreline areas:

A. Known Archaeological, Cultural and Historic Resources

1. Applications for a shoreline permit shall identify whether the property is within 500 feet of a site known to contain an historic, cultural or archaeological resource(s). Records of known sites are restricted. Consultation with Washington Department of Archaeology and Historic Preservation or a certified archaeologist will be required. If the property is determined to be within 500 feet of a site known to contain an historic, cultural, or archaeological resources, the City shall require a cultural resource site assessment; provided that, the provisions of this section may be waived if the Land Use Administrator determines that the proposed development activities do not include any ground disturbing activities and will not impact a known historic, cultural or archaeological site. The site assessment shall be conducted in accordance with Washington State Department of Archaeology and Historic Preservation guidelines for survey and site reporting to determine the presence of significant historic or archaeological resources. The fee for the services of the professional archaeologist or historic preservation professional shall be paid by the landowner or responsible party.
2. If the cultural resource site assessment identifies the presence of significant historic or archaeological resources, a Cultural Resource Management Plan (CRMP) shall be prepared by a professional archaeologist or historic preservation professional paid by the landowner or responsible party. In the preparation of such plans, the professional archaeologist or historic preservation professional shall solicit comments from the Washington State Department of Archaeology and Historic

⁷ http://cms.cityoftacoma.org/cedd/TacomaCulture/Historic/general/PUBLICATION_LANDMARKS_REGISTER.pdf

⁸ <http://wspdsmap.ci.tacoma.wa.us/website/HistoricMap/viewer.htm>

Preservation, and the Puyallup Tribe. Comments received shall be incorporated into the conclusions and recommended conditions of the CRMP to the maximum extent practicable.

3. A CRMP shall contain the following minimum elements:
 - a. The CRMP shall be prepared by a qualified cultural resources consultant, as defined by the Washington State Department of Archaeology and Historic Preservation.
 - b. The CRMP shall include the following information: (see Shoreline Master Program for details)
 4. Upon receipt of a complete development permit application in an area of known historic/archaeological resources, the City shall notify and request a recommendation from appropriate agencies such as the Washington State Department of Archaeology and Historic Preservation, and the Puyallup Tribe. Recommendations of such agencies and other affected persons shall be duly considered and adhered to whenever possible and reasonable.
 5. The recommendations and conclusions of the CRMP shall be used to assist the Administrator in making final administrative decisions concerning the presence and extent of historic/archaeological resources and appropriate mitigating measures. The Administrator shall consult with the Washington State Department of Archaeology and Historic Preservation, and the Puyallup Tribe prior to approval of the CRMP.
 6. The Administrator may reject or request revision of the conclusions reached in a CRMP when the Administrator can demonstrate that the assessment is inaccurate or does not fully address the historic/archaeological resource management concerns involved.
- B. Unanticipated Discovery of Archaeological, Cultural and Historic Resources
1. All applications for a shoreline permit shall prepare a plan for the possible unanticipated discovery of historic, cultural or archaeological resource(s), including a point of contact, procedure for stop-work notification, and for notification of appropriate agencies.

Section 6.3.2 of Tacoma's 2013 Shoreline Master Program establishes the following regulations for development projects in shoreline areas:

A. General

1. Archaeological sites located in shoreline jurisdiction are subject to RCW 27.44 (Indian Graves and Records) and RCW 27.53 (Archaeological Sites and Records).
2. Development or uses that may impact such sites shall comply with WAC 25-48 as well as the requirements within this Program, where applicable.
3. Development that is proposed in areas documented to contain archaeological resources shall have a site inspection or evaluation by a professional archaeologist in coordination with affected Indian Tribes.

B. Unanticipated Discovery of Historic, Cultural or Archaeological Resource

1. Consistent with TSMP 2.4, all applications for a shoreline permit shall prepare a plan for the possible unanticipated discovery of historic, cultural or archaeological resource(s), including a point of contact, procedure for stop-work notification, and for notification of appropriate agencies.
2. Whenever historic, cultural or archaeological sites or artifacts are discovered in the process of development on shorelines, work on that portion of the development site shall be stopped immediately, the site secured and the find reported as soon as possible to the Administrator. Upon notification of such find, the property owner shall

notify the Washington State Department of Archaeology and Historic Preservation and the Puyallup Tribe, and the Administrator shall conduct a site investigation to determine the significance of the discovery. Based upon the findings of the site investigation and consultation with the Washington State Department of Archaeology and Historic Preservation, the Puyallup Tribe, and the proponents unanticipated discovery plan prepared consistent with TSMP 2.4, the Administrator may require that an immediate site assessment be conducted or may allow stopped work to resume.

3. If a site assessment is required, the area of inadvertent discovery shall be stabilized, contained or otherwise protected until the site assessment and/or CRMP is completed. The site assessment shall be prepared to determine the significance of the discovery and the extent of damage to the resource and shall be distributed to the Washington State Department of Archaeology and Historic Preservation, and the Puyallup Tribe
4. Upon receipt of a positive determination of a site's significance, the Administrator may invoke the provisions of TSMP 2.4.6 for a Cultural Resource Management Plan (CRMP), if such action is reasonable and necessary to implement.

Other Mitigation

In addition to the mitigation listed above, the action alternatives would involve adoption of a Subarea Plan with multiple recommendations that are aimed at mitigating adverse impacts to historic and cultural resources, as described below.

The Subarea Plan Vision includes the following language that helps set policy direction to help mitigate impacts to historic and cultural resources in the Subarea:

Cultural and Heritage District: A community that respects and preserves the mix of historic characteristics and vibrant business of all types while encouraging and celebrating the rich mix of cultures and heritages.

The Subarea Plan identifies and describes the following important potential catalytic historic renovations projects:

- Old City Hall
- Elks/McMenamins
- National Guard Armory

The Subarea Plan includes the following recommendations that would help mitigate impacts to historic resources in the Subarea:

- RECOMMENDATION HR-1: Implement historic resource conservation strategies to preserve the existing mix of historic and contemporary structures within North Downtown districts.
- RECOMMENDATION HR-2: Continue to support existing organizations, initiatives and tours that promote the arts, historic and cultural themes that define the North Downtown brand.
- RECOMMENDATION HR-4: Enforce Historic Properties Maintenance Code to prevent demolition by neglect of deteriorating historic structures.

- RECOMMENDATION HR-5: Create a funding mechanism for the repair of historic structures suffering from deferred maintenance.
- RECOMMENDATION HR-6: Create an inventory of historic structures within North Downtown that includes a prioritized list of buildings in need of repair and identifies properties that are high priorities for preservation through TDR.
- RECOMMENDATION HR-7: Proactively support renovation and adaptive reuse projects on key historic properties.
- RECOMMENDATION HR-8: Establish a demonstration project program for renovation and adaptive reuse projects on historic properties.

Transfer of Development Rights

The City has enacted a Transfer of Development Rights (TDR) program in the Downtown Districts and Mixed-use Centers. TDR is intended to advance the City's conservation, historic preservation, and built environment goals by encouraging the voluntary redirection of development away from areas where the City wants less or no development, called sending areas, toward areas that the City has designated as suitable for bonus development, called receiving areas. Currently, structures designated as landmarks in the Tacoma Register of Historic Places qualify as TDR sending areas. Under TDR, funds collected from developers in exchange for increased development capacity in receiving area are made available through various mechanisms to preserve historic structures in sending areas. The Subarea Plan includes the following recommendation to promote historic TDR in North Downtown:

- RECOMMENDATION HR-3: Identify Historic properties in North Downtown that are well-suited to be TDR sending sites.

Cultural Resource Protections

The Historic Resources chapter of the Subarea Plan recommends that the cultural resource protections provided by Tacoma 2013 Shoreline Master Program listed above be extended to cover the entire Subarea (RECOMMENDATION HR-10). If the Subarea Plan is adopted by the City, the following regulations would apply to all development projects in the North Downtown Subarea:

A. General

1. Archaeological sites located in Washington State are subject to RCW 27.44 (Indian Graves and Records) and RCW 27.53 (Archaeological Sites and Records).
2. Development or uses that may impact such sites shall comply with WAC 25-48 as well as the requirements within this Program, where applicable.
3. Development that is proposed in areas documented to contain archaeological resources shall have a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

B. Known Archaeological, Cultural and Historic Resources

1. Applications for a development permit shall identify whether the property is within 500 feet of a site known to contain an historic, cultural or archaeological resource(s). Records of known sites are restricted. Consultation with Washington Department of Archaeology and Historic Preservation or a certified archaeologist will be required. If the property is determined to be within 500 feet of a site known to contain an historic,

cultural, or archaeological resources, the City shall require a cultural resource site assessment; provided that, the provisions of this section may be waived if the Land Use Administrator determines that the proposed development activities do not include any ground disturbing activities and will not impact a known historic, cultural or archaeological site. The site assessment shall be conducted in accordance with Washington State Department of Archaeology and Historic Preservation guidelines for survey and site reporting to determine the presence of significant historic or archaeological resources. The fee for the services of the professional archaeologist or historic preservation professional shall be paid by the landowner or responsible party.

2. If the cultural resource site assessment identifies the presence of significant historic or archaeological resources, a Cultural Resource Management Plan (CRMP) shall be prepared by a professional archaeologist or historic preservation professional paid by the landowner or responsible party. In the preparation of such plans, the professional archaeologist or historic preservation professional shall solicit comments from the Washington State Department of Archaeology and Historic Preservation, and the Puyallup Tribe. Comments received shall be incorporated into the conclusions and recommended conditions of the CRMP to the maximum extent practicable.
3. A CRMP shall contain the following minimum elements:
 - a. The CRMP shall be prepared by a qualified cultural resources consultant, as defined by the Washington State Department of Archaeology and Historic Preservation.
 - b. The CRMP shall include the information required by Section 2.4.6 of Tacoma's 2012 Shoreline Master Program Update
4. Upon receipt of a complete development permit application in an area of known historic/archaeological resources, the City shall notify and request a recommendation from appropriate agencies such as the Washington State Department of Archaeology and Historic Preservation, and the Puyallup Tribe. Recommendations of such agencies and other affected persons shall be duly considered and adhered to whenever possible and reasonable.
5. The recommendations and conclusions of the CRMP shall be used to assist the Administrator in making final administrative decisions concerning the presence and extent of historic/archaeological resources and appropriate mitigating measures. The Administrator shall consult with the Washington State Department of Archaeology and Historic Preservation, and the Puyallup Tribe prior to approval of the CRMP.
6. The Administrator may reject or request revision of the conclusions reached in a CRMP when the Administrator can demonstrate that the assessment is inaccurate or does not fully address the historic/archaeological resource management concerns involved.

C. Unanticipated Discovery of Historic, Cultural or Archaeological Resource

1. All applications for a development permit in the South Downtown Subarea shall prepare a plan for the possible unanticipated discovery of historic, cultural or archaeological resource(s), including a point of contact, procedure for stop-work notification, and for notification of appropriate agencies.
2. Whenever historic, cultural or archaeological sites or artifacts are discovered in the process of development on shorelines, work on that portion of the development site shall be stopped immediately, the site secured and the find reported as soon as possible to the Administrator. Upon notification of such find, the property owner shall

notify the Washington State Department of Archaeology and Historic Preservation and the Puyallup Tribe, and the Administrator shall conduct a site investigation to determine the significance of the discovery. Based upon the findings of the site investigation and consultation with the Washington State Department of Archaeology and Historic Preservation, the Puyallup Tribe, and the proponents unanticipated discovery plan, the Administrator may require that an immediate site assessment be conducted or may allow stopped work to resume.

3. If a site assessment is required, the area of inadvertent discovery shall be stabilized, contained or otherwise protected until the site assessment and/or CRMP is completed. The site assessment shall be prepared to determine the significance of the discovery and the extent of damage to the resource and shall be distributed to the Washington State Department of Archaeology and Historic Preservation, and the Puyallup Tribe
4. Upon receipt of a positive determination of a site's significance, the Administrator may invoke the provisions of Section B.3 for a Cultural Resource Management Plan (CRMP), if such action is reasonable and necessary to implement.

The Subarea Plan also recommends that the City develop and implement a Memorandum of Understanding (MOU) with the Puyallup Tribe to establish supplemental protections for archeological resources in North Downtown (RECOMMENDATION HR-11). In early 2013 the City initiated discussions with the Puyallup Tribe concerning the establishment of an MOU for the South Downtown Subarea Plan to fill gaps in the review process that that Subarea Plan's proposed regulations may not have covered. Elements that may be considered for the MOU include:

- City commitment to the use of a predictive GIS model to identify projects where mitigation is needed
- City commitment to site monitoring during construction for certain projects
- City commitment to conducting an archaeological survey of the area

3.9.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to historic or cultural resources.

3.10 AESTHETICS

Information presented in this section addresses the effects of the proposed alternatives relative to views on and from sites that are located within or proximate to the North Downtown Subarea.

3.10.1 Affected Environment

The North Downtown Subarea consists of approximately 520 acres of industrial and commercial properties that are located within the north half of Tacoma's downtown. The Subarea encompasses several distinct districts: the northern portion of **Downtown Tacoma**, including the Bates Technical College Campus and the **Commercial Core**; the **Stadium District**; the northern portion of the **Hillside District**; the **St. Helens District**; and **Wright Park** (for reference see **Figure 2-3** in *Section II* of this Final EIS).

Views

The topography of the North Downtown Subarea affords numerous opportunities for spectacular views, including views of Mount Rainier and Commencement Bay. In roughly the southern half of the Subarea, the topography varies from sea level at the Foss Waterway to an elevation of approximately 300 feet along Yakima Ave. From the Waterway, the topography rises steeply to I-705 and South A St, rises slowly between Pacific Ave. and Commerce St., and then rises more steeply to Yakima Ave. Many areas on the upper portions of the hillside command 180-degree territorial views to the east.

In the northern portion of the Subarea, there are very steep slopes rising from the Foss Waterway to Stadium Way. Topography also rises along Stadium Way from about 140 feet at the I-705 ramps, to about 240 feet when at the intersection with North 1st Street. Many locations along Stadium Way offer expansive views of Commencement Bay.

I-705 provides motorists with commanding views of the southern portion of Subarea. The east side of the Foss Waterway and the Waterway itself provides excellent views of the Commercial Core, and the St. Helens and Hillside neighborhoods. Highrise office buildings in the commercial Core are the Subarea's most iconic visible landmarks from a distance.

The City does not have specifically-designated view corridors. The Thea Foss Waterway Design Guidelines include a guideline that pertains to View/Access Corridors within the Shoreline (S-8) District.

Urban Design

A range of building types are represented within the Subarea. The Downtown Core contains historic commercial and residential structures mixed with new mid- and high-rise office buildings. Surface and structured parking options are abundant. The St. Helens neighborhood shares the Downtown Core's dense urban character, but the majority of the buildings in this district are multifamily residential - apartments and condos. There are many commercial structures as well, but they are generally more modest in scale than those in the Downtown Core.

Further north, the built environment of the Stadium District illustrates the transition from a downtown urban context to a residential neighborhood environment, with smaller scale commercial buildings and a mix of apartment buildings and single family homes. The North Downtown Subarea also includes the east bank of the Foss Waterway, which is home to an assortment of marine services companies, fuel docks, and warehouses as well as the Center for Urban Waters.

Several notable public spaces contribute to the pedestrian character of the Subarea, including the Pacific Avenue streetscape, the 12th Street hillclimb that provides an east-west connection from Pacific Avenue to Broadway, and the Foss Esplanade along the waterfront. City-owned parks in the North Downtown Subarea include Wright Park, Firemen's Park and Thea's Park, which sits at the entrance to the Foss Waterway. Open space lands, urban parks and recreational facilities are managed by Metro Parks Tacoma.

Within the North Downtown Subarea, the mainly rectilinear street grid makes two significant shifts - one between the Downtown Core area and St. Helens in the vicinity of 6th and 7th Avenues, and another, more significant, shift between St. Helens and the Stadium District at Division Avenue. In the Downtown Core, most blocks are approximately 700 x 300 ft. in size with a north-south orientation. They become irregular in shape and size as they negotiate the slope between downtown and the Stadium District and as the grid shifts to parallel the shoreline.

Shadows, Light, and Glare

Existing conditions for shadows, light, and glare are typical for an urban environment that is developed to the level of intensity found in North Downtown.

3.10.2 Impacts

No Action Alternative

Views, Shadows, Light and Glare, and Urban Design

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Aesthetics-related impacts would be evaluated on a site-specific basis in conjunction with each proposed project. Area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The proposed development alternative would continue the redevelopment trend of properties in the North Downtown Subarea, at varying intensities, for urban uses and activities.

Views

As projects in the North Downtown Subarea develop according to existing zoning, views of, and within the Subarea are expected to change significantly. Impacts will vary depending on the degree to which projects utilize bonuses to achieve higher floor area ratios (FAR). Views of

existing lowrise structures would be affected as neighboring buildings are demolished and redeveloped with taller structures. Lowrise buildings that were constructed recently will be the last to redevelop and will be impacted the most. Structures with east-facing views of Commencement Bay, and southeast views of Mt. Rainier could be affected the most as a result of increased height and density within this Subarea and corresponding viewshed-related impacts. As noted previously, while there are no regulated view corridors within the Subarea, there are view/access considerations associated with the S-8 Shoreline District.

Urban Design

Development in the Subarea will result in a higher preponderance of buildings with greater height, bulk, and scale, as compared to existing buildings. It is possible that, urban design within the Subarea could be favorably affected by the action alternative. All of the zoning districts within the Subarea include development standards that would ensure relatively high standards for urban design for new development and for renovations.

Older, neglected buildings that contribute to the character of parts of the Subarea that are not historically-designated may be demolished or remodeled in favor of newer structures that meet the City's current design and streetscape standards. The potential exists for inconsistency between older and newer buildings -- but this is not necessarily an impact. Conversion of surface parking lots adjacent to city streets to buildings is expected to result in an improved pedestrian environment.

Potential impacts to the aesthetics of historic buildings and districts are addressed in the *Historic and Cultural Resources Element*.

Shadows, Light, and Glare

Development of taller buildings in the North Downtown Subarea would result increased shading throughout the area, which could periodically affect smaller buildings and open spaces -- particularly if such buildings and open spaces are located north of the redevelopment. Shadow impacts are for the most part temporary and are influenced by the height/bulk and scale of new construction, climatic conditions (e.g., number of clear days vs. partly cloudy or cloudy days), and the seasonal rate of change of the sun's angle relative to the earth. While the action alternative has the potential for increased shadow impacts, no significant impacts are anticipated.

New and renovated structures would provide additional light sources within the Subarea, including interior and exterior building lighting and security lighting. Such would be noticeable from adjacent neighborhoods and the freeways. With the action alternative, additional vehicular traffic is anticipated within the area, which would result in additional light from vehicles entering and leaving the area. Additional light resulting from the action alternative, however, is not anticipated to result in any significant impacts.

The primary sources of glare from development would be direct glare from lighting sources, (e.g., building and security lighting, vehicle headlights) and reflective solar glare from specular surfaces (e.g., glazing, luminaire housing, reflective surfaces on building facades and vehicles). New sources of light and glare would be similar to those that current exist in the Subarea and could be perceived as a continuation of existing light and glare in the area. As with shadows,

reflected solar glare impacts are also influenced by climatic conditions. No significant glare-related impacts are anticipated.

3.10.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations, and other mitigation, as noted below.

City Policies

The following policies, together with City codes and other more specific measures, can help mitigate impacts that are described in this section of the Final EIS.

Tacoma Comprehensive Plan Environmental Policy Element

The Environmental Policy Element of Tacoma’s Comprehensive Plan includes the following policies intended to preserve the aesthetics of “scenic” areas:

Policy	Intent
<i>E-SA-1 Scenic Sites and Vistas</i>	Develop and maintain a system of scenic view sites and vistas in order to take advantage of the natural beauty of Tacoma and its siting in the Puget Sound Region.
<i>E-SA-2 Tree Trimming</i>	Permit the trimming or removal of trees or vegetation from natural open space areas only if it can be accomplished in accordance with the Critical Areas Preservation Ordinance or established regulations for view preservation or if it can be proven that the trees or vegetation are a detriment to the ecology or aesthetic appearance of the area or that they present an unsafe condition.
<i>E-SA-3 View Corridors</i>	View corridors which can link the City and the water should be preserved or created.
<i>E-SA-4 Promote Steep Slope Views</i>	Recognize, protect and promote the visual qualities and the view potential offered by steep slope areas.
<i>E-SA-5 Preservation Large Trees/ Existing Views</i>	Preserve, wherever and whenever feasible, large existing trees within residential neighborhoods and select and locate new trees to preserve existing views.
<i>E-SA-6 Design and Aesthetics</i>	Emphasize good design and aesthetics with respect to scale, proportion and the use of compatible materials in new development and redevelopment within the City.
<i>E-SA-7 Encourage Private Covenants</i>	Encourage the establishment of private covenants to control height and vegetation in new plats to promote view preservation.
<i>E-SA-8 Coordination of Efforts</i>	Encourage the agencies responsible for utility lines to work together to achieve the long-range goal of undergrounding all utility lines.
<i>E-SA-9 Neighbor Cooperation</i>	Encourage neighboring property owners to work together to preserve individual property views.

The above Comprehensive Plan policies are implemented in the following regulations and programs:

Tacoma Municipal Code Design Standards and Regulations

Chapter **13.06A.070** establishes Design Standards for the downtown districts in the North Downtown Subarea, including DCC, DR, and DMU. Standards address rooftop mechanical systems, street trees, surface parking lots, building facades, driveways, pedestrian lighting, public seating, roof forms (DR District only), setbacks/sidewalks (in certain DCC District locations only).

Chapter **13.06A.080** establishes Design Standards for increasing allowable FAR for the downtown districts in the North Downtown Subarea, including DCC, DR, and DMU. These Standards are designed to grant additional development capacity in exchange for the provision of features that enhance aesthetics. Allowable FAR is increased in exchange for inclusion of 12 possible design standards (see the Land Use Element for further details).

Chapter **13.06.501** establishes Design Regulations for the URX, NCX, RCX, and M2 zones in the North Downtown Subarea. Standards address Mass Reduction, Roofline, Windows and Openings, Façade Surface Standards, Pedestrian Standards, Fencing, Retaining Wall, and Utility Standards, Single, Two, and Three Family Dwellings, and Townhouses. Chapter 13.06.502.D addresses Landscaping Standards, and 13.06.503 addresses Residential Transition Standards.

Chapter **13.06.400** establishes regulations for Industrial Districts, including M2 zones in the North Downtown Subarea. In the M2 zone, increased heights are allowed with additional setbacks: a building or structure must be set back on all sides one foot for each four ft. such building or structure exceeds 100 feet in height. Chapter **13.06.100** addresses the R2 and R3 Residential Districts in the North Downtown Subarea.

Chapter **13.10.110** establishes regulations for the S7, S8, S10, and S13 Shoreline Districts, which includes properties on the Thea Foss Waterway in the North Downtown Subarea. Standards that address the aesthetics include the following: view analysis, view corridors, pedestrian-friendly uses and frontages, blank walls, height/bulk/scale, and structured parking. Fourteen specific view corridors are defined and protected.

City of Tacoma Shoreline Master Program

The City of Tacoma's 2012 Shoreline Master Program (SMP) (Ord. 28034, Exhibit A) establishes policies and regulations that are intended to preserve views and aesthetics in Shoreline areas, including the portion of the North Downtown Subarea that is located on the Thea Foss Waterway:

6.7.4 Regulations

A. View Regulations

1. New development shall be located and designed to mitigate adverse impacts to views from public vistas, viewpoints, parks and scenic drives.
2. View corridors (as specified in Table 9.2 of the SMP) shall be provided concurrent with any new use or development.
3. Structures are not permitted in any required view corridor, except that weather protection features, public art, and areas provided primarily for public access, such as viewing towers and pedestrian bridges, may be located in or over these areas.
4. As mandated by the Act (RCW 90.58.320), no permit may be issued for any new or expanded building or structure of more than 35 feet above average grade level on shorelines that will obstruct the view of a substantial number of residences on areas adjoining such shorelines, except where this Program does not prohibit such development and only when overriding considerations of the public interest will be served. Private views of the shoreline, although considered during the review process, are not expressly protected.
5. Property owners concerned with the protection of views from private property are encouraged to obtain view easements, purchase the intervening property, and/or seek other similar private means of minimizing view obstruction.
6. Protection and/or enhancement of critical areas and their associated buffers shall be preferred over provisions for visual access, when there is an irreconcilable conflict between the two.
7. Water-dependent uses and/or public access uses shall be preferred over provisions for visual access, when there is an irreconcilable conflict between the two.
8. View protection does not justify the excessive removal of vegetation to create views or enhance partial existing views. Retaining vegetation and “windowing” or other pruning techniques shall always be preferred options over vegetation removal.

B. Aesthetic Regulations

1. Buildings shall incorporate architectural features that reduce scale such as setbacks, pitched roofs, offsets, angled facets, and recesses.
2. The first floor of structures adjacent to pedestrian public access-ways or street ROW shall be designed to maximize transparency, where appropriate given the type of use and its location in the shoreline.
3. Building surfaces on or adjacent to the water shall employ materials that minimize reflected light.
4. Building mechanical equipment shall be incorporated into building architectural features, such as pitched roofs, to the maximum extent possible. Where mechanical equipment cannot be incorporated into architectural features, a visual screen shall be provided consistent with building exterior materials that obstructs views of such equipment.

5. Fences, walls, hedges and other similar appurtenances and accessory structures shall be designed in a manner that does not preclude

The SMP also establishes the following regulations specific to the S-8 zone in the South Downtown Subarea:

Thea Foss Waterway Design Guidelines

The 2011 Thea Foss Waterway Design Guidelines were developed through an extensive public process. The guidelines apply to the Shoreline District areas within the North Downtown Subarea, and address three main areas: (1) Public Spaces, (2) Building Sites, and (3) Site Details. Guidelines most relevant to aesthetics include: View/Access Corridors, Streetscapes, View Considerations, Shading Considerations, Site Layout, Exterior Appearance, Transition Areas, Fences, Landscaping, Lighting, Signage, Surfacing Materials, and miscellaneous street furniture.

Other Mitigation

Under all alternatives, the Environmental Policy Element of the Tacoma Comprehensive Plan (Amended Ordinance Number 27769), taken together with implementing regulations, is expected to protect scenic areas within the Subarea. Therefore, no additional mitigation measures are necessary or proposed to address potential impacts associated with the proposed alternatives.

Depending on the nature of future site-specific development, mitigation may be necessary to address site-specific impacts that could occur with development under any of the alternatives. Site specific measures may include reducing the size, bulk and scale of the project, changing the location of the project on a particular lot, and/or placing limits on proposed building materials.

3.10.4 Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated relative to aesthetic resources.

3.11 TRANSPORTATION

Information presented in this section addresses the effects of the proposed alternative on transportation located within or proximate to the North Downtown Subarea. This section is divided into five parts including: vehicular traffic, waterborne/rail traffic, public transit, non-motorized systems and parking.

3.11.1 VEHICULAR TRAFFIC

3.11.1.1 Affected Environment

Street Network

The street network in the North Downtown Subarea is based on a rectangular grid, but also has irregularities in several areas. In general, blocks and alleys within the Downtown Core and St. Helens Districts run north-south, slightly angled from the cardinal directions, and are approximately 750' long and 200' wide. The grid shifts significantly at Division Avenue to more or less parallel the shoreline, and blocks within the Stadium District are oriented NW-SE. Stadium District blocks are also smaller, approximately 325' long and 150' wide.

Important arterials and connections within the North Downtown Subarea include Stadium Way, Division Avenue, Schuster Parkway, North Tacoma Avenue, I Street, South 9th Street, South 11th Street, and South 15th Street. The Downtown Element of the Tacoma Comprehensive Plan establishes the following street classifications:

- Pedestrian/Retail: Pacific Ave, Broadway Ave, and Tacoma Ave
- Transit Priority: Commerce St, Market St, Tacoma Ave, Pacific Ave
- Connector: "A Street", 6th Ave, 9th St, 11th St, 13th St, 15th St
- Cycling Boulevard: Fawcett Ave
- Urban Residential: Local access streets in the St. Helens area and areas on the west edge of the Subarea

Limited Access Highways

The Interstate 705 (I-705) spur bisects the east edge of the Subarea, terminating near South 7th St. I-705 can be accessed at South 13th Street and exits onto South 15th Street. It also has both on- and off-ramps at South 7th Street, and an onramp at South 9th St. There is often congestion around the 9th St. onramp during peak commuting hours.

At-Grade Rail Crossings

There are no at-grade rail crossings in the Subarea.

Traffic Volume

The average daily traffic volume for selected North Downtown Subarea streets is shown in **Figure 3.11-1**. In general, traffic volume is relatively low compared to available

capacity. The most heavily traveled arterial street sections in the Subarea are on Stadium Way (19,410 vehicles per day), and Division Ave (18,356 vehicles per day).

Speed Limits

As shown in **Figure 3.11-2**, speed limits on most streets in the study area range from 25 MPH to 35 MPH, with the exception of the I-705, which permits up to 60 MPH travel on certain segments. There is one 10 MPH limited segment on Stadium Way and North 1st St adjacent to Stadium High School.

3.11.1.2 Impacts

To estimate potential impacts to vehicular traffic within the North Downtown Subarea and at the regional level, this FEIS utilizes the travel demand modeling documented in the 2013 South Downtown Subarea Plan EIS, which this FEIS has adopted by reference. For the South Downtown Subarea Plan EIS, each alternative was evaluated based on the results of a scenario specific forecast using the Puget Sound Regional Council's (PSRC's) Regional Travel Demand Model. The South Downtown Subarea Plan EIS documents the results of the modeling in the Transportation Chapter, and provides assumptions and details of the analysis in Appendix B. (Note that the South Downtown Subarea was paired for analysis with alternatives for the parallel Hilltop Subarea Plan).

The results of the modeling for the South Downtown Subarea Plan EIS are applicable to North Downtown for the following reasons:

- The highest intensity growth alternatives modeled for the South Downtown Subarea Plan EIS are similar in intensity to the Action Alternative being analyzed for the North Downtown Subarea.
- North Downtown has an overall urban form that is similar to that of South Downtown
- North Downtown is directly adjacent to the South Downtown and Hilltop Subareas
- The mode shifts to alternatives to single-occupant vehicles (SOV) projected by the modeling are caused by factors that can be expected to have similar effects in both the South and North Downtown Subareas

As was the case for the South Downtown Subarea, the Action Alternative for the North Downtown Subarea is expected to result in reduced rates of driving and increased rates of walking, cycling and utilization of public transportation for travel to, from, and within the Subarea. This may be explained largely by (1) planned improvements to bicycle, pedestrian and transit facilities and services in the Subarea (described in the 'Mitigations,' section), and (2) the fact that development of new, higher density buildings, with a greater mix of uses and activities will put more people, destinations and essential services within easy walking, or cycling distance of each other, and in areas accessible to local and regional public transit services, allowing residents and employees of, and visitors to the Subarea to accomplish a significantly higher share of their daily travel without driving. While this trend is expected to result in lower per capita rates of driving and increased use of non-auto modes of transportation and a reduction of vehicle miles traveled (VMT) at the regional-level, the substantial growth planned for the Subarea is still projected to increase vehicle travel on streets and roadways within the Subarea.

Figure 3.11-1: Average Weekday Traffic Volumes



Source: City of Tacoma Department of Planning and Development Services

Figure 3.11-2: Speed Limits



Source: City of Tacoma Department of Planning and Development Services

These area-wide impacts are expected to be fully mitigated by planned improvements to multimodal transportation facilities and services and other mitigation measures identified in this section, including transportation demand management programs.

Note that the more detailed identification and definition of localized (e.g. intersections) and transportation network link level (e.g. street/path segments) impacts of site specific development applications will be conducted in the future according to requirements set forth by the City in forthcoming amendments to the engineering section of the Tacoma Municipal Code, specifying requirements for (a) the conduct of transportation impact analysis for specific projects and (b) mitigation of any such impacts (per Subarea Plan Recommendations M-1, M-4, M-5, M-6, M-7, and M-8).

Level of Service Standards

As one of several measures of performance relative to the goals and objectives of the Subarea Plan, the City as a whole, and the State Growth Management Act (RCW 36.70.A), the Subarea Plan establishes context-sensitive level-of-service (LOS) standards that are specific to and appropriate for the Subarea. Vehicle LOS will be measured for selected intersections and streets/roadways in the Subarea based on one of the following methodologies, selected at the discretion of the City:

- A. A modified version of the methodology used by the Puget Sound Regional Council (PSRC) to determine the severity of congestion at specific locations over a 24-hour period (Annual Average Daily Traffic to one-hour capacity ratio, or AADT/C), or,
- B. The methodology contained in the most recently published version of the Highway Capacity Manual (HCM) published by the Transportation Research Board.

Standards for the Subarea and citywide (as established in the Transportation Element of the Tacoma Comprehensive Plan [T-44]) have been defined to optimize the efficient utilization of the existing transportation network, while minimizing potential impacts on walking, bicycling, transit use, community development potential, and the environment. As such, the City will balance these objectives by operating streets and intersections within the Subarea at LOS E or better, with the following exceptions, where LOS F is acceptable:

- Pedestrian and bicycle priority: The City shall maintain operations on all streets and intersections at LOS A-E, unless maintaining this would, in the City's judgment, be infeasible, conflict with applicable facilities and standards in the Pedestrian and Bicycle Elements of the Mobility Master Plan, and/or conflict with the achievement of other Subarea Plan goals. LOS F conditions may be accepted in such cases, provided that provisions are made to facilitate and encourage non-single occupant vehicle transportation as part of a development project,
- Local streets and roadways: For all arterial roadways, collector streets, and other streets and roadways within the Subarea, but not under the jurisdiction of the Washington State Department of Transportation (WSDOT), the City of Tacoma will accept operations at LOS F. Applicants for new development projects in the Subarea will not be required to analyze the impact of their projects on the vehicle

LOS of streets and intersections in the Subarea, provided that their application is consistent with all other Subarea Plan and Tacoma Comprehensive Plan requirements.

Regional Impacts

The modeling for the South Downtown Subarea Plan EIS projected that between 2010 and 2030, vehicle travel and delay at the regional level would increase substantially under all of the alternatives. Consistent with theory and research evidence on the travel demand impacts of compact, mixed-use development in accessible locations, the modeling results suggest that all of the action alternatives would result in the following relative impacts to vehicular travel at the regional level:

- a lower share of trips made by driving single occupant vehicles (SOV)
- reduced Vehicle Hours of Delay
- essentially no change to VMT, and
- increased use of non-auto modes of transportation, relative to the No-Action Alternative (2030)

The South Downtown Subarea Plan EIS modeling results projected that the share of regional person trips made by private vehicle (SOV + carpool) would decline slightly with increasing intensity of planned development in the Subarea, dropping from 84.7 percent under the No Action Alternative (2030) to 84.0 percent under the highest intensity buildout alternative. Further details can be found in Tables 3.11-2, 3.11-3, and 3.11-4 of the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million square feet of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan. Therefore, we conclude that the regional impacts of the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS.

Subarea Impacts

The modeling for the South Downtown Subarea Plan EIS indicated that VMT and vehicle delay within the Study Area would increase under all action alternatives. Both VMT and vehicle delay within the Study Area were projected to be highest with the most intense development alternatives. The highest intensity buildout alternative was projected to result in 17% more VMT and 28% more average daily vehicle hours of delay than the No Action Alternative.

These projections are consistent with expectations that vehicle traffic volumes will increase with substantial new development, but their impact on a local and regional level is mediated by expectations that per capita VMT and exposure to vehicle delay will be lowest for the most intense development alternatives. This is consistent with the projections of the previous section that vehicular traffic impacts at the regional level will be minimal, with lower VMT and delay for the action alternatives with the highest development intensity.

For all of the South Downtown alternatives, projected walk, bike and transit mode shares were substantially higher, and auto mode shares (SOV+ carpool) were significantly lower, for trips with either an origin or destination in the Study Area, than for all trips region wide. This likely reflects the well-connected street grids, proximity to downtown Tacoma, and the strong regional accessibility of the Study Area. Further details can be found in Tables 3.11-5, 3.11-6, 3.11-7, and 3.11-8 of the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million sf of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan. Therefore, we conclude that the Subarea impacts of the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS.

Vehicular Traffic on Limited Access Highways

The modeling for the South Downtown Subarea Plan EIS indicated that under the No Action Alternative, the following changes to travel on limited access highways throughout the region would occur:

- VMT increase of 30% to a daily average of 51,660,465,
- vehicle hours of delay are projected to rise by 47% to a daily average of 383,342 hours, and
- Average travel speed decline of 3.4% to 41.1 MPH.

Minimal differences between South Downtown Subarea Plan action alternatives were projected for VMT, vehicle hours of delay and travel speeds on limited access highways at the regional level.

Subarea

Minimal differences between the South Downtown Subarea Plan alternatives were projected for VMT and daily average travel speeds (MPH) on limited access highways within the Study Area. The most notable difference in impacts of the Subarea alternatives with the highest development intensities are with respect to vehicle hours of delay on limited access highways within the Study Area. The highest intensity buildout alternative was projected to result in 11.0% more vehicle hours of delay on highways within the Study Area than the No Action Alternative.

The only limited access highway segment projected to see substantially higher daily average traffic volumes in one of the South Downtown action alternatives is the southernmost segment of I-705 between E. 26th Street and I-5, which is projected to see 12,777 more vehicle trips per day in 2030 under the highest intensity buildout alternative than under the No Action Alternative. Further details can be found in Tables 3.11-9, 3.11-10, 3.11-11, and 3.11-12, and Figures 3.11-3, 3.11-4, 3.11-5, 3.11-6, 3.11-7, 3.11-8, and 3.11-9 of the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million sf of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan. Therefore, we conclude that impacts on vehicular traffic on limited access highways caused by the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS.

Vehicular Traffic on the Arterial Roadway Network

Region

The modeling for the South Downtown Subarea Plan EIS projected the following changes for arterial roadways region wide under the No Action Alternative:

- VMT is projected to increase by 26.2%
- Vehicle hours of delay are projected to increase by 57.5%, and
- Average travel speeds are projected to decline by 1 MPH to 31.2

Vehicle hours of delay on the regional arterial roadway network were projected to be slightly higher under each of the three action alternatives for the South Downtown Subarea, than for the No-Action Alternative, despite the fact that VMT on arterial roadways across the region is projected to be slightly lower under each of the action alternatives. This may occur if increases in vehicle traffic volumes, VMT on arterial roadways within the Study Area that lead to increased congestion and vehicle delay within the Study Area are more than off-set by projected reductions in vehicle traffic and VMT on less congested and lengthy segments of arterial roadways across the region, resulting from projected changes to travel patterns associated with the type and intensity of development planned for the Study Area under the Action Alternatives, including significant reductions in driving and increased walking, cycling and use of public transportation. Further details can be found in Tables 3.11-13 and 3.11-14 of the South Downtown Subarea Plan EIS.

Subarea

The modeling for the South Downtown Subarea Plan EIS projected substantial differences between alternatives with respect to arterial VMT and vehicle hours of delay on arterial roadways within the Study Area. Under the highest intensity buildout alternative, arterial VMT and vehicle hours of delay on arterials within the Study Area were projected to be 29.9% higher and 57.5% higher, respectively, than under the No Action Alternative. Nevertheless, even with model-based projections of substantial increases in daily traffic volumes, VMT and vehicle hours of delay, most of the affected arterials in the Subarea are likely to remain below capacity and operate efficiently most of the time – even under the highest intensity buildout alternative. Traffic volumes were projected to be substantially higher under the highest intensity buildout than the No Action Alternative on five key segments arterials in the Subarea. Further details can be found in Tables 3.11-15 and 3.11-16 of the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million sf of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan.

Therefore, we conclude that impacts on vehicular traffic on the arterial roadway network caused by the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS, for both the region and the Subarea.

Vehicular Traffic on Connector Streets

The modeling for the South Downtown Subarea Plan EIS projected that traffic volumes on local connector streets within the Subarea and the larger Study Area would increase significantly with each of the action alternatives. However, most connector streets are likely to operate efficiently and below capacity, most of the time, even under the highest intensity buildout alternative. Vehicle-miles-traveled were projected to increase by 150% for the highest intensity buildout alternative compared to the No Action Alternative. Further details can be found in Tables 3.11-17 and 3.11-18 of the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million sf of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan. Therefore, we conclude that impacts on vehicular traffic on connector streets caused by the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS, for both the region and the Subarea.

Impacts to Specific Streets and Roadway Segments

The modeling for the South Downtown Subarea Plan EIS projected average daily vehicle traffic volumes for specific street and highway segments in the Study Area under each of the action alternatives (for details, see Figures 3.11-3 to 3.11-9 in the South Downtown Subarea Plan EIS). Given the limitations of the regional travel demand model to project change at the link and intersection level, and the nature of the street grid in the area, it should be noted that traffic volumes may have been over-assigned for street links with highest traffic volumes. Also, the projections identify changes in traffic volumes and differences between alternatives with respect to the same baseline, but make no statement with respect to the relationship of volumes to peak-hour capacity. These limitations apply similarly to the North Downtown Subarea Plan high-intensity buildout alternative.

3.11.1.3 Mitigation Measures

Potential localized impacts of the action alternative for the North Downtown Subarea will be mitigated primarily by projects, programs and policies contained in existing City, County and regional plans. Mitigation of any unforeseen impacts, and/or additional local and regional vehicular traffic reduction may be achieved by implementation of a combination of several or all of the transportation demand management programs and services described at the conclusion of this sub-section, including incremental implementation of programs required of and/or associated with new development in the Subarea.

The Subarea Plan includes recommendations for (1) the development of a multimodal transportation impact fee on new development to fund site and/or intersection specific mitigation measures, and/or larger, area, or district-wide mitigation projects and programs (Recommendation M-6: Develop and implement a phased-in developer impact fee system to fund multimodal transportation investments...”), (2) requirements for property owners to “develop and implement regulations that require Transportation Management Programs (TMP)” to reduce the share of tenants and employees access sites in the district by driving alone, “triggered when new development exceeds predetermined threshold levels” (Recommendation M-7), and (3) the adoption of amendments to the engineering section of the Municipal Code to “set forth a framework for the City Engineer to secure traffic analyses for specific projects and to require any mitigation” (Recommendation M-1).

Current projects, programs and policies

The City of Tacoma Comprehensive Plan and the Washington State Policy on Greenhouse Gas Emissions both emphasize the importance of managing vehicular traffic by minimizing its impact on other modes of travel. Single-occupancy vehicle travel is hierarchically lower than all other modes, and should continue to be carefully managed as residential and commercial activity increases in the Subarea.

Tacoma Comprehensive Plan Transportation Element

The following system management policy of the Tacoma Comprehensive Plan Transportation Element supports mitigation of potential impacts to vehicular transportation to and within the Subarea:

- T-TSM-6 Level of Service Standards: Establish level of service standards that are consistent with regional and state standards for roadways that reflect arterial functional classifications and the differing development patterns, growth objectives, accessibility for vehicles, transit, pedestrian and bicycle use.
- T-ES-3 Congestion Management: Encourage the use of alternative modes, and thereby slow the increase in the use of single occupant vehicles and the increase of environmental degradation associated with their use.

The City’s Comprehensive Plan also specifies target auto level of service (LOS) for arterial roadways, consistent with the requirements of the State Growth Management

Act, while identifying selected “Arterial Corridors” where lower auto LOS is acceptable, given the plan’s focus on the movement of people, rather than vehicles:

“Level of Service Standards for City Arterials¹: For the purposes of the system-wide level of service (LOS) determination, the City’s arterials are divided into three categories: (a) arterial connecting corridors, and primarily associated with designated centers; (b) Port Industrial area arterials, aggregated because of the regional economic importance and the preponderance of heavy truck traffic; and (c) all other arterials and collectors on the transportation network not included in the first two categories.

- Arterial Corridors: 85% of the arterial lane-miles within the designated arterial corridors must exhibit a LOS "E" or better (volume-to-capacity ratio of 0.99 or below). The focus of arterial corridors in this transportation plan is on moving people as opposed to moving vehicles. As such, we are suggesting that a lower level of service (LOS E) be provided to vehicular traffic within the identified arterial corridors. In addition, priority treatment for transit and High Occupancy Vehicles (HOVs) will be provided within the arterial corridors.”

The above-noted proposed policy change to reduce LOS requirements on arterials is a key enabling strategy for achieving North Downtown’s goals to accommodate new residents and jobs and create walkable, transit-oriented communities. As North Downtown grows, an increasing share of trips will be accommodated by modes other than private auto, and as such, a lower priority on LOS for vehicular traffic is appropriate.

Washington State Policy on Greenhouse Gas Emissions

Washington State law (RCW 70.235.020 Greenhouse gas emissions reductions) requires that “The state shall limit emissions of greenhouse gases” to achieve the following:

- Reduce overall statewide emissions to 1990 levels by 2020
- Reduce overall statewide emissions to 25% below 1990 levels by 2035
- “By 2050, the state will do its part to reach global climate stabilization levels by reducing overall emissions to fifty percent below 1990 levels, or seventy percent below the state’s expected emissions that year.

In 2008, as a key strategy for reducing greenhouse gases in the transportation sector, the Washington State Legislature passed House Bill 2815 mandating reductions in vehicle miles traveled (VMT).² The legislation sets targets of 18 percent reduction in per capita VMT by 2020, 35 percent by 2035, and 50 percent by 2050.

Numerous studies have shown that households in walkable, transit-rich neighborhoods tend to drive less than comparable households located in more car-dependent environments.³ By enabling a greater share of the new residents and employees of and

¹ Tacoma Comprehensive Plan, p. T-44 (Adopted 11/16/04, Ordinance 27295, Last Amended 6/15/10, Amended Ordinance No 27892)

² <http://apps.leg.wa.gov/documents/billdocs/2007-08/Pdf/Bills/Session%20Law%202008/2815-S2.SL.pdf>

³ Transit-Oriented Communities: A Blueprint for Washington State, Futurewise, 2009.

visitors to the Subarea to travel mostly by walking, cycling, or utilizing public transit, each of the action alternatives for the Subarea can contribute to achievement of these state VMT and greenhouse gas emissions reduction goals.

Traffic Dispersion through the Existing Street Grid

The majority of the street network in the Subarea is characterized by a conventional urban grid pattern. By providing multiple route options for travel between two points within a district, the urban street grid can alleviate traffic congestion at specific locations and specific times to a degree by dispersing traffic through the network. Travel demand modeling for the South Downtown Subarea Plan EIS indicates that there is likely to be substantial available capacity on many street and roadway segments in the North Downtown Subarea. This means that maintenance of and improvements to the existing grid, such as filling gaps or 'missing links' in the network, modifying intersection operations, or adding new network links, where appropriate, will tend to mitigate some of the location specific (link level) traffic impacts highlighted in this Chapter.

In addition to the measures defined in this section, the identified impacts of plan implementation on vehicular traffic circulation may be mitigated by many of the City's current parking supply and demand management programs and policies, described in the Mobility Chapter of the Subarea Plan, all of which tend to reduce demand for vehicle travel to, from and within the North Downtown Subarea.

Mitigation Mechanisms of the Subarea Plan

The Subarea Plan includes the following recommendations related to the requirements of and funding for mitigation of identified site-specific and Subarea-wide impacts:

- RECOMMENDATION M-1: Move traffic analysis and mitigation for the North Downtown Subarea from SEPA to new engineering codes.
- RECOMMENDATION M-4: Implement a monitoring program to collect transportation and land use performance data every five years.
- RECOMMENDATION M-5: Implement an Adaptive Management and Mitigation Program to address potential future impacts to mobility as the Subarea builds out.
- RECOMMENDATION M-6: Develop and implement a phased-in developer impact fee system to fund multimodal transportation infrastructure investments as North Downtown builds out.
- RECOMMENDATION M-7: Develop and implement regulations that require Transportation Management Programs with specific elements, triggered when new development exceeds predetermined threshold levels.
- RECOMMENDATION M-8: As the Subarea redevelops, consider implementation of Universal Transit Pass Programs and/or a reduction of the employee threshold for the requirement of Commute Trip Reduction Programs.

Additional Vehicular Traffic Reduction Strategies

To address any potential unforeseen impacts to vehicular traffic circulation, and the impacts of additional local vehicle traffic on the safety, accessibility, and mobility of travel by other modes of transportation, the City of Tacoma may opt to develop and implement one or more of the following Transportation Demand Management (TDM) strategies to reduce the vehicle trip generation of new and existing buildings in the sub-area (Note that among the most impactful TDM and traffic reduction strategies are the additional parking supply management and pricing strategies detailed in Section 3.11.5.). Potential TDM-related mitigation strategies are identified in the following categories:

- 1. Improved Transportation Options:** This includes enhanced facilities & services for bicycling, walking, and public transit, and facilitation of carpooling and informal ridesharing. Programs and strategies to improve access to and within the North Downtown Subarea by walking, cycling and public transit are described in section 3.11.3, mitigation of impacts to public transportation, and Section 3.11.4, mitigation of impacts to non-motorized transportation.
- 2. Universal Transit Passes:** In recent years, a growing number of transit agencies have teamed with developers, employers and universities, and even residential neighborhood associations to provide universal transit passes. These passes typically allow the holder to take unlimited rides on local and regional transit services for a low monthly fee, or often at no charge, where the cost is born entirely by the University, employer, property manager or developer. By removing cost-barriers to taking transit, universal transit passes – sometimes called flex-passes or eco-passes – can be extremely effective in reducing vehicle traffic. Implementation of universal transit passes was found to reduce auto mode share for work commute trips by an average of eleven percentage points in the studies summarized in **Table 3.11-1**. Students and permanent employees of UW Tacoma are currently eligible to participate in the U-Pass program, the University of Washington’s innovative universal transit pass program, which provides full fare coverage for unlimited rides on Pierce Transit, King County

Metro Transit, Community Transit, Everett Transit, and Sound Transit buses, Sounder commuter rail trains, and paratransit services provided by any of these transit agencies (UW students are automatically enrolled in the program and assessed a \$45 quarterly fee for the service). U-Pass holders are also eligible for subsidized vanpool fares and have access to Pierce Transit’s Emergency Ride Home program.

With the cooperation of District property managers and employers, a similar Universal Transit Pass program could be developed and implemented to increase transit ridership and reduce driving by residents and employees of the sub-area. Using parking revenues, or other transportation related fees on developers, property owners and/or employers, free, unlimited ride transit passes could be provided to all full-time employees and residents of the Subarea.

The City may consider incentivizing or requiring property managers and employers of newly developed properties in the Subarea to participate in a

**Table 3.11-1
Mode Shifts Achieved with Universal Transit Passes**

Location	Drive to work		Transit to work	
	Before	After	Before	After
Municipalities				
Santa Clara (VTA) ⁴	76%	60%	11%	27%
Bellevue, Washington ⁵	81%	57%	13%	18%
Ann Arbor, Michigan ⁶	N/A	(4%)	20%	25%
Universities				
UCLA ⁷ (faculty and staff)	46%	42%	8%	13%
Univ. of Washington, Seattle ⁸	33%	24%	21%	36%
Univ. of British Columbia ⁹	68%	57%	26%	38%
Univ. of Wisconsin, Milwaukee ¹⁰	54%	41%	12%	26%
Colorado Univ. Boulder (students) ¹¹	43%	33%	4%	7%

Source: NelsonWygard Consulting Associates.

⁴ Santa Clara Valley Transportation Authority, 1997.

⁵ 1990 to 2000; http://www.commuterchallenge.org/cc/newsmar01_flexpass.html.

⁶ White et. al. "Impacts of an Employer-Based Transit Pass Program: The Go Pass in Ann Arbor, Michigan."

⁷ Jeffrey Brown, et. al. "Fare-Free Public Transit at Universities." *Journal of Planning Education and Research* 23: 69-82, 2003.

⁸ 1989 to 2002, weighted average of students, faculty, and staff; From Will Toor, et. al. *Transportation and Sustainable Campus Communities*, 2004.

⁹ 2002 to 2003, the effect one year after U-Pass implementation; From Wu et. al, "Transportation Demand Management: UBC's U-Pass – a Case Study", April 2004.

¹⁰ Mode shift one year after implementation in 1994; James Meyer et. al., "An Analysis of the Usage, Impacts and Benefits of an Innovative Transit Pass Program", January 14, 1998.

¹¹ Six years after program implementation; Francois Poinsette et. al. "Finding a New Way: Campus Transportation for the 21st Century", April, 1999.

Universal Transit Pass Program, and may assist property owners, employers, developers and transit agencies with program design and administration, or with the formation of a Transportation Management Association (TMA) to manage these and other TDM programs and services within the Subarea. The effect of such a requirement or incentive for new property owners and tenants would be to incrementally mitigate or off-set the vehicle trip generation impacts of each new project developed in the District). Using parking revenues, or other transportation related fees on developers, property owners and/or employers, free, unlimited ride transit passes could be provided to all full-time employees and residents of the Subarea.

A review of existing universal transit pass programs found that the annual per employee fees are between 1% and 17% of the retail price for an equivalent annual transit pass. The principle of employee or residential transit passes is similar to that of group insurance plans – transit agencies can offer deep bulk discounts when selling passes to a large group, with universal enrollment, on the basis that not all those offered the pass will actually use them regularly.

In addition to reducing impacts to vehicular traffic, implementation of a Universal Transit Pass program will significantly reduce parking demand in the district. The Eco-Pass program in Santa Clara County, California resulted in a 19% reduction in parking demand¹².

3. **Parking Management:** Among the most impactful TDM and traffic reduction strategies are the parking management and pricing strategies that the City has recently implemented for Downtown and a portion of the North Downtown Subarea (detailed in Section 3.11.5), located within the City's designated Reduced Parking Area (RPA), such as:

- Exemption from minimum off-street parking requirements, and
- Initiation of paid on-street parking pricing

Further vehicular traffic reduction and mitigation of impacts to vehicular transportation can be achieved through the additional parking supply management and pricing strategies detailed in Section 3.11.5, such as:

- Parking cashout programs
- Priority parking for carpools, vanpools and short-term parking
- Requirements that the lease or sale of off-street parking be unbundled from the lease or sale of commercial and/or residential space within the Subarea, and
Maximum off-street parking requirements, or an area-wide cap on off-street parking supply

¹² Santa Clara Valley Transportation Authority, 1997.

4. Policy and Institutional Reforms

a. **Commute trip reduction (CTR) requirements for small employers:**

The state currently requires employers with employment sites where 100 or more employees are scheduled to arrive for work during the morning peak period to implement a comprehensive CTR program to encourage these employees to walk, cycle, share rides (by vanpooling or carpooling), and/or take public transportation to the work site, and/or to tele-work (also known as telecommute), or to work a flexible or irregular schedule that allows them to avoid commuting during off-peak hours (RCW.70.94.531). Subject employers are required to monitor the impact of their own CTR programs by conducting annual travel surveys of employees. Widespread and coordinated implementation of such CTR programs have been shown to reduce vehicular traffic to and parking demand at major employment centers. One example is in downtown Bellevue, where the drive-alone commute rate at CTR affected worksites declined by nearly 20% between 1993 and 2001 (The overall drive-alone rate in downtown Bellevue fell from 81% in 1990 to 57% in 2000, a nearly 30% decline over 10-years)¹³.

The City of Tacoma maintains a robust Commute Trip Reduction Program, with specific requirements for “affected employers,” (i.e. employers subject to State CTR requirements per RCW70.94.531) detailed in the Tacoma Municipal Code (Title 13 – Land Use Regulatory Code, Chapter 12.15 – Commute Trip Reduction).

Although the largest employers in the City of Tacoma are already subject to the state CTR law, the City may leverage further reduction of traffic and parking demand by extending similar requirements to employment sites in the district with 10-99 employees (i.e. by amending TMC Chapter 13.15.020 (B) to define an “affected employer” as “an employer that employs 10 or more affected employees,” rather than “100 or more employees.”). To minimize small employers’ administrative costs for development and implementation of CTR programs and other TDM measures, the City and major property owners in the District can facilitate the formation of a Transportation Management Association (TMA), similar to Commute Seattle, the TMA for Downtown Seattle, or the Greater Redmond TMA, which organizes CTR and TDM programs for employers¹⁴ in Downtown Redmond and the Overlake neighborhood, where Microsoft is headquartered.

The transportation impact mitigation effect of such requirements would be incremental and in proportion to the scale and pace of the development of new buildings in the Subarea and the occupation of existing and new

¹³ City of Bellevue, www.onelesscarbellevue.org, as cited in the City of Pasadena Traffic Reduction Strategies Study (2006), Draft Report, Appendix A – Case Studies, p. 1-3.

¹⁴ Note: The definition of the size, and of the land uses and activities of development projects subject to any such requirement to develop and implement a TMP should be determined by the City, based on further analysis, with recognition of the potential cumulative impacts of multiple smaller development projects in close proximity.

structures by new businesses and organizations and the expanded operations of existing businesses and organizations.

- b. **Transportation Management Programs:** Consistent with its authority under the State Environmental Policy Act (SEPA), the City of Tacoma may require property owners to develop and implement a Transportation Management Program (TMP) intended to reduce the share of tenants and employees who access the site by driving alone. Such programs may be required as a condition of approval for large construction and development projects in order to reduce potential parking and traffic impacts of the project on other stakeholders in the district and surrounding neighborhoods and the citywide transportation system. The City may require the development and implementation of a TMP by developers of each and every large project in the District, with recognition of the fact that the TDM benefits and transportation impact mitigation effects of such an approach would be incremental and in proportion to the scale and pace of the development of new buildings and the redevelopment of existing buildings in the Subarea

As an alternative, the City of Tacoma may opt to address the increasing need for TMPs as the Subarea grows by establishing new development thresholds to trigger requirements for TMPs. The preliminary proposed threshold for the North Downtown Subarea Plan is 10 million square feet of new development after which TMPs as described below would be required as conditions of approval for all future development projects. Final determination of the optimum threshold and specific requirements for TMPs would require further analysis.

An effective TMP should include specific goals for the percentage of trips made to the site by single-occupant vehicles (SOV), and carpools, and a set of program elements designed to achieve those goals. While employer-based CTR plans frequently include programmatic elements, such as incentives and services for employees, property manager TMP's can help ensure that projects are designed and developed physically in ways that support the use of non-auto modes of transportation. Typical TMP program elements may include the provision of on-site secure and covered bicycle parking, and shower facilities, installation of on-site commuter information centers in publicly accessible areas, to display real-time transit arrival and departure information and other information about alternatives to driving alone to work, and charging market-based daily or hourly prices for the use of dedicated off-street parking facilities. Once occupied, residents of each building can be required to conduct surveys of tenants' travel behavior and to provide regular reports to the City evaluating program implementation and achievement of TMP goals.

Several cities in the region, including Seattle, Bellevue, Kirkland and Redmond, currently require selected property owners to implement TMP's as a condition of development approval¹⁵.

3.11.1.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to vehicular traffic.

¹⁵ In the City of Seattle, selected building project applicants and property managers are required to develop and implement Transportation Management Programs (TMP's) as a condition of development, according to provisions of the City's Land Use Code (Title 23), and its SEPA Policies and Procedures (Ch. 25.05). The Seattle Department of Planning and Development's Directors Rules on Transportation Management Programs (TMP's) are available at: web1.seattle.gov/dpd/dirrulesviewer/Rule.aspx?id=10-2012. An overview of Seattle's Transportation Options program for large buildings can be viewed at: www.seattle.gov/waytogo/TMP.htm

3.11.2 WATERBORNE/RAIL TRAFFIC

3.11.2.1 Affected Environment

Waterborne Transportation

The Thea Foss Waterway provides access to Commencement Bay and the Puget Sound from the North Downtown Subarea. The Foss Waterway is a north-south waterway adjacent to downtown Tacoma. The west edge of the Foss Waterway (bordering downtown) is largely disconnected from the street grid due to shoreline railroad tracks and the I-705 corridor. Access from the Subarea is limited to a ramp at E 15th St. to Dock St., and South 4th St via Schuster Parkway. The Subarea includes the east edge of the Foss Waterway, which is only accessible to the rest of the Subarea by the 11th St Bridge.

There is no ferry or cruise ship service in the Foss Waterway at this time. There are no public moorings on the Foss Waterway within the boundaries of the North Downtown Subarea.

Railroads

A well-used, multi-track BNSF and UPRR rail corridor passes through the Subarea along the west edge of the Foss Waterway. Amtrak service currently follows the BNSF/UPRR corridor, sharing that passage with freight service Waterway north to Point Defiance. With the Sounder Extension, Amtrak trains may also begin using the Point Defiance bypass route approaching and departing Tacoma from the south.¹⁶ WSDOT recently completed the Point Defiance Bypass Environmental Assessment to evaluate the rerouting of passenger trains from the Point Defiance route to the rail line traveling through south Tacoma, Lakewood, and DuPont. The existing BNSF route, WSDOT found, is near capacity, with physical and operational constraints adversely affecting passenger and freight train service.¹⁷

3.11.2.2 Impacts

Neither the Action Alternative nor the No Action Alternative for the North Downtown Subarea would impact passenger rail transportation or waterborne transportation to, from or within the Subarea:

- No public or private operation currently provides direct waterborne transportation service to or from the Subarea and no need for such service is projected as a result of implementation of any alternative.
- None of the alternatives are projected to constrain the capacity of current or future planned passenger rail transportation services to or from the Subarea.

¹⁶ Amtrak routing south of Tacoma Station has not yet been determined as of October 2012.

¹⁷ WSDOT (2012). Point Defiance Bypass Project Environmental Assessment. Pp4-12

- All freight rail lines that currently enter or pass through the Subarea are completely grade separated and thus should not be impacted by any alternative for the Subarea.

3.11.2.3 Mitigation Measures

This section highlights current relevant plans, policies and projects that affect the future capacity and operation of rail transportation and prospects for future waterborne transportation to the Subarea. These plans, policies and projects will influence the City's options for and approach to mitigating any potential unforeseen impacts to rail and waterborne transportation.

Waterborne Transportation

The Action Alternative for the North Downtown Subarea is consistent with and supportive of the goals of the 2005 Thea Foss Waterway Design and Development Plan (Plan) – an element of the City's Comprehensive Plan and the Shoreline Master Program (SMP).

One of the five major goals of the Plan is to: "Provide opportunities for mixed-use development, public/private investment and recreational opportunities, and public access to the shoreline for the citizens of Tacoma." Regarding development, the Plan states that "Presently, the Waterway is not being used to its fullest potential. There are numerous vacant properties, especially along the west side of the Waterway, that have potential for redevelopment. Some are occupied by unused structures and others are vacant lots. There is potential for shifting this underdeveloped area into a mixed economic community connected to downtown."¹⁸

The policies of the Plan are implemented in Chapter 13.10.110 of the Tacoma Municipal Code: S-8 Shoreline District. The intent of the S-8 regulations is "to improve the environmental quality of Thea Foss Waterway; provide continuous public access to the Waterway; encourage the reuse and redevelopment of the area for mixed-use pedestrian-oriented development, cultural facilities, marinas and related facilities, water-oriented commercial uses, maritime activities, water-oriented public parks and public facilities, residential development, and waterborne transportation; and to encourage existing industrial and terminal uses to continue their current operations and leases to industrial tenants."

Railroads

The potential impacts of the Action Alternative on passenger rail service will primarily be mitigated by service improvements that allow for increased capacity as well as decreased travel times on the Amtrak Cascades Corridor. The 2006 Washington State Long-Range Plan for Amtrak Cascades states that by 2023 service will grow from its current four daily round trips to 13 daily round trips between Portland and Seattle. Additionally, planned improvements to the rail line on the west side of I-5 through Fort Lewis will allow trains to bypass Point Defiance. Along with associated track

¹⁸ City of Tacoma (2005). Thea Foss Waterway Design and Development Plan, p. 12

improvements, the Point Defiance bypass will help reduce rail passenger travel times between Tacoma Dome Station and Portland by 10 minutes.

3.11.2.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to waterborne/rail traffic.

3.11.3 PUBLIC TRANSPORTATION

3.11.3.1 Affected Environment

The North Downtown Subarea has a high concentration of transit service, as summarized in **Figure 3.11-3**. Pierce Transit is the primary provider of bus service to the Subarea. The Commerce Street Transit Center, located between S. 9th Street and S. 11th Streets, provides a point of connection for most local bus routes. Principal transit streets and corridors within the North Downtown Subarea include Tacoma, Division, 1st, and Pacific Avenues.

Between 2008 and 2012, Pierce Transit experienced a drop in bus ridership equivalent to approximately 30% of average weekday boardings. A failed Proposition 1 ballot measure for a sales tax increase in 2011 resulted in service cuts of approximately 35%. In 2012, a similar Proposition 1 measure failed. The same year, service to areas in unincorporated Pierce County was eliminated. Due to projected budget constraints, Pierce Transit had expected to eliminate 28% of current service in September 2013. However, because sales tax revenues have been rising, in July 2013 it was determined that Pierce Transit could maintain current service levels through June 2014.

Pierce Transit Board members will continue to revisit the numbers to provide guidance for the 2015 budget-setting process. Current projections show a reduction to 340,000 to 350,000 service hours from the current 392,000. The transit system's annual service hours are already significantly less than their 2008 total of 617,000. Pierce Transit has worked to cost cuts since 2008, employing strategies such as fare increases, reduced management, delayed/eliminated capital projects and facility upgrades, and lean process improvements. They are also focusing on developing more tailored service to small communities via shuttles. The agency is currently in the process of developing its Long Range 2040 Plan, which is anticipated to be completed for adoption in early 2015. The planning process includes developing service scenarios and creating a draft plan for future service.

Several Pierce Transit routes travel from downtown Tacoma through North Downtown to outlying destinations including Tacoma Community College (TCC), Walmart, Lakewood, Parkland, Tacoma Mall, and Purdy on the Gig Harbor Peninsula. Routes serving the North Downtown Subarea are identified in **Table 3.11-2**. Numerous additional transit options are available in the downtown core, Brewery District, and Dome District, provided by Pierce Transit, Sound Transit, and Intercity Transit.

Tacoma Link light rail currently travels 1.6 miles through downtown Tacoma on East 25th Street, Pacific Avenue, and Commerce Street, with stops at six stations:

- Tacoma Dome
- South 25th Street
- Union Station/South 19th Street
- Convention Center/South 15th
- Commerce Street/South 11th
- Theater District/South 9th

Figure 3.11-3: North Downtown Transit, Bicycle, and Pedestrian Networks



Source: City of Tacoma Department of Planning and Development Services

Table 3.11-2

Transit Service in the North Downtown Subarea (April 2004)

Route	Primary Corridor/s Traveled in North Downtown	Route Destinations	Average Weekday Trips	Span of Bus Service
PT 1	6th Ave/Pacific Ave	Tacoma Community College, Downtown Tacoma, Parkland TC, Spanaway Airport, Walmart	52	4:30am - 10:30pm
PT 2	Market/S. 19th	Downtown Tacoma, Bates Technical College, Tacoma Community College, University Place, Lakewood Towne Center	39	6am - 10pm
PT 3	S. 9th/Tacoma Ave	Downtown Tacoma, Tacoma Mall, Lakewood Mall Transit Center	31	6am - 9pm
PT 11	6th Ave/Division/Broadway	Port Defiance Ferry Terminal, Proctor, University of Puget Sound, Downtown Tacoma, Tacoma General Hospital	12	7am - 6pm
PT 13	Tacoma/St. Helens	North End, Downtown Tacoma, Museum of Glass, Tacoma Dome Station	12	6am - 5pm
PT 14	Division/St. Helens	Proctor, University of Puget Sound, Downtown Tacoma, Museum of Glass, Tacoma Dome Station	12	6am - 5pm
PT 16	N. I/St. Helens	Tacoma Community College, Proctor, Downtown Tacoma	15	6am - 8pm
PT 28	S. 13th	Tacoma Community College, Central Tacoma, Downtown Tacoma	21	7am - 8pm
PT 41	Commerce/Pacific	Downtown Tacoma, Tacoma Dome Station, McKinley Hill, 72nd St. Transit Center	23	5am - 8pm
PT 42	Pacific Ave	Downtown Tacoma, Tacoma Art Museum, America's Car Museum, Tacoma Dome Station, Hillside, 72nd St. Transit Center	13	7am - 7pm
PT 45	Commerce/Yakima	Downtown Tacoma, Parkland Transit Center	14	6am - 7pm
PT 48	Commerce/Pacific	Downtown Tacoma, Lakewood Mall Transit Center	24	5:30am - 9pm
PT 53	Pacific Ave	Downtown Tacoma, Tacoma Mall Transit Center, University Place, Tacoma Community College	14	6am - 7am
PT 57	Commerce/S. 9th	Downtown Tacoma, Hilltop, St. Joseph Medical Center, Tacoma Mall	26	6am - 8pm
PT 102	S. 9th/Pacific Ave	Tacoma General Hospital, Downtown Tacoma, Tacoma Dome Station, Gig Harbor	5	3pm - 6pm
PT 400	Commerce/Pacific	Downtown Tacoma, Tacoma Dome Station, Puyallup, Washington State Fairgrounds, South Hill Mall Transit Center	27	5am - 8:30pm
PT 500	Pacific Ave	Downtown Tacoma, Fife, Federal Way	16	6:30am - 10pm
PT 501	Pacific Ave	Downtown Tacoma, Fife, Milton, Federal Way	13	6am - 8pm
ST 590/594		Downtown Tacoma, Lakewood, Seattle	85	4am - 10pm
IT 603/605/612		Downtown Tacoma, Lakewood, Olympia/Lacey	28	5:30am - 8pm

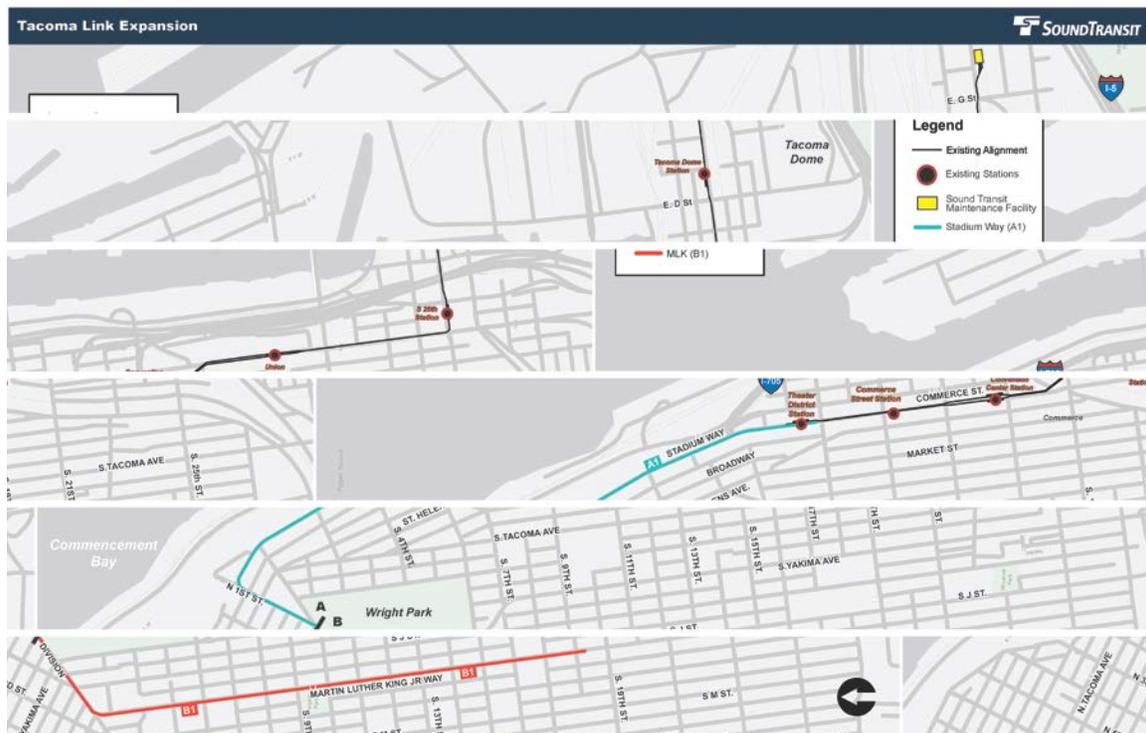
Transit Providers: PT = Pierce Transit ST = Sound Transit IT = Intercity Transit (Olympia/Thurston County)

The Tacoma Dome Link station provides multiple connection options to Sounder Commuter Rail, Amtrak, and local and regional bus service.

Link trains run every 12 to 24 minutes depending on the time of day. Service is available from 5:30 a.m. to 10 p.m. Monday through Friday, from 8 a.m. to 10 p.m. Saturday, and from 10 a.m. to 6 p.m. on Sunday and holidays. Currently, all rides on Tacoma Link are free. As Sound Transit's only fare-free service, Tacoma Link has provided free rides since it opened for service in 2003. When service began, it would have cost more to collect fares than those fares would generate. However, ridership on Tacoma Link has increased to one million rides per year, which would make fare collection worthwhile. Following comprehensive public outreach in summer 2013, including an open house and public hearing in Tacoma, Sound Transit made the decision to start charging fares. Beginning in September of 2014, \$1.00 fares will be collected on Tacoma Link, to increase to \$1.50 in September 2016. Youth riders will pay a fare of 75 cents, while senior and disabled riders will pay 50 cents to ride Tacoma Link in 2014, with an increase to 75 cents in 2016. Fares collected will cover a portion of operating costs.

In 2008, voters approved Sound Transit 2, which included funding for an exploration of options for expanding Tacoma Link. The project, which will study alternative travel corridors and produce a project financing plan, is a partnership between Sound Transit, the City of Tacoma, and Pierce Transit. On February 27, 2014, the Sound Transit Board identified an alignment along Stadium Way and Martin Luther King, Jr. Way to the Hilltop District for the planned expansion of Tacoma Link light rail service, as shown in Figure 3.11-4. The alignment has now advanced to the environmental phase of the project for further study and refinement.

Figure 3.11-4: Sound Transit Tacoma Link Expansion



3.11.3.2 Impacts

Development under the action alternative is projected to result in significant increases in demand for transit service within the Subarea, and connecting to other parts of the City, County and larger Puget Sound Region.

To estimate potential impacts to transit service within the North Downtown Subarea and at the regional level, this FEIS utilizes the travel demand modeling documented in the 2013 South Downtown Subarea Plan EIS, which this FEIS has adopted by reference. For the South Downtown Subarea Plan EIS, each alternative was evaluated based on the results of a scenario specific forecast using the Puget Sound Regional Council's (PSRC's) Regional Travel Demand Model. The South Downtown Subarea Plan EIS documents the results of the modeling in its Transportation Chapter, and provides assumptions and details of the analysis in its Appendix B. (Note that the South Downtown Subarea was paired for analysis with alternatives for the parallel Hilltop Subarea Plan).

The results of the modeling for the South Downtown Subarea Plan EIS are applicable to North Downtown for the following reasons:

- The highest intensity growth alternatives modeled for the South Downtown Subarea Plan EIS are similar in intensity to the Action Alternative being analyzed for the North Downtown Subarea.
- The North Downtown Subarea has an overall urban form that is similar to the South Downtown Subarea
- The North Downtown Subarea is directly adjacent to the South Downtown and Hilltop Subareas
- The mode shifts to alternatives to single-occupant vehicles (SOV) projected by the modeling are caused by factors that can be expected to have similar effects in the South and North Downtown Subareas

The modeling for the South Downtown Subarea Plan EIS projected the following key indicators of projected demand for travel by transit to destinations in the Study Area and from trip origins in the Study Area:

- projected daily average volumes of transit person trips;
- transit mode share; and,
- AM peak period transit person trips from areas of parts of Pierce County (outside of the Study Area) and from King County.

The total volume of transit person trips originating in or destined for the South Downtown Study Area, as well as the transit person trips to/from (a) King County and (b) elsewhere in Pierce County, was projected to rise substantially with increased intensity of development in the Subarea. Total volume of daily transit person trips to and from the Study Area was projected to be highest – 77,296 – under the highest intensity buildout alternative; more than twice the projected volume of 31,919 transit trips into and out of the Study Area under the No Action Alternative. Further details can be found in Tables 3.11-20 and 3.11-21 of the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million sf of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan.

Therefore, we conclude that the impacts on transit of the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS.

At current and potential future service levels, Tacoma Link has more than enough capacity to accommodate projected demand for local transit trips within the South Downtown Study Area, even under the highest intensity buildout alternative, for which 4,303 peak period transit trips are projected within the Study Area (with 1,261 trips projected in the immediate vicinity of the Link alignment). For further details see Table 3.11-22 of the South Downtown Subarea Plan EIS. Similarly, Link service in North Downtown can be expected to have sufficient capacity to meet future demand for local transit trips within the North Downtown Subarea under the action alternative. However, new or redeployed local public transit services may be necessary to accommodate a share of the projected trips within the North Downtown Subarea for which the trip origin or destination is not easily accessible to a Tacoma Link Station.

Given the substantially increased demand for transit service within the Subarea and between the Subarea and other parts of Pierce County that can be expected under the action alternative, the capacity of the local public transit system may be significantly constrained. Current Pierce transit service levels are incompatible with addressing the local transportation needs associated with scale and type of dense, mixed-use, transit-oriented development envisioned for the Subarea under the action alternative. Nevertheless, the current financial situation of Pierce Transit and its long-term financial outlook with current levels of state funding and state authorized revenue options, do not necessarily limit the collective capacity of Pierce Transit, the City, County, region and/or State's to fund and operate local public transit service to and within the Subarea at levels necessary to support the access and mobility needs of existing and future residents, employees and visitors, given the scale and type of development in the action alternative.

3.11.3.3 Mitigation Measures

The potential impacts of the Subarea action alternative on public transportation service will be mitigated in part by service improvements in existing plans that increase transit capacity and connectivity within the Subarea and to other destinations in the City of Tacoma and the greater Puget Sound. The most significant planned service improvement is Tacoma Link Expansion, described above in Section 3.11.3.1. The selected alignment will provide service through the heart of the Subarea, connecting both to the medical employment center in Hilltop, and to the UWT, Museum District, Brewery District, Dome District's multimodal transit hub.

The Subarea Plan includes the following recommendations for integration of the Tacoma Link expansion that will maximize the mitigation potential:

- RECOMMENDATION M-9: Work with Sound Transit to secure Small Starts funding for the Tacoma LINK light expansion project.
- RECOMMENDATION M-10: Current zoning is highly transit-supportive and no changes are recommended at this time; zoning should be subject to future review once Link is operational and as further redevelopment occurs.

- RECOMMENDATION M-11: Collaborate with Sound Transit to share responsibility for improvements that support multimodal access to the future stations on the Link expansion.
- RECOMMENDATION M-12: Establish a citywide policy that prioritizes projects to improve non-motorized access to Link stations.
- RECOMMENDATION M-13: Designate the following streets on the proposed Tacoma Link expansion alignment as Transit Priority Streets: Stadium Way, North 1st Street, Division Avenue, and Martin Luther King Jr Way.
- RECOMMENDATION M-14: Apply the City of Tacoma’s Mixed-Use Center Complete Streets Design Guidelines to Transit Priority Streets on the Tacoma Link expansion alignment.
- RECOMMENDATION LU-12: Coordinate parking resource provision and management strategies with the expansion of LINK Light Rail service and with downtown transit in general.

For regional transit, Sound Transit’s planned High Capacity Transit (HCT) from South King County to Tacoma Dome Station will help provide mitigation. As shown in **Figure 3.11-5**, this corridor is identified as an electric light rail corridor in Transportation 2040, the Puget Sound Regional Council’s (PSRC) Regional Transportation Plan, as well as in the Sound Transit Long Range Plan. Sound Transit ST2 funds the extension of the Central LINK Light Rail Line from SeaTac Airport to the Federal Way Transit Center as well as right of way preservation, initial engineering, and environmental analysis of HCT Alternatives from Kent-Des Moines Road to Tacoma Dome Station, which is connected to the North Downtown Subarea by Link light rail service.

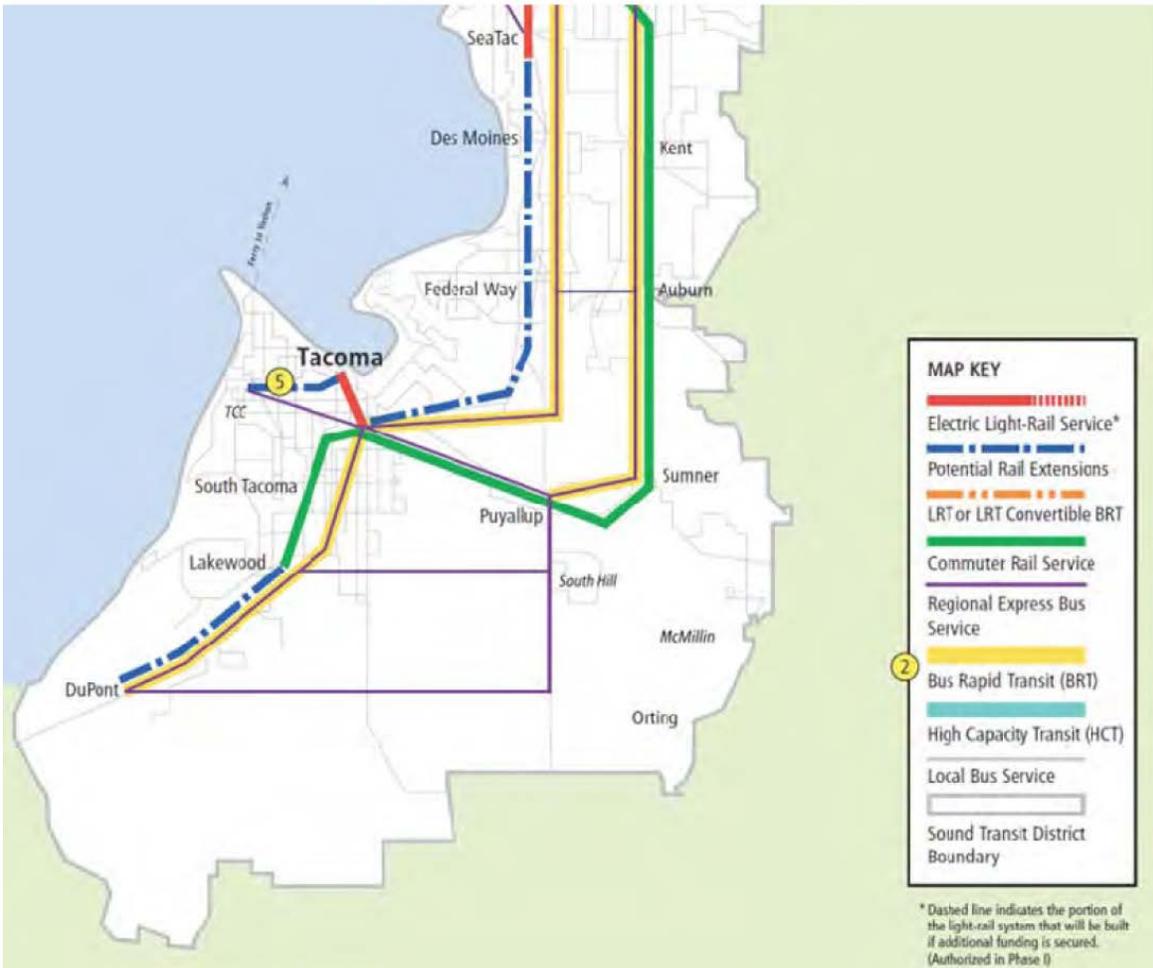
The Subarea Plan includes two recommendations intended to ensure a sufficient transit level of service as the Subarea builds out:

- RECOMMENDATION M-2: Set the motor vehicle level of service standard to LOS “E” and the transit level of service to LOS “D”.
- RECOMMENDATION M-3: Establish specific thresholds of significance for transit service.

Transportation 2040 identifies the SR7 corridor as a potential alignment for Pierce Transit State Route 7 BRT corridor, which would connect to Pacific Avenue in downtown Tacoma.

Tacoma Land Use Regulatory Code Provision (13.06.511) provide mitigation in the form of support for transit station facilities. New development and redevelopment that exceeds 50% of the value of existing structures and is located within 500 feet of a street where transit service is operated is required to provide transit facilities in the form of foundation pads and benches or shelters. While small developments are exempt, the requirement varies depending on size. For example, a shopping center of 4,000 to 8,000 square feet is required to provide two benches and foundation pads for future transit shelters. Shopping centers over 8,000 square feet are required to provide two foundation pads and two shelters.

Figure 3.11-5 – Sound Transit Long Range Plan, Pierce County and South King County



Additional Mitigation

Additional measures to consider for mitigation of potential impacts to public transportation service to and within the Subarea include:

- Near-term restoration and eventual expansion of seven-day per week, long-span, high frequency local transit service within the Subarea and between the Subarea and other parts of Tacoma and Pierce County can support and encourage development and Subarea plan implementation, and simultaneously address projected growth in local transit travel demand under each of action alternative for the Subarea.
- As mitigation for any unforeseen impacts to the capacity and reliability of local public transit services for the Subarea, the City of Tacoma, Pierce Transit, Sound Transit, and/or other public agencies may consider other innovative means for funding and providing necessary local public transit services, such as dedicating a share of multimodal transportation impact fee revenue to local public transit facilities and services providing access to and within the Subarea.

3.11.3.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to public transit.

3.11.4 NON-MOTORIZED SYSTEMS

3.11.4.1 Affected Environment

Non-motorized systems in the North Downtown Subarea include the pedestrian and bicycle network—sidewalks, on-street bicycle lanes, and shared road markings. Enabling safe and comfortable bicycle and pedestrian mobility is critical in ensuring a healthy, sustainable, and economically viable place to live, work and recreate for existing and future residents and employees of and visitors to the Subarea.

The journey to work mode split for the North Downtown Subarea based on the 5-year estimates of the American Community Survey (2007-2011) is shown in **Table 3.11-3**. Non-motorized transportation comprises 13% of trips, including a very small percentage of bicycling.

**Table 3.11-3
Journey to Work by Census Tract (2010)**

Mode	North Downtown Subarea
Drive Alone	60%
Carpool	6%
Public Transportation	15%
Bicycle	0.3%
Walk	13%
Work from Home	3.4%

*Source: US Census American Community Survey, 2007-2011
Table B08301; prepared by City of Tacoma*

Pedestrian Environment

Tacoma has a generally “walkable” downtown center with continuous pedestrian infrastructure, but the quality of the existing sidewalks, crosswalks and other pedestrian infrastructure varies. The shifting street grid creates some particularly wide intersections that are difficult for pedestrians to navigate and detract from the overall walkability of the subarea. While some streets within the Subarea lack pedestrian amenities such as planting buffers, benches, and street trees, others have received significant recent attention and investment focused on improving the pedestrian experience.

Sidewalk coverage is fairly complete in Subarea, but the City does not have an up-to-date inventory. Sidewalks in the half-mile station areas of the Theatre District and Convention Center Link stations were inventoried in the Growing Transit Communities Workshops (PSRC, 2012) and the results are shown in **Table 3.11-4**. Sidewalk

coverage is a measure of transit accessibility, as increased ease of access to transit stations will have a positive impact on transit ridership.

**Table 3.11-4
Sidewalk Coverage and Designated Bicycle Lanes Around Link Light Rail Stations
in the Subarea¹⁹**

Station Area	Sidewalk Coverage	Designated Bike Lanes (miles)
Theater District	~77%	0
Convention Center	~59%	1.9

Source: VIA Architecture.

Existing shared-use trails are located near the north end of the Foss Waterway in and around Thea's Park, with connections to trails beyond the Subarea along the Foss Waterway.

The 2010 Mobility Master Plan identifies the following intersections in the North Downtown Subarea as needing improvements:

- 1st & St. Helens
- Division & South I Street
- 9th & Tacoma
- 9th & Commerce

The following streets in the Stadium Mixed-Use Center portion of the North Downtown Subarea are designated Pedestrian Streets:

- Division from 2nd to Tacoma: Core Pedestrian Street
- Tacoma Ave: Core and Primary Pedestrian Street
- N 1st St: Core Pedestrian Street
- N I St: Pedestrian Street

Bicycle Facilities

Currently, bicycle facilities in the North Downtown Subarea are limited. As of the 2010 Mobility Master Plan, there were no bicycle facilities in the Subarea. As of 2010, the bicycle facilities closest to the Subarea were the striped bike lanes on South 15th St, west of South Yakima Ave. Since 2010, striped bike lanes were installed with the recent Stadium Way Arterial Project, and sharrows (shared lane arrows) were installed on St Helens between South 9th St and Market St.

Bicycle lane-miles for the half-mile station area around the Theatre District and Convention Center Link stations were inventoried in the Growing Transit Communities Workshops (PSRC, 2012) and the results are shown in **Table 3.11-4** above. Bicycle

¹⁹ Growing Transit Communities Workshops, Connectivity Data Measures, May 2012 (Puget Sound Regional Council)

lane-miles is a measure of transit accessibility, as increased ease of access to transit stations will have a positive impact on transit ridership.

3.11.4.2 Impacts

The action alternative for the North Downtown Subarea is projected to result in very significant and substantial increases in trips to/from and within the Subarea made by walking and bicycling.

To estimate potential impacts to walking and bicycling to/from and within the Subarea, this FEIS utilizes the travel demand modeling documented in the 2013 South Downtown Subarea Plan EIS, which this FEIS has adopted by reference. For the South Downtown Subarea Plan EIS, each alternative was evaluated based on the results of a scenario specific forecast using the Puget Sound Regional Council's (PSRC's) Regional Travel Demand Model. The South Downtown Subarea Plan EIS documents the results of the modeling in its Transportation Chapter, and provides assumptions and details of the analysis in its Appendix B. (Note that the South Downtown Subarea was paired for analysis with alternatives for the parallel Hilltop Subarea Plan).

The results of the modeling for the South Downtown Subarea Plan EIS are applicable to North Downtown for the following reasons:

- The highest intensity growth alternatives modeled for the South Downtown Subarea Plan EIS are similar in intensity to the Action Alternative being analyzed for the North Downtown Subarea.
- The North Downtown Subarea has an overall urban form that is similar to the South Downtown Subarea
- The North Downtown Subarea is directly adjacent to the South Downtown and Hilltop Subareas
- The mode shifts to alternatives to single-occupant vehicles (SOV) projected by the modeling are caused by factors that can be expected to have similar effects in the South and North Downtown Subareas

The South Downtown modeling projected that both total walking trips and walk mode share in the Study Area would increase in relation to the intensity of development associated with each of the action alternatives for the Subarea. The highest intensity buildout alternative was projected to result in a total of 224,346 average daily pedestrian person trips (walk mode share of 42%), nearly 400% of the pedestrian person trips projected for the Study Area under the No Action Alternative. For details see Table 3.11-25 in the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million sf of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan. Therefore, we conclude that the impacts on pedestrian travel of the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS.

The substantial projected increase in pedestrian activity within the Subarea increases the importance of planned and potential future improvements to pedestrian facilities in

the area, including filling gaps in the street and sidewalk networks, enhancing crossings, and providing new facilities where appropriate.

The South Downtown modeling projected that both total cycling trips and bike mode share in the Study Area would increase in relation to the intensity of development associated with each of the action alternatives for the Subarea. The highest intensity buildout alternative was projected to result in a total of 10,543 average daily cycling trips to/from the Study Area, nearly 300% of the bicycle trips projected under the No Action Alternative. For details see Table 3.11-26 in the South Downtown Subarea Plan EIS.

The North Downtown Subarea Plan Action Alternative is a buildout of 30 million sf of commercial and residential space, which is approximately the same level of buildout as the highest intensity Action Alternative for the South Downtown Subarea Plan. Therefore, we conclude that the impacts on cycling of the North Downtown Subarea Plan Action Alternative would be similar to those described above for the South Downtown Subarea Plan EIS.

The substantial projected increase in bicycle trips to/from and within the Subarea increases the importance of planned and potential future improvements to bicycle facilities in the area, including filling gaps in the bikeway network, and providing new facilities where appropriate.

3.11.4.3 Mitigation Measures

The impacts of the action alternative for the North Downtown Subarea on non-motorized transportation systems will primarily be addressed by projects, programs and policies contained in existing City, County and regional plans, and by measures established in the Subarea Plan.

The Pierce County Countywide Planning Policies and the City of Tacoma Mobility Plan, which are concurrent with GMA requirements, set the following goals and objectives to plan for considerable growth in walking and biking in the Subarea.

Pierce County Countywide Planning Policies

- Encourage walking, bicycling, and transit use.
- Design communities to provide an improved environment for walking and bicycling.
- Reduce vehicle miles traveled and auto dependence.
- Increase alternatives to driving alone.
- Use land use regulations to increase the modal split between automobiles and other forms of travel.

Tacoma Comprehensive Plan

As part of the City of Tacoma Comprehensive Plan Transportation Element, in 2010 the City of Tacoma adopted the *Mobility Master Plan*, an implementation plan for improving

“conditions for pedestrians and bicyclists citywide over the next fifteen years,” providing “recommendations for developing a non-motorized network that reduces auto travel, increases the number of non-motorized users of all ages and abilities...”²⁰ The main goals of the plan are to:

- “Complete a safe and comfortable bicycling system that connects all parts of the city (north to south/east to west) and accommodates all types of cyclists by 2025.
- “Complete an accessible network of pedestrian supportive infrastructure, including sidewalks, curb ramps, accessible pedestrian signals and shared-use paths, in high-priority pedestrian areas.
- “Increase the non-motorized mode split to 5% by 2015 and continue gains thereafter
- “Increase transit use by enhancing pedestrian access and bicycle support facilities through the development of bikeways and walkways that serve transit hubs.”

A particularly relevant policy of the Mobility Master Plan is to “Prioritize infrastructure improvements that connect residential areas to local retail, business, and community services, so residents can access more of the services they need close to home by walking, biking, and using assistive devices.” The corresponding Action is to “Prioritize funding and construction of non-motorized facilities in recognition of the livability, environmental and health benefits these forms of mobility provide,” with priority given to projects that:

- “Provide the greatest connectivity to the greatest number of people or neighborhoods;
- “Provide connections to transit;
- “Connect major employers or employment areas to residential areas in order to increase commute trips by bike or walking;
- “Connect residential areas to local retail, business and community services so residents can access daily”

Figure 3.11-6 shows pedestrian network improvement recommendations from the Mobility Master Plan. Within the North Downtown Subarea, there are recommendations for intersection improvements at South 1st and St Helens, Division and South I, 9th and Tacoma, and 9th and Commerce. A pedestrian “trail” is proposed for Market St as far north as South 11th St.

Figure 3.11-3 (above) shows the Mobility Master Plan’s long term (11-15 years) bicycle network recommendations, which includes the short- and medium-term recommendations. The map shows a much higher coverage of paths and on-street bicycle lanes and other facilities than currently exists in the Subarea, including Bicycle Boulevards²¹ on Broadway, South G St, Court D, and Yakima Ave. The City’s “Top 4 Bikeways 2011-2012” list includes the Top 4 Bike projects includes the bicycle boulevard

²⁰ <http://www.cityoftacoma.org/Page.aspx?hid=12894>

²¹ According to the Tacoma Mobility Master Plan, “Bike Boulevards are streets where motorists and cyclists share the road. Pavement markings & signage indicate bicycle route. Bike Boulevards are used on lower volume, residential streets. They are designed to be comfortable for cyclists of all ages and abilities. Bike Boulevards often include traffic calming measures such as traffic circles, rain gardens, or street trees as well as wayfinding signage.”

Figure 3.11-6: Proposed Pedestrian Improvements in the Mobility Master Plan



Source: City of Tacoma Department of Planning and Development Services

on South Fawcett Ave to South G St to North Yakima Ave.

The intention to implement the pedestrian and bicycle infrastructure improvements proposed for the North Downtown Subarea in the Mobility Master Plan are captured in the following Subarea Plan recommendations:

- RECOMMENDATION M-17: Implement the City's proposed bicycle infrastructure projects in North Downtown as identified in the Mobility Master Plan.
- RECOMMENDATION M-18: Implement improvements to the North Downtown problem intersections identified in the in the Mobility Master Plan.
- RECOMMENDATION TION M-19: Implement the City's proposed pedestrian connector projects in North Downtown as identified in the Mobility Master Plan.

Schuster Parkway Promenade Connections

The historic Bayside Trails present opportunity for connections from Stadium Way and surrounding neighborhoods to the new Schuster Parkway Promenade and the waterfront. The Schuster Parkway Promenade will welcome pedestrians and cyclists to this corridor with waterfront views and trails connecting to the forested hillside. The promenade will serve as a key connection between North Downtown and destinations such as the historic Old Town district, Point Defiance and adjacent hillside neighborhoods. The Subarea Plan includes the following recommendation:

- RECOMMENDATION M-16: Implement the Schuster Parkway Promenade multimodal corridor project, including key connections to and along the waterfront:
 - Connect the South 4th Street overpass with Pacific Avenue, effectively linking the Prairie Line trail with the Dome to Defiance trail system
 - Connect Stadium Way and adjacent neighborhoods to the new Schuster Parkway Promenade and the waterfront via the Bayside Trails

Development Thresholds for Impact Fees

The North Downtown Subarea Plan includes the following recommendation to address the increasing need for multimodal transportation investments to mitigate impacts as the Subarea grows:

- RECOMMENDATION M-6: Develop and implement a phased-in developer impact fee system to fund multimodal transportation infrastructure investments as North Downtown builds out.

This strategy entails establishing growth thresholds that trigger the requirement for future private development projects to pay impact fees that fund multimodal projects in the Subarea. These impact fees will be designed to be consistent with the Growth Management Act. The Subarea Plan's recommendation is for two tiers of development thresholds that would trigger increasing impact fees. The optimum threshold levels would require further analysis to determine, but as a starting point the Subarea Plan suggests considering 10 million and 20 million square feet of new development. Determination of the impact fee amounts and the types of projects that would be funded would also require further planning and analysis.

Thea Foss Waterway Design and Development Plan

The 2005 Thea Foss Waterway Design and Development Plan (Plan) is an element of the City's Comprehensive Plan and the Shoreline Master Program (SMP). The policies of the Plan are implemented in Chapter 13.10.110 of the Tacoma Municipal Code: S-8 Shoreline District. One of the major goals of the Plan is to: "Provide opportunities for [...] public access to the shoreline for the citizens of Tacoma." Connectivity to the north part of the Foss Waterway is currently provided by the 11th Street bridge and elevator and an overpass at South 4th St.

Prairie Line Trail

Prairie Line Trail is a one mile long trail (shared use path corridor) connecting key destinations in downtown Tacoma, traversing the University of Washington Tacoma campus. The project is funded through a grant from the Puget Sound Regional Council. One third of the trail is currently under construction by UW Tacoma. The trail starts just at the south edge of the North Downtown Subarea. Once completed, the trail will provide bicycle and pedestrian access into South Downtown, the waterfront, the Chambers Bay Recreation Area and the Foothills Trail.

3.11.4.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to non-motorized systems.

3.11.5 PARKING

3.11.5.1 Affected Environment

Currently, on-street and off-street parking facilities within the North Downtown Subarea and adjacent districts are used for short-term vehicle access and long-term vehicle storage for a variety of different users, including:

- residents
- students, faculty and staff commuters to the Bates Technical College Campus
- staff of and visitors to museums, event centers, and entertainment venues, and the Foss Waterway
- commuters to downtown Tacoma
- employees, customers and vendors of business establishments in the district

Parking supply

Motor vehicle access to destinations and services within the North Downtown Subarea is facilitated by a supply of on-street and off-street parking spaces available for short-term (a few hours) and long-term (all day, or multiple day) vehicle storage. The supply of off-street parking spaces on individual parcels within the district varies, based on current and former land uses on each site, the availability of on-street parking during times of peak demand, market demand for parking to provide access to uses and activities on nearby parcels, and historical zoning code requirements for the provision of a fixed supply of off-street parking spaces for each land use or activity on a site at the time it was developed.

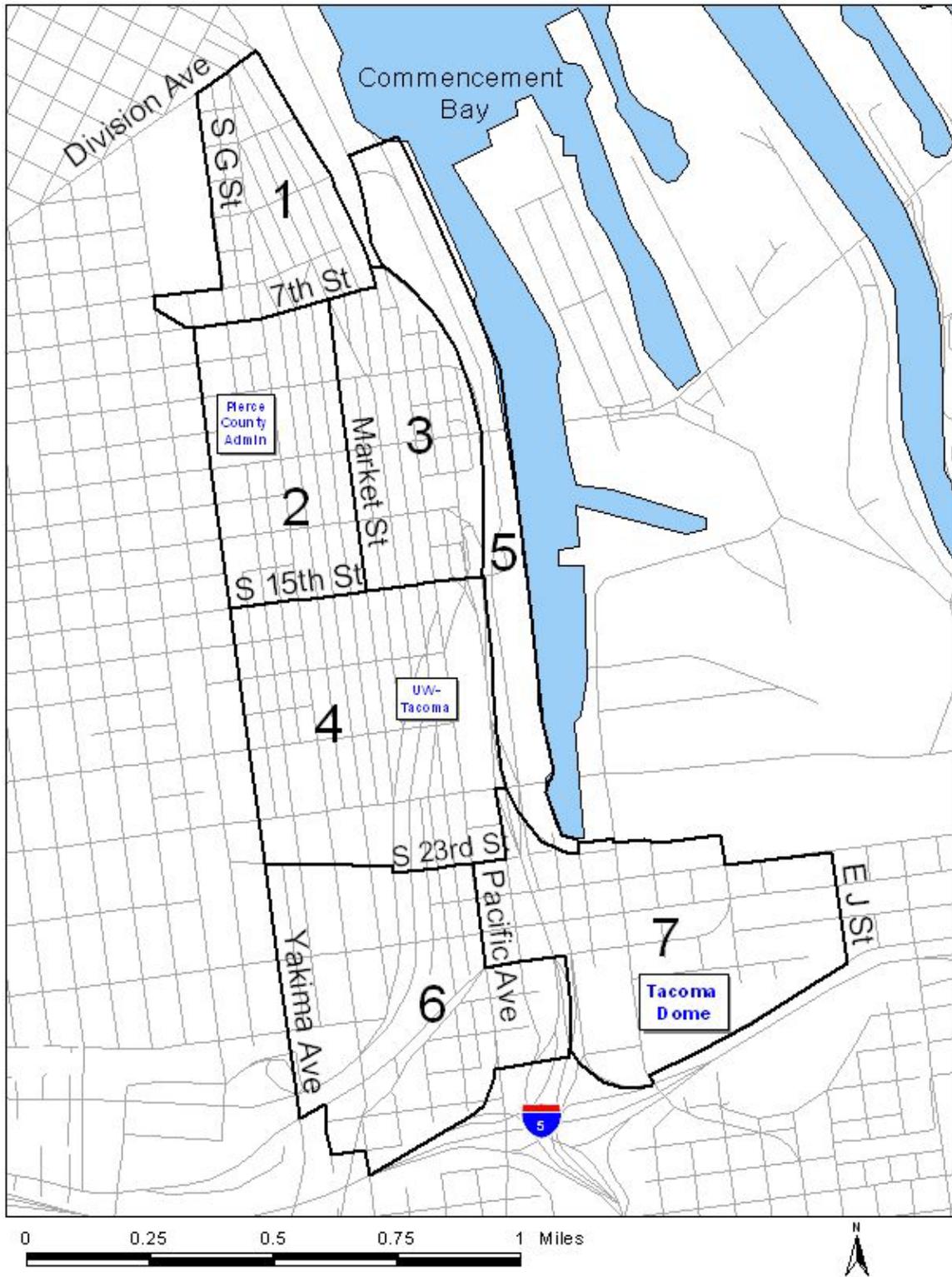
In 2013 the Puget Sound Regional Council (PSRC) conducted a parking survey of the Tacoma CBD.²² As shown in **Figure 3.11-7**, zones 1, 2, 3 of the PSRC survey comprise all of the North Downtown Subarea except the portion north of Division Ave in the Stadium Mixed-Use Center, a small area at the north end of the Foss Waterway, and the east side of the Foss Waterway. Within the three North Downtown zones the survey found a total supply of 9,892 off-street parking spaces in 169 off-street parking lots or structures. Twenty-eight (28) of these facilities were classified as “Free short-term customer parking,” associated with land uses such as convenience stores and restaurants. Sixty-three (63) were designated as “Employee parking” areas. The majority (85) of these parking facilities were classified as “Other,” primarily public pay lots and those facilities serving a mix of users.

The City of Tacoma owns six off-street parking facilities with a total of nearly 2,550 parking spaces. Five of these lots are located in the North Downtown Subarea, and the sixth is directly adjacent to the southern edge of the Subarea:

- A Street Garage - 110 South 11th Street
- Carlton Center Building & Garage Parking - 1551 Broadway

²² Puget Sound Regional Council (2013). External location: <http://psrc.org/data/transportation/parking-inventory/>. Parking Inventory data are collected every two years typically during the months March - June (Spring). The survey hours are from Monday to Thursday from 8:30 AM to 11:30 AM and 1:00 PM - 3:30 PM.

Figure 3.11-7: Puget Sound Regional Council's Parking Survey Zones



- Convention Center Garage - 1500 Broadway
- International Museum of Glass Garage - 1801 Dock Street
- Municipal Garage and Lot - 728 Market Street
- Park Plaza North Garage - 923 Commerce Street
- Pacific Plaza Garage - 1125 Commerce Street

In 2013 the City of Tacoma's Public Works Department conducted a preliminary survey of the Stadium Business District's current parking conditions. Each on-street parking stall was identified and mapped. Staff estimated 397 marked and unmarked parking spaces in the study area. Of the estimated parking spaces, 256 were not time restricted. The remaining spaces included a mix of permit only, 2-hour, 1-hour, 30-minute, 15-minute, and load zone restrictions. Off-street parking stalls were not included in this survey; however, there are several surface parking lots within the Stadium Business District.

The City also conducted a preliminary review of potential new parking spaces, which included infrastructure improvements, eliminating No Parking and Loading zones, and converting parallel to angle parking. Infrastructure improvements include closing South 1st Street at St Helens Avenue, which would result in an additional 14 parking spaces. Eliminating No Parking zones include adding 2 parallel parking stalls on North 1st Street across from Stadium Thriftway. Staff also evaluated converting parallel parking along Tacoma Avenue to angle parking, which would result in a loss of the two-way left turn lane or bike lanes.

Key findings for the general Stadium Business District area:

- Time-restricted parking is not consistent or systematic; there are six types of time restricted parking that vary across blocks
- On average, parking duration exceeds time restrictions
- The occupancy survey suggests a high level of employee and residential use of the on-street parking system
- Infrastructure improvements are unfunded; private funding partnerships or grants could provide opportunities for improvements
- There are limited locations available to convert parallel to angle parking; however, the net increase may not result in an overall benefit to the Business District or surrounding neighborhoods

The City will continue to evaluate parking in the Stadium Business District. Future evaluations will include a survey while school is in session and more detailed review of additional parking opportunities.

Bicycle Parking Supply

No data are available on the total supply or utilization of publicly available short-term bicycle parking spaces, within the Subarea. Curbside bicycle parking racks are available in selected areas. Businesses can also request free bicycle racks from the City to be installed public sidewalks in front of their business location. Short-term bicycle parking racks are provided at all Tacoma Link Stations except for the Stadium Station. Secure, covered bicycle parking can be rented at the Pacific Plaza and Park Plaza North parking garages.

Businesses can request free bicycle racks from the City to be installed public sidewalks in front of their business location. Secure, indoor, or enclosed long-term bicycle parking for residents, employees and/or customers is provided at selected employment sites and selected multi-unit residential buildings in the Subarea, but no comprehensive data on supply, utilization or pricing are available.

Parking Prices

Demand for parking and resulting rates of occupancy and availability of on-street and off-street parking in particular areas is partly a function of the price charged to the user. In many parts of the Subarea, on-street and off-street parking are available to residents, visitors and employees free of charge. Where the costs of operating and maintaining parking facilities is not charged to users, but instead covered by general funds, or wrapped into other costs such as the cost of housing, or the costs of commercial goods and services, auto access is effectively subsidized and encouraged, resulting in more driving and higher parking utilization than optimum for transportation or parking system efficiency.

Access to some on-street and off-street parking in the Subarea is available only by payment of an hourly, daily, or monthly fee. Fees and meter charges in some areas are employed both to cover the capital and operating costs of parking, and to encourage turnover in the use of parking spaces in order to maintain the constant availability of parking for new users in specific areas. The City of Tacoma currently manages the supply of public on-street parking in portions of the Subarea with time limits and in some areas by requiring payment of a fee for use at a pay station. The metered area shown in **Figure 3.11-8**, includes significant portions of the North Downtown Subarea. Within this metered area, a total of 1,500 on-street parking spaces are priced using multi-space electronic parking pay stations on each block face (Roughly half of these metered spaces are located in the Subarea, north of South 15th St. Meters are enforced from 8:00 AM-6:00 PM Monday-Friday at a rate of \$0.75 per hour with a two-hour time limit, and from 8:00 AM-6:00 PM on Saturday at \$0.75 per hour up to two hours, or \$2.50 for the entire day.

Outside of the metered area shown in **Figure 3.11-8**, where the on-street parking supply is managed through pricing, the City of Tacoma has established a “parking buffer zone,” including all city streets west of Market St. to Tacoma Avenue (within the Subarea). Parking within this buffer zone is free but limited in some areas to 90 minutes. These parking meter rates, time limits and other parking management policies of the City of Tacoma are intended to facilitate the turnover of parking spaces, improving the availability of on-street parking for visitors and short stay customers and are subject to change by ordinance.

Twenty-five of the 169 off-street parking facilities surveyed in the Subarea charged by the day for parking with average daily rates of \$11.36 (the minimum daily rate charged was \$4.00, and the maximum daily rate was \$15.00).

Parking Availability

The *availability* of parking spaces – rather than their total supply – is a key indicator of accessibility of the area to motor vehicle users, against which the impacts of

Figure 3.11-8: Metered and Time Limited Parking in the Subarea



Source: City of Tacoma Department of Planning and Development Services

development or changes to supply, prices, or regulations can best be measured. Parking availability can be measured by the total number, or share of parking spaces in the vicinity of a destination that are open, available and legal for use by incoming travelers. The share of on-street and/or off-street parking spaces available during periods of peak demand for access to a site determines the ease of and time required for finding an open and available parking space within comfortable walking distance of one's destination.

Table 3.11-5 shows the average occupancy rate observed in off-street parking facilities surveyed by PSRC between 8:30-11:30 AM and 1:30-3:30 PM on selected weekdays in 2013. Occupancy of 85-95% of spaces in off-street parking facilities during periods of peak daily demand is considered to represent the efficient utilization of parking facilities while maintaining the availability of auto access and parking for additional users. None of the zones surveyed within the Subarea had a weekday average occupancy of 64% or more, meaning that off-street parking is widely available.

**Table 3.11-5
Off-street Parking Occupancy Rates**

Location	Lots	Stalls	AM Occupancy	PM Occupancy
Zone 1	49	918	48.3%	50.4%
Zone 2	75	3,380	63.6%	64.0%
Zone 3	45	5,094	61.8%	60.0%
Total	169	9,892	61.1%	60.4%

Source: 2013 PSRC; compiled by VIA Architecture

The Stadium District parking study noted above included an occupancy count was for on-street parking spaces during various weekdays in July 2013 between the hours of 7:00 AM and 6:00 PM. As a whole, on-street parking was occupied 61% during the survey time. Some individual blocks were more or less occupied than the average occupancy of the sub areas, as was to be expected. However, the average duration of stay data suggests high employee and residential use of on-street system.

Other than in the Stadium District, no data were available on the occupancy or availability of on-street parking throughout the Subarea, however, the current availability off-street vehicle parking, highlighted in **Table 3.11-5**, can support additional growth and development of new land uses and activities in the area.

Off-Street Parking Requirements

As an indirect way to maintain the availability of parking, the City's Land Use Regulatory Code (Title 13) specifies requirements for the provision of off-street parking spaces for development of new land uses and changes of use in selected areas. Although compliance can reduce the immediate impact of specific development projects on parking availability in the vicinity of a project, they do not directly address the congestion of on-street parking, and can worsen parking and traffic conditions on an area-wide

basis by encouraging and facilitating auto access (as opposed to travel by non-auto modes of transportation).

For Downtown Tacoma and portions of the North Downtown Subarea, the City of Tacoma enforces time limits and recently started charging for on-street parking – in part as a more direct means of maintaining parking availability. With these parking management policies in place, the City has established a Reduced Parking Area (RPA) downtown, and has recently proposed an expansion of the zone, as shown in **Figure 3.11-9**. Within the RPA:

- There is no required minimum number of off-street parking spaces required for any type of new development (13.06A.065B Reduced Parking Area (RPA) – Parking Quality Standards) Tacoma Municipal Code Title 13.06A.065 establishes requirements for the provision of off-street parking for parcels in zones and districts located within the South Downtown Subarea and within the Downtown Mixed Use Center. Per 13.06A.065B Reduced Parking Area (RPA) – Parking Quality Standards, minimum and maximum off-street parking requirements for residential and non-residential parking are “not applicable,” within the entirety of the Reduced Parking Area for downtown Tacoma, as shown in **Figure 3.11-9**.
- Requirements for the provision of some accessible off-street parking spaces have been maintained.
- The construction of new stand-alone surface parking lots and expansion of existing surface parking lots along Primary Pedestrian Streets within the RPA has been prohibited.

The boundaries of the existing and proposed RPA include a substantial portion of the North Downtown Subarea. Minimum off-street parking requirements remain in effect for selected zoning districts in the portions of the North Downtown Subarea located outside of the RPA (See **Figure 3.7-1** in **Section 3.7 -- Land Use**, for a map of the Zoning Districts in and around the North Downtown Subarea). **Table 3.11-6** shows the parking requirements for North Downtown Districts outside the RPA zone.

For buildings within 10 feet of North Downtown’s designated Core Pedestrian Streets—such as Division Ave and N 1st Street in the Stadium District—there are no off-street parking requirements for either residential or commercial uses.

No requirements are in effect for buildings in existence prior to the adoption of the Tacoma Municipal Code on May 18, 1953, and any parking above and beyond the current requirements may be removed. Parking previously constructed in accordance with the off-street parking requirements in place at the time of permit application and development is both an element of the affected environment and an opportunity for mitigation of the potential impacts of growth on area-wide parking availability through shared parking and other parking pricing and management strategies.

Figure 3.11-9: Reduced Parking Area



Source: City of Tacoma Department of Planning and Development Services

**Table 3.11-6
Off-Street Parking Requirements Within North Downtown Subarea, but Outside of
Reduced Parking Area (TMC 13.06A.065, and TMC 13.06.510)**

Land Use/District	Unit	Required Minimum Quantity of Off-Street Parking Spaces per Unit*	Maximum Quantity of Off-Street Parking Spaces Allowed Per Unit
Downtown Residential (DR): Residential Uses	Unit	1.0	Not Applicable
Downtown Residential (DR): Non-Residential Uses	1,000 sf	1.0	3.0
Downtown Mixed-Use (DMU): Residential Uses	Unit	1.0	Not Applicable
Downtown Mixed-Use (DMU): Non-Residential Uses	1,000 sf	2.5	Not Applicable
Mixed-Use Center Districts: Residential Uses	Unit	1.0	Not Applicable
Mixed-Use Center Districts: Non-Residential Uses	1,000 sf	2.5	Not Applicable

Source: City of Tacoma

*Per 13.06A.065C(2), the first 3,000 square feet of each street level establishment is exempt from parking requirements. Per 13.06A.065C(3) Special needs housing, including, but not limited to, seniors, assisted living, congregate care, licensed care, or group care homes may provide less than one stall per residence upon a showing that a lesser parking requirement will reasonably provide adequate parking for residents, staff, and visitors, subject to the approval of the City Engineer.

3.11.5.2 Impacts

The purpose of parking facilities is to provide for automobile access and short or long-term storage of vehicles while not in use. In the near-term and long-term, no impact to the availability of parking or the auto accessibility of the Subarea is projected to directly result from implementation of any of the alternatives for the North Downtown Subarea. Projected increases in demand for vehicle travel to, from and within the Subarea, highlighted in the Vehicular Traffic Impacts analysis (Section 1 of this Transportation Element), may be associated with increased demand for short-term and long-term parking, but will not necessarily affect the availability of parking for residents and others traveling to and from the Subarea by car.

Even as the Subarea continues to develop, the availability of parking in areas currently subject to pricing and regulation of use (time limits), can be expected to be maintained as drivers are encouraged to shift modes, access sites by car at different times of day when parking is less congested, or unpriced, and/or to park in off-street facilities or on-street in surrounding areas where parking is more widely available.

Experience from other urban areas with compact, transit-oriented development patterns similar to that envisioned in each of the action alternatives for the North Downtown Subarea confirms that even without minimum off-street parking requirements, project developers can be expected to provide more than enough parking to serve the specific market driven demands of their contracted and/or prospective future tenants/occupants for auto access and vehicle storage²³. This is especially true in the parts of the Subarea where on-street parking pricing and/or time limits are in place, providing a strong marketing incentive for developers to include the option of dedicated off-street parking for new commercial residential tenants.

3.11.5.3 Mitigation Measures

Any potential unforeseen impacts of alternatives for the North Downtown Subarea on the availability of motor vehicle parking in the area will be mitigated primarily by a combination of existing plans, policies and infrastructure established to accommodate growth – particularly the development of walkable, bicycle and transit accessible mixed-use districts with reduced demand for auto access and parking. Mitigation and avoidance of potential impacts to parking availability will be supported by:

- implementation of the City of Tacoma’s plans, policies and principles for the management of public parking;
- investments in bicycle, pedestrian and transit facilities and services, and Transportation Demand Management (TDM) policies and programs included in existing city, county and regional plans (see planned mitigations for impacts to vehicular traffic, public transportation and non-motorized transportation systems); and,
- additional such measures intended to shift travel demand from automobiles to non-motorized modes of transportation and public transit, thereby reducing demand for auto access and parking.

Many of these same plans, policies, projects and programs will also mitigate identified impacts of the action alternatives to other transportation systems, such as vehicular traffic.

Parking management

The existing plan and policy framework in the City of Tacoma is clearly supportive of a market-oriented approach to the supply and management of vehicular parking. Current plans, policies and projects that will contribute to mitigation of identified impacts to parking availability include:

- **On-Street Parking Pricing and Regulation:** The establishment of a paid parking area, with metered and time limited on-street parking in selected areas (see **Figure 3.11-8**) directly contributes to the maintenance of auto accessibility and parking availability in the Subarea. These rates and regulations may be adjusted in the future as necessary to maintain auto accessibility and parking availability in the Subarea.

²³ Cervero, R., A. Adkins, and C. Sullivan (2009). “Are TODs Over-Parked?” *University of California Transportation Center (UCTC) Research Paper No. 882*, University of California, Berkeley.

- **Reduced Parking Area:** In 2012, the City established a Downtown Reduced Parking Area, including parts of the North Downtown Subarea (see **Figure 3.11-9**) with no minimum off-street parking requirements. Allowance for development with a reduced parking supply in portions of the district will reduce incentives for auto access, and facilitate the development of low-traffic, pedestrian and transit oriented development, allowing a greater share of future residents, employees and visitors to reach destinations in the district with no need to drive and park a private vehicle, at the same time reducing parking demand and supply constraints for those who must drive.

- **Commute Trip Reduction:** Provisions of the Tacoma Municipal Code requiring the adoption and implementation of a Commute Trip Reduction (CTR) program by certain qualifying employers (13.15.070 Requirements for Employers), including but not limited to one or more of the following elements related to the supply and management of parking (all of which may be expected to contribute to the maintenance of parking availability in the Subarea):
 - “Provide preferential parking for high-occupancy vehicles”
 - “Reduce parking charges for high-occupancy vehicles”
 - “Institute or increase parking charges for drive alone commuters”
 - “Eliminate free parking”
 - “Provide a parking incentives program such as a rebate for employees who do not use the parking facilities”

- **Off-Street Parking Reductions:** Per the Tacoma Municipal Code (Table 2,13-174), off-street parking requirements for multifamily, commercial, institutional, and industrial uses in mixed use districts may be reduced for properties with one or more of the following:
 - Proximity to transit (within 500 feet of a transit line with frequent all-day service)
 - Adoption of an employer Commute Trip Reduction plan.
 - Car sharing stalls on-site.
 - Mixed-use/shared parking credit

- **Transportation Element of the Tacoma Comprehensive Plan:** The following Comprehensive Plan policies and implementation actions are supportive of low-traffic development with reduced parking demand and active management of existing on-street and off-street parking resources.
 - Transportation System Management Policy 5, Downtown Parking System, provides the following guidance related to market-based management of on-street and off-street parking facilities as necessary to maintain availability:
 - Develop...a downtown parking system that seeks balance among competing uses...and meets the needs of both private and public users.
 - Implement the elements of the Business Plan for the Downtown Parking System [Including] increased level of parking enforcement, centralization of municipal parking assets, establishment of a fee based parking system, the creation of more off-street parking when warranted...;

- Develop and maintain criteria for the purpose of identifying and prioritizing parking facilities in need of repair or expansion. For example, use nationally recognized parking facility criteria to determine if expansion of the municipal parking system is warranted.
 - Encourage the redevelopment of large standalone downtown parking facilities into commercial building space with parking to accommodate a diversity of uses...
 - **Action 1.8: End of Trip Facilities**, calls for the City to “Install bike racks, accessible parking and other support infrastructure at destinations citywide, including transit stations, retail areas, parks, public facilities, and other high-traffic areas.”
 - **Action 3.2: Parking Strategies to Reduce Driving**, calls for the City to “Support changing parking policies to discourage single occupancy vehicle driving, while recognizing the need to provide accessible parking.
 - **Action 3.3: End of Trip Facilities for Active Commuting**, calls for the City to, “Give incentives for bicycle storage, locker rooms and shower facilities for all major office building construction and remodeling projects in the downtown core.
- **Provisions of the Land Use Element Tacoma Comprehensive Plan:** The Land Use Element of the Tacoma Comprehensive Plan includes the following policies and guidance related to parking as a land use (both as a condition for and barrier to development and redevelopment) and the maintenance of parking availability as a means of providing access, supporting economic development and encouraging use of non-auto modes of transportation:
 - **LU-MUP-1 Parking:** Minimize the amount of land dedicated to parking and encourage alternative transportation by reduced off-street parking requirements...
 - **LU-MUP-2 Minimize Parking Impacts:** Discourage surface parking lots and locate parking areas to the rear or side of buildings or within structures.
 - **LU-MUP-9 Flexible Off-Street Parking Requirements for New Development:** Allow for more flexibility in the amount of off-street parking provided by new development by eventually eliminating off-street parking requirements...
 - **Downtown Element, Policy:** 2.1E.C: Downtown should move towards the implementation of a shared satellite parking system, and consider steps towards a market based parking approach within certain areas of downtown.
 - **Downtown Element, Action 2.1E.6:** Consider creating parking maximums in downtown’s most walkable neighborhoods to encourage full participation in above programs.

Stadium District Measures in the Subarea Plan

The Subarea Plan establishes the following recommendation and goal intended to preserve the availability parking for businesses located in the Stadium District portion of the North Downtown Subarea:

- GOAL LU-5: Maintain the current number of on-street parking spaces in Stadium District with a target total of 420 spaces.

Parking Management Measures in the Subarea Plan

The Subarea Plan establishes the following recommendations for parking management strategies that the City should implement to mitigate parking impacts as the Subarea builds out over time:

- RECOMMENDATION LU-6: Establish a program to provide area-wide parking management for North Downtown, and consider including shared parking, vacancy rate management, Parking Benefit Districts, requirements for unbundled parking, parking maximums, and a non-residential off-street parking tax.
- RECOMMENDATION LU-7: Coordinate parking resource provision and management strategies with the expansion of LINK Light Rail service and with downtown transit in general.

Additional measures

In addition to the City's current parking management programs and measures incorporated in existing plans and policies, the following measures can further mitigate any future impacts to parking availability within the Subarea. Given their demonstrated benefits in other communities—ranging from vehicle traffic reduction, and increased parking availability, to improved retail vitality—the City may elect to actively pursue the development and implementation of the following policies and programs, even where current on-street parking conditions do not indicate a high probability of significant impacts of new development in the Subarea.

- **Adopt Parking Availability Targets and Associated Management Policies:** To maintain the availability of on-street parking in the Subarea and to prevent spillover parking impacts in surrounding areas, the City can adopt a policy target and management principles as follows:
 - **Adopt a 15% Availability Target:** The most direct way to ensure the availability of on-street parking in the Subarea is to set a policy goal of maintaining approximately 15% vacancy of on-street parking spaces on any given block face ((Meaning at least one to two spaces per block face would be available at any time). This means that new arrivals can always find an on-street parking space within a block or two of their destination, reducing the traffic tie-ups that can occur when people continuously search and circle to find on-street parking²⁴. **Monitor Occupancy and Availability:** To ensure that parking availability is maintained over time, the occupancy of on-street and off-street parking facilities should be monitored on an annual basis, both within the Subarea and in immediately adjacent neighborhoods.

²⁴ UCLA Professor Donald Shoup, argues that with 15% of on-street spaces vacant, cities make the most efficient use of their on-street parking supply (Shoup, Donald (2004). *The High Cost of Free Parking*, Washington, DC: APA Planners Press).

- **Manage Parking to Achieve Goals:** On block faces within the Subarea where monitoring confirms that occupancy consistently exceeds 85%, the City may consider pricing or regulating parking to maintain availability, consistent with the adopted parking space vacancy goals. Management options include:
 - Installing and operating adjustable rate parking meters.
 - Issuing permits for the use of on-street parking during selected hours to residents and businesses in the District
 - Establishing or adjusting existing time limits.
- **Rate adjustment:** In order to achieve vacancy goals, parking meter and/or permit) rates should be adjusted regularly for the primary purpose of managing demand, rather than for revenue generation (This means parking rates may go down significantly in areas where occupancy is consistently low).
- **Establish Parking Benefit District:** The City may consider establishing a Parking Benefit District (PBD) for the Subarea, with a commitment to return all permit and/or meter revenue to the District to fund streetscape and other access improvements and programs in the same area in which the revenue was collected.
- **Require Unbundled Parking Costs:** Requiring that parking spaces be leased or sold separately (“unbundled”) from the rent or sale price of commercial space or residential units can provide a financial incentive inducing individuals to own fewer cars and drive less, and encouraging private companies to support and incentivize the use of non-auto modes of commuting to/from the workplace...
- **Establish Maximum Parking Requirements:** Through its land use code, the City may impose limits on the number of off-street parking spaces that can be provided in association with or accessory to specific new land uses in the Subarea. Limits on the supply of off-street parking can prevent over-supply, eliminating a hidden incentive to drive and encouraging use of transit use and other non-auto access alternatives (as an alternative, incentives could be offered to developers who build less parking than the maximum allowed by code).

Establish a Cap on the Supply of Off-Street Parking in the Subarea: As an alternative to establishing maximum parking requirements for specific land uses, the City may – once large scale redevelopment in the Subarea is underway – establish a Subarea-wide maximum, or cap on the total number of off-street parking spaces permitted in the District (including existing spaces). This policy should include an allowance for individual property owners to sell or trade rights to use existing but underutilized off-street parking spaces, and for the design and brokerage of a system of exchangeable allowances to supply new parking stalls under the area-wide cap.

- **Consider Non-residential Off-street Parking Tax:** To generate revenue for new transportation facilities and services in the Study Area and to reduce demand for parking, the City may advocate for state legislative authority to levy

an annual per-stall tax on all off-street parking in the Subarea that is accessory to non-residential land uses. Such a tax might be graduated, with lower rates for property owners who unbundle parking or otherwise charge for parking at market rates.

- **Ensure Flexible Parking Design:** Most new off-street parking in the Subarea should be built to allow flexible management and use, including shared parking, and maximum adaptability to new conditions. The City may facilitate shared parking and the creation of a private market for the use of parking spaces in the Subarea by adopting conditions for the design and operation of new off-street parking facilities in the area, such as:
 - a. requiring all off-street parking facilities to be publicly accessible or easily convertible to allow public access (e.g. requiring direct pedestrian access to the street or other public space from any and all off street parking facilities).
 - b. designing surface parking lots in a way that permits future conversion of lot corners to new TOD.
 - c. designing all off-street parking areas initially intended for restricted use (e.g. dedicated residential parking spaces) should be designed so that some or all restricted spaces may be converted to publicly available spaces in the future (e.g. installing moveable gate arms that can be shifted within the facility to restrict access to smaller or larger share of spaces, as needed by future tenants), and
 - d. designing lot circulation patterns to permit flow through the entire facility in a future shared parking scenario).

All of these existing and proposed City policies and programs will tend to have an incremental mitigation effect on the identified and potential unforeseen transportation impacts of new development in the North Downtown Subarea.

3.11.5.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts are anticipated relative to parking.

3.12 PUBLIC SERVICES

Information presented in this section addresses public services including: fire and EMS, law enforcement, public schools, and parks and open space. This information is based on readily available data, the primary source being the City of Tacoma 2011-2016 Capital Facilities Program (CFP).

The City of Tacoma has adopted the following level of service standards for public services:

CAPITAL FACILITY TYPE	LEVEL OF SERVICE STANDARD
Emergency Medical Services (EMS)	0.000016 units per capita
Fire	0.000109 apparatus per capita
Law Enforcement	.288580 sq. ft. per capita
Local Parks	.003 acres per capita
Regional Parks	.007 acres per capita
Open Space/Wildlife Habitat	.002 acres per capita

Source: City of Tacoma 2011- 2016 Capital Facilities Program

3.12.1 FIRE AND EMERGENCY MEDICAL SERVICES (EMS)

3.12.1.1 Affected Environment

As indicated in the City’s CFP, the Tacoma Fire Department (TFD) is responsible for delivering fire protection and EMS to residents of a 71.6 square-mile service area including Tacoma, Fife, Fircrest, and the unincorporated area of Pierce County protected by Pierce County Fire District 10. The population TFD serves is 222,120; the vast majority of which are within the city limits. The Department operates out of and maintains 16 regular staffed stations, has 16 engines, 4 ladder companies, 5 medic companies, and 2 battalion command vehicles.

The majority of the North Downtown Subarea is served by TFD Station #1, which is located at 901 South Fawcett Ave. Nearby stations located outside the Subarea that could be called upon to provide service include: TFD Station #2 (2701 Tacoma Ave South), and TFD Station #4 (1453 Earnest S Brazill St.). Station #18, which is located on the east side of the Foss Waterway near 11th St, is used for fireboat moorage and maintenance.

3.12.1.2 Impacts

Development consistent with the proposed **North Downtown Subarea Plan** would generate new demands for fire and EMS service within the Subarea based on an increased number of residential, office, commercial and neighborhood service uses, as well as the associated employment and population increases.

No Action Alternative

Nor South Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to fire and EMS service would be evaluated based on each site-specific project. Broad area-wide

cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

According to the City's adopted LOS standards, **Table 3.12-1** notes the number of EMS units and fire apparatus that would be necessary to serve the projected Subarea population under the action alternative.

**Table 3.12-1
Action Alternative - Increased EMS and Fire Apparatus Demand**

	Projected Site Population	Fire LOS Requirement	EMS LOS Requirement
Action Alternative	30,000	3.27 apparatus	0.48 units

3.12.1.3 Mitigation Measures

No additional mitigation necessary. The City of Tacoma is committed to expanding Fire and EMS services to meet the needs of its future growth.

3.12.1.4 Unavoidable Adverse Impacts

No unavoidable adverse impacts are anticipated.

3.12.2 LAW ENFORCEMENT

3.12.2.1 Affected Environment

The Tacoma Police Department (TPD) employs 372 commissioned officers and 42 civilian employees. TPD's services include Operations, Investigations, and Administrative Services Bureaus, as well a K-9 Unit, Traffic, Marine Services, Animal Control and Compliance and other specialized police operations. The Operations Bureau is responsible for emergency 911 response and patrolling the City's streets, which are divided into four sectors. The Investigations Bureau conducts follow-up investigations on reports generated by the Patrol Division, as well as information provided by citizens.

The North Downtown Subarea is located in Sector One, which has two substations: the **Central Substation** (1524 Martin Luther King Way); and the **Northeast Substation** (4731 Norpoint Way NE). According to the TPD:

“Sector One is currently undergoing a ‘renaissance’ as a result of the efforts of many individuals, businesses, and organizations- public and private. Because of a vast array of new building projects that have been completed or are currently underway, the central district of Tacoma has once again become a more vibrant, exciting, pleasant, and safe place to live and work.”

Additional law enforcement services are provided Pierce County.

3.12.2.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to law enforcement would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

Increases in the North Downtown Subarea population and employment under **Alternatives 1-3** would be incremental and would be accompanied by increases in demand for police service. Call volumes could increase under all of the proposed alternatives; however, the exact number of incremental new calls cannot be quantified.

According to the City's adopted LOS standards, **Table 3.12-1** notes the number of additional law enforcement facilities that would be necessary to handle the projected Subarea population under the action alternative.

**Table 3.12-2
Action Alternative - Increased Law Enforcement Demand**

	Projected Site Population	Law Enforcement LOS Requirement
Action Alternative	30,000	8,657.40 sq. ft.

As stated by the Tacoma Police Department in the quote above, continued development in the North Downtown Subarea can be expected to help create a safer environment, which will to some extent offset demand for increased law enforcement services. The increased residential density provided under all of the development alternatives and the introduction of retail and office uses would increase lighting levels and establish a more constant level of activity in the area. Such changes could contribute to overall increases in safety.

3.12.2.3 Mitigation Measures

No additional mitigation is necessary. The City of Tacoma is committed to expanding law enforcement services to meet the needs of future growth.

3.12.2.4 Unavoidable Adverse Impacts

No unavoidable adverse impacts are anticipated.

3.12.3 PUBLIC SCHOOLS

3.12.3.1 Affected Environment

Tacoma Public Schools (TPS) is the third largest school district in Washington State, serving more than 28,000 children in kindergarten through grade 12. The district has 35 elementary schools, nine middle schools, five comprehensive high schools and 14 alternative learning sites. TPS has more than 3,500 employees and is one of the largest employers in Tacoma.

Stadium High School is located in the Subarea at 111 North E St. The school has a capacity of 1825 students, and had an enrollment of 1671 in the 2010-11 year.

Tacoma School of the Arts (SOTA) is located in the Subarea at 1102 A St #200, though classes are housed in multiple venues across downtown Tacoma. SOTA's student capacity is approximately 500 students in grades 9 – 12, and it draws students from across the entire City. SOTA was established in autumn 2001, with help from the Bill & Melinda Gates Foundation.

The middle school that serves the Subarea is Jason Lee Middle School, located at 602 N Sprague Ave, just beyond western boundary of the Subarea. The school has a capacity of 720 students, and had an enrollment of 466 in the 2009-10 year.

The elementary school that serves the Subarea is the McCarver School (2111 S J St, enrollment of 393, grades PK – 5). Bryant Montessori school is located to the west of the Subarea at 717 S. Grant Ave.

2010-11 Tacoma Public School funding sources:

State	58.1%
Local taxes	24.0%
Federal	14.9%
Local non-taxes	1.9%
Other	1.1%

The 2010-2011 total annual operating budget for Tacoma Public Schools was approximately \$340 million. Reductions in state funding may result in budget cuts estimated at more than \$20 million over the next three years.

3.12.3.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to public schools would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The action alternative will continue development of the lands within the North Downtown subarea for urban uses and activities at various intensities. Development will increase the residential population, requiring additional public school capacity. High-quality public schools are essential to the creation of a complete community in the North Downtown Subarea

3.12.3.3 Mitigation Measures

No additional mitigations necessary. The Tacoma Public School District is committed to expanding public school services to meet the needs of its future growth. State funding for public schools is allocated on a per student basis (average \$5,032 per student in the 2011-12 school year), so funding will increase as enrollment increases. Local taxes are primarily property taxes, and revenue will rise as property is developed and increases in value in the North Downtown Subarea.

3.12.3.4 Unavoidable Adverse Impacts

No unavoidable adverse impacts are anticipated.

3.12.4 PARKS and OPEN SPACE

3.12.4.1 Affected Environment

Metro Parks Tacoma

In Tacoma, most open space lands and facilities intended for high-impact access and/or recreation are managed by Metro Parks Tacoma (MPT). MPT has a biennial budget of close to \$85 million and operates close to 2,800 acres of open space. MPT's jurisdiction includes the entire City of Tacoma and part of unincorporated Pierce County to the north and the west of Browns Point (known as Dash Point), covering an area of over 50 square miles.

In 2012, MPT published a *Strategic Plan Interim Update*. MPT recognizes that the majority of new growth is anticipated to occur across the City in 17 mixed-use centers, and that the two largest regional growth center areas are Downtown Tacoma and the Tacoma Mall area. The North Downtown Subarea is located in MPT's Northwest Planning Area, which has a total of 33 parks of various types. The two MPT parks located in the Subarea boundary are Wright Park and Thea's Park. Nearby MPT "neighborhood" parks include Lots for Tots, Neighbors', and People's Parks just beyond the west edge of the Subarea.

City of Tacoma

The City of Tacoma Open Space Program provides and manages open space lands and facilities. The City of Tacoma's Open Space Program is primarily responsible for managing open space habitat areas intended for habitat conservation and restoration and, when appropriate, low-impact access and recreation. In addition, the City of Tacoma Streets and Grounds Division develops and maintains a number of small urban parks which provide amenities and recreation opportunities.

City-owned parks and open spaces in the North Downtown Subarea include:

- McCormick Park
- Theater Square
- Frost Park
- Ben Gilbert Park
- Fireman's Park
- Spanish Steps
- Norton Memorial Park
- Center for Urban Waters Esplanade
- Downtown Hillclimbs

Community gardens in the North Downtown Subarea include:

- Gallucci Learning Garden

Designated Habitat Corridors in the North Downtown Subarea include:

- Schuster Parkway corridor

Nearby parks and open spaces outside the Subarea include:

- Jefferson Ave. Mini-Park

- Tollefeson Plaza
- Tacoma Art Museum Plaza
- Foss Waterway Esplanade

3.12.4.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to parks and open space would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

Increases in the North Downtown Subarea population and employment under the action alternative would be incremental and would be accompanied by increases in demand for public parks and open spaces. However, it must be recognized that the LOS standards noted above pertain to the City as a whole, and cannot be applied in isolation to a relatively small Subarea, such as North Downtown. In particular, the population and employment densities that would occur under the action alternative are much higher than the City average, and therefore it is not valid to apply the city-wide LOS locally to the Subarea.

3.12.4.3 Mitigation Measures

The following mitigation measures apply to all alternatives, and are based on existing City policies, regulations, and other mitigation, as noted below.

City Policies

Comprehensive Plan -- Open Space Habitat and Recreation Element

The 2008 Open Space Habitat and Recreation Element of Tacoma's *Comprehensive Plan* establishes policies designed to ensure sufficient parks and open space for a growing City. In particular, the Element addresses Urban Parks in Downtown and Mixed-use Centers, stating:

“As the areas planned for the most intense and dense development within the City, downtown and the other mixed-use centers are home to many of Tacoma’s residents as well as where Tacoma residents work, shop, dine and recreate. Attractive, well-designed public parks and open spaces are essential assets to the community and economic vitality of these areas.”

To help realize the above goals, the Element includes the following policies:

Policy	Intent
<i>OS-MUC-1 Open Space within Centers</i>	Ensure open space is provided in the Mixed-use Centers as the population in the center increases.
<i>OS-MUC-2 Siting and Design</i>	Recognize the primary importance of urban parks and open spaces, and invest in well-chosen designs and locations.
<i>OS-MUC-3 Identify Open Space Needs within Centers</i>	Work with the Green Tacoma Partnership, Metro Parks Tacoma, Neighborhood Councils, business district associations, property owners, and residents to identify open space, park, and recreation needs within Mixed-use Centers.
<i>OS-MUC-4 Partner with Public Institutions and Private Landowners</i>	Explore options for public-private partnerships and other innovative approaches to providing open spaces within centers.
<i>OS-MUC-5 Mechanisms to Create Urban Parks</i>	Develop zoning incentives, controls and/or funding mechanisms, such as Transfer of Development Rights, to create highly functional urban parks and amenities within Mixed-use Centers, downtown and Planned Residential Developments.
<i>OS-MUC-6 Fee In Lieu Program</i>	Consider adopting a fee-in-lieu program that would allow development to contribute toward open space, park, community garden, or recreation space within a Mixed-use Center rather than providing on-site open space.
<i>OS-MUC-7 Streets and Sidewalks as Temporary Open Space</i>	Support and encourage the use of streets and sidewalks within centers as open space on a temporary or intermittent basis for a range of activities such as markets, festivals, shopping, dining and recreation, while ensuring safety and balancing street and sidewalk use for transportation.
<i>OS-MUC-8 Public Streets as Linear Urban Parks</i>	Seek opportunities, including joint ventures with public or private partners, to create a park-like environment within public rights-of-way, incorporating features such as widened sidewalks, street amenities and furniture, and landscape planting.
<i>OS-MUC-9 Reconnect the Waterfront</i>	Seek opportunities to re-connect the waterfront to abutting neighborhoods, in particular downtown and the Thea Foss Waterway, through developing multi-functional open spaces, trails and/or recreational facilities that provide or enhance pedestrian connectivity between downtown or other centers and the waterfront.
<i>OS-CG-1 Community Gardens</i>	Support and develop existing and new community gardens within parks and on appropriate public and private lands. Consider creative approaches to managing community gardens, such as support by education institutions or volunteer management by community organizations.

Other Mitigation

In addition to the measures described above, the action alternative would result in the adoption of a Subarea Plan that provides further mitigation measures. The Subarea Plan Vision Statement includes the following language addressing the importance of open space:

Open Spaces and Natural Systems: An environmentally-responsive urban center which values its green spaces and strives to maintain and enhance existing open spaces, parks, recreational opportunities, view corridors, community gardens, and the connections between each while carefully adjusting to local terrain conditions.

The Subarea Plan establishes the following recommendations that mitigate for parks and open space:

- RECOMMENDATION OS-1: Continue to support integration with the City's open space program and foster partnerships with Metro Parks Tacoma.
- RECOMMENDATION OS-2: Maintain and enhance existing open spaces within the North Downtown Subarea.
- RECOMMENDATION OS-3: Develop a system of coordinated gathering spaces, green streets, greenways and hillclimbs to link North Downtown parks, recreational facilities and other open space resources.
- RECOMMENDATION OS-4: Explore establishing a phased-in development impact fee to fund open space improvements in North Downtown.
- RECOMMENDATION OS-5: Develop partnerships and seek funding from the City of Tacoma Public Works Department, the Center for Urban Waters, Citizens for a Healthy Bay, the Puget Sound Partnership, the Department of Ecology, the U.S. EPA, and other organizations to develop natural drainage features in existing and planned open spaces.
- RECOMMENDATION OS-6: Maintain existing and designate additional visual connections between North Downtown neighborhoods and the Thea Foss Waterway, recognizing the need to balance slope stabilization and native landscaping with the protection of public views.
- RECOMMENDATION OS-7: Adopt and implement design standards for the management of the Stadium/Schuster hillside.
- RECOMMENDATION OS-8: Plant community gardens on vacant sites as well as other available lands within North Downtown to restore habitat, grow healthy foods for local use, and improve visual appearances, and in some cases to serve as temporary uses on sites waiting to be redeveloped.
- RECOMMENDATION OS-9: Identify public view corridors from North Downtown neighborhoods toward Commencement Bay and the Thea Foss Waterway; create appropriate view protection measures to preserve and protect them in coordination with the Schuster Parkway project and other ongoing initiatives.
- RECOMMENDATION OS-10: Initiate a Downtown trash and recycling bin program that will improve the efficiency and consistency of Downtown trash and recycling management.

3.12.4.4 Unavoidable Adverse Impacts

With implementation of appropriate mitigation measures, no significant unavoidable adverse impacts would be anticipated relative to parks and open space.

3.13 PUBLIC UTILITIES

Information presented in this section addresses the effects of the proposed alternatives on the existing public utilities located within or proximate to the North Downtown Subarea including wastewater, stormwater, potable water, power, communications/data and solid waste.

Regulatory Background

Local Improvement Districts

Local Improvement Districts (LIDs) are a key component of the North Subarea Plan strategy to coordinate infrastructure and complete street upgrades. An LID is a financial instrument that provides a long-term payment plan with relatively low interest rates, enabling property owners to pool their resources for upgrades to various infrastructure in their neighborhood. Such improvements may include: permanent street and alley paving; streetlight installation; sanitary sewer extensions; and the undergrounding of overhead utility wires. An LID may only be created if the benefits of added value to the individual properties outweigh the cost of the improvement. Each property owner is assessed according to the benefit to their respective property and the amount each property owner pays must be proportional.

Complete Streets

Rebuilding existing city streets to “complete street” standards after sub-surface infrastructure upgrades is central to this Subarea planning effort. The City defines a *complete street* as a “street that safely and comfortably accommodates all users and travel modes, fosters livability, neighborhood identity and character, and incorporates features that reduce environmental impacts.” In the Transportation Element of the Tacoma Comprehensive Plan, Policy #T-MS-12 states:

Apply the Complete Streets guiding principle, where appropriate, in the planning and design for new construction, reconstruction and major transportation improvement projects to appropriately accommodate all users, moving by car, truck, transit, bicycle, wheelchair, or foot to move along and across streets.

3.13.1 WASTEWATER

3.13.1.1 Affected Environment

Wastewater treatment in the North Downtown Subarea is provided by the Central Treatment Plant (CTP), operated by the City of Tacoma. The CTP is located approximately 1.5 miles up the Puyallup River. It is the City's largest plant with a permitted maximum month treatment capacity of 60 million gallons per day (MGD). (Note: Maximum monthly flow is based on an average of the total daily plant flow throughout an entire month). The plant has a permitted peak hydraulic capacity of 150 MGD, and a secondary treatment capacity of 60 MGD. It services the majority of wastewater flows from the Tacoma area, including the industrialized tide flats, northeast, central and south Tacoma, plus Fircrest, Fife, Milton and some bordering areas in Pierce County and Federal Way.

Tacoma was founded in 1868 and construction of the first community collection pipes occurred in 1880. The collection pipes were installed to follow the shortest path to the tidewaters of Commencement Bay. From that time until 1928, collection systems for wastewater and surface water were separately constructed and were interconnected only at the head of ravines or near the point of final disposal. Between 1928 and 1946, most local collection system construction was of the combined type where wastewater and storm water from surface runoff were conveyed to the Bay in the same pipe. Collection systems constructed since 1946 have been separate, and currently there are no combined pipes serving the Subarea. There is a network of approximately 700 miles of wastewater collection pipes and 46 pump stations that convey wastewater to the treatment facilities.

In 1952, completion of the CTP provided Tacoma with primary wastewater treatment. However, because of excessive hydraulic loading, Tacoma began a surface water and wastewater separation project in the late 1950's, which allowed Tacoma to defer enlargement of the plant until 1963. An additional improvement to the primary plant occurred between 1979 and 1982. Construction of a high purity oxygen secondary treatment facility was completed in 1989. A third major upgrade to the facility was completed in 2009 and primarily consisted of construction of a new peak wet weather treatment facility, new influent and effluent pumping stations, new grit removal process, and various upgrades to existing facility components.

Level of Service Standard

The level of service standard for wastewater is 200 gallons per capita per day (GPCD) Maximum Month Flow and 400 GPCD Peak Hydraulic or Peak Instantaneous Flow. This standard is subject to State and City concurrency standards. Capacity in the City's system for collecting and treating wastewater is a function of both the quantity of flow generated by the City's customers and the amount of inflow and infiltration of surface water runoff and groundwater that enters the wastewater collection system through cracks in pipes or other similar defects.

3.13.1.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to wastewater would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Development Alternatives

The increased density and intensity of development that would be permitted by the development alternatives would result in greater demands on the wastewater collection and treatment system. The City of Tacoma is committed to delivering the Level of Service Standard noted above that is also a requirement of concurrency regulations. For new capital improvements, the City is striving to design the capacity of the system (collection and treatment) to have the hydraulic capacity to convey and treat the inflow and infiltration associated with a statistical one in 20 year rainfall event for this region. During wet weather events larger than this, it is possible that hydraulic capacities may be exceeded and sanitary sewer overflows may occur. Natural drainage strategies such as green roofs, rain gardens, and pervious pavement that are implemented with new development will help reduce the occurrence of sanitary sewer overflows.

The City of Tacoma Public Works Department has an ongoing Rehabilitation/Replacement program to repair and upgrade wastewater pipes.¹ Projects are typically tied to aging pipes that are either failing or about to fail, as well as eliminating the sources of clean groundwater and surface water from inflow and infiltration. Whenever possible, these projects would be coordinated with other utility upgrades that require street excavation and work towards replacement of existing streets with streets that meet City “Complete Street” standards.

With planned downtown sewer line replacement and inflow and infiltration programs, the action alternative can be achieved without new initiatives being developed. However, the collection system capacity is not uniformly distributed throughout the system and no guarantee can be made that there is capacity in every line for every new development that could occur. Nevertheless, the City is willing to adjust, within certain parameters, the timing of ongoing sewer programs in order to stimulate private investment and to partner with property owners through the use of local improvement district financing and construction mechanisms.

3.13.1.3 Mitigation Measures

The following mitigation measures apply to all alternatives.

For new development projects, it is City policy to make capacity determinations on a case-by-case basis for the following situations, to ensure capacity is either available in the existing system or required to be provided by the developer applicant:

¹ Project Number: ENV-NEW-778.

- Residential developments or subdivisions that will result in the potential for construction of more than 20 dwelling units.
- Commercial or industrial developments that will result in a peak daily flow of more than 5,000 gallons per day.

3.13.1.4 Unavoidable Adverse Impacts

With implementation of mitigation measures stated above, no unavoidable adverse impacts are anticipated.

3.13.2 STORMWATER

3.13.2.1 Affected Environment

In the North Downtown Subarea, all sewer and stormwater lines are separated. Subarea storm water flows to several outfalls on the Foss Waterway, then into Commencement Bay and Puget Sound. Stormwater management in Tacoma is managed by the City Public Works Department's Surface Water and Environmental Compliance Sections of the Environmental Services, Science and Engineering Division.

Tacoma was founded in 1868 and construction of the first community sewers occurred in 1880. From that time until 1928, collection systems for sanitary sewage and storm water were separately constructed and were interconnected only at the head of ravines or near the points of final disposal. Between 1928 and 1946, most collection system construction was of the combined type where sanitary sewage and storm water from surface water runoff were conveyed to the Bay in the same pipe. Collection systems constructed since 1946 have been separate. During the late 1950's and throughout the 1960's, the City sold bonds to finance both the construction of new storm drainage systems (both large diameter pipes and holding basins) and the separation of the combined systems from the 1930's and 1940's. Today, construction of new storm lines continues as well as operation and maintenance of the existing ones. A storm drainage utility was formed in 1979 to provide funding for these activities.

Level of Service Standard

Conveyance Systems Capacity: The level of service standard for private systems is to convey:

- 10-year, 24-hour design storm for pipes less than 24 inches in diameter without surcharging; and
- 25-year, 24-hour design storm for pipes equal to or greater than 24 inches in diameter without surcharging.

The level of service for all public systems is to convey:

- 25-year, 24-hour design storm for drains equal to or greater than 24 inches in diameter without surcharging.

If the capacity level of service cannot be met or if detention is required, the level of service standard for new detention systems will be according to the updated *2012 Stormwater Management Manual*.

Detention Facilities

Projects that meet or exceed the thresholds outlined in the *2008 Surface Water Management Manual*, Volume 1, Chapter 3, shall be required to construct flow control facilities and/or land use management BMPs. Using an approved continuous simulation runoff model such as the Western Washington Hydrology Model (WWHM), storm water discharges shall match developed discharge durations to pre-developed discharge durations for the range of pre-

developed discharge rates from 50% of the 2-year peak flow up to 100% of the 50-year peak flow. The pre-developed condition to be matched shall be a forested land cover.

Treatment Facilities

All new treatment facilities shall be designed for the volume of runoff predicted from one of the two following methods:

- Single event model – 6-month, 24-hour design storm of 1.44 inches, or
- Continuous simulation runoff model – 91st percentile of 24-hour runoff volume

3.13.2.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to stormwater would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

Because the majority of the North Downtown Subarea has been previously developed, new development is not expected to significantly change the amount of impervious surface and the associated volume of runoff to the stormwater system. Furthermore, because new development must comply with increasingly stringent best management practices (BMPs), new development has the potential to reduce capacity demand on the stormwater system. Accordingly, all of the alternatives can be achieved without new initiatives being developed. However, the collection system capacity is not uniformly distributed throughout the City and no guarantee can be made that there is capacity in every line for every new development that could occur. Nevertheless, the City is willing to adjust, within certain parameters, the timing of ongoing surface water programs in order to stimulate private investment and to partner with property owners through the use of Local Improvement District (LID) financing and construction mechanisms.

3.13.2.3 Mitigation Measures

The following mitigation measures apply to all alternatives.

City regulations associated with new development are documented in Volume 1, Chapter 3 of the City's *2012 Stormwater Management Manual*. When new storm water regulations require added facilities in order to comply with the new requirements, the current strategy is to employ the use of Best Management Practices to comply. New development within the City will require storm water practices/facilities, generally on-site, to comply with the new storm water regulations. Also, as development occurs, additional storm water pipes in city streets may need to be constructed, upgraded or replaced due to age and condition. An NPDES permit was issued by the WA Department of Ecology to the City of Tacoma in February 2007 and was modified in June 2009. The new permit is focused on the quality and quantity of water

discharged to receiving waters. Increasingly the permit will require projects to improve water quality and reduce the volume of water discharged into receiving waters.

As the storm water system ages, focus is shifting from capacity improvements to rehabilitation or replacement of pipe. The City has completed an analysis of the storm sewer network based on criticality factors and is beginning an asset management program including the physical investigation and repair of the most critical pipes in the storm system. Within this program it may be possible to adjust, within certain parameters, the timing of ongoing surface water programs in order to stimulate private investment and to partner with property owners through the use of LID financing and construction mechanisms.

3.13.2.1 Unavoidable Adverse Impacts

With implementation of mitigation measures stated above, no unavoidable adverse impacts are anticipated.

3.13.3 POTABLE WATER

3.13.3.1 Affected Environment

The North Downtown Subarea is supplied with potable water by Tacoma Water, a division of Tacoma Public Utilities, which is governed by a five-member Tacoma Public Utility Board. Tacoma Water provides water service to residences, businesses, and industries located in the cities of Tacoma, University Place and Ruston; in portions of the cities of Puyallup, Orting, Bonney Lake, Fircrest, Lakewood and Federal Way; and, in portions of Pierce and southern King county.

The Green River, located in King County, is Tacoma Water's primary source of water. Tacoma Water's Green River First Diversion Water Right can supply up to 73 million gallons of water each day, but is subject to minimum river flows as established in an agreement reached with the Muckleshoot Indian Tribe. The supply under this water right can be replaced with water from seven wells when water in the Green River is turbid, or cloudy. Tacoma Water's Green River Second Diversion Water Right can provide up to 65 million gallons of water each day. In addition to surface and groundwater sources in the Green River Watershed, Tacoma Water owns 24 wells located in and around the city with a short-term combined pumping capacity of approximately 60 million gallons a day.

Tacoma Water's Draft *2011-2020 Business Plan* identifies key planning, customer and operation and maintenance (O&M) and capital programs which the utility must address in order to meet customer expectations for high quality water service, to address new regulations and to respond to growth in system demands. The business plan also addresses financing and rate requirements necessary to support the implementation of the projected operations and capital program needs. The Tacoma Water *Business Plan's* Strategic Initiatives address the following areas:

- Water Supply, Transmission and Storage Improvements;
- Water Quality Improvements;
- Water Distribution Improvements; and
- General Improvements.

Level of Service Standard

The adopted level of service (LOS) standard for Water is 562 gallons per day per Equivalent Residential Unit (ERU). This standard is subject to concurrency. An ERU is a unit of measure used to express the amount of water consumed by a typical residential customer of the Water Division during the 4-day peak period. The LOS is determined by multiplying the Water Division's actual residential customer 4-day peak factor of 2.01 times the actual average daily residential water consumption. The 4-day peak water demands drive the new water system facility requirements for meeting new customer growth. The 4-day peak (maximum) is defined as: The average use per day of the four highest consecutive days of water use in the summer months.

3.13.3.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to potable water would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The action alternative would increase water demand relative to existing conditions. According to the existing LOS standard of 562 gallons per day per EDU, the additional residential units in the North Downtown Subarea could result the additional demand detailed in **Table 3.13-1** below.

**Table 3.13-1
Action Alternative - Increased Daily Water Demand**

Alternative	Residential Sq. Ft. (# of units)¹	Total Daily Residential Water Demand
Action Alternative	15,000,000 (15,000 units)	8.43 million gallons per day

¹assumes 1,000 sq. ft. per residential unit.

The additional water demand shown in the table above would only serve the projected additional dwelling units, not total equivalent residential units, which would also include hospital beds, school students, business employees, and other water generating requirements. The projected requirements, therefore, are likely higher than estimated above.

Tacoma Water has evaluated the existing water distribution system within the bounds of the Subarea. Research indicates that the existing system will provide satisfactory water pressure and flow to support the development within the Subarea for the foreseeable future. Accordingly, all of the alternatives can be achieved without new initiatives being developed.

3.13.3.3 Mitigation Measures

The following mitigation measures apply to all alternatives.

Tacoma Water is committed to meeting the *Level of Service Standard* noted above that is also a requirement of concurrency regulations. At present there are no active or planned water main replacement projects within the Subarea that are driven solely by the need to support projected development. Current or planned water main replacement work will be the result of project partnering opportunities where aging infrastructure can be replaced with shared restoration costs.

It is anticipated that this strategy of coordinating water main upgrades with sewer replacement projects will continue to be pursued in the future at locations in the North Downtown Subarea.

3.13.3.4 Unavoidable Adverse Impacts

With implementation of mitigation measures stated above, no unavoidable adverse impacts are anticipated.

3.13.4 POWER

3.13.4.1 Affected Environment

The North Downtown Subarea is served with electrical power by Tacoma Power. Tacoma Power provides electrical power with a common rate structure to residential, commercial and industrial customers in the cities of Tacoma, Fircrest, Fife, and University Place, and area also parts of Lakewood, Midland, Summit, Waller, Spanaway, Frederickson, Graham, and South Hill Puyallup. Tacoma Power has been publicly owned since 1893, and is a division of Tacoma Public Utilities, which is governed by a five-member Tacoma Public Utility Board. According to Tacoma Power's Mission Statement:

We will continue to serve our customers in Tacoma and neighboring communities and serve new markets to benefit both existing and new customers.

Level of Service Standard

- Voltage level + or – 5 percent;
- Average annual system outage duration 75 minutes or less; and
- Average annual system outage frequency .95 or less.

In several locations throughout the City, Tacoma Power has converted overhead power lines to underground with funding provided by property owners and/or developers. Conversion may offer one or more of the following listed benefits:

- greater reliability due to their reduced exposure to outages caused by storm and vehicular related accidents;
- creating a more aesthetically pleasing urban environment;
- promotion of economic development consistent with current zoning allowances and the Plan's policies for dense, mixed-use growth, and would also help support historic building upgrades; and
- avoidance of conflicts due to building construction and maintenance for those structures 3 stories and taller.

Converting the current overhead 12,470 Volt electrical facilities to underground is relatively expensive, typically costing between \$600,000 to \$1,400,000 per block within the urban core of Tacoma. Pursuant to RCW 35, conversion to underground power lines can be financed by forming a Local Improvement District (LID). Tacoma Power's current Customer Service Policy commits Tacoma Power to fund 30 percent of the LID conversion cost.

The conversion to underground of the current overhead system pose unique challenges within dense urban areas that include zero lot-line set-back zoning. These challenges include:

- the installation of 2 underground systems in place of 1 overhead system;
 - multi-conductor high-ampacity feeder system requiring multiple large conduits & large vaults

- lower ampacity distribution system that feeds individual properties requiring multiple conduits and moderately sized vaults
- location of large electrical switching and sectionalizing equipment within very large sub-surface vaults, or with pad-mounted equipment taking up landscape or parking space;
- the location of transformers either within specially designed rooms located in buildings, or within landscaping or parking areas; and
- the need to include multiple ducts, in addition to those needed at the time of conversion, to accommodate future load growth and operational needs within and beyond the affected area.

Removal of the overhead system would include the conversion of the commonly attached multiple communication utilities to underground. Often the communication utilities and Tacoma Power share the same trench and vault excavations. The resulting volume of conduit and vault systems create additional challenges when designing to avoid conflicts with existing underground utilities such as sanitary and storm sewers, water, street light & traffic signal systems, and natural gas.

3.13.4.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to power would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The increased density and intensity of development that would be permitted by the action alternative could result in greater demands on electrical energy. Tacoma Power has evaluated their existing distribution system within the bounds of the North Downtown Subarea. Resources exist to support development within the Subarea for the near future. However, as development advances, additional resources will be required to support the additional electrical load. The electrical delivery infrastructure does not exist within each block to support full build out to the development capacities allowed by existing land use code.

3.13.4.3 Mitigation Measures

The following mitigation measures apply to all alternatives.

Tacoma Power is committed to delivering power at the level of service standard noted above. In general, Tacoma Power's policy is to add service as required by new demand, with the rate structure covering the cost of adding new service.

At present there are no active or planned electrical infrastructure addition and/or replacement projects within the Subarea that are driven by solely by the need to support the projected development. Any electrical infrastructure additions and/or replacement work that may be required to support new development will be the result of:

- development of a Downtown master electrical infrastructure plan;
- partnership with developers concerning their future utilization of properties within the Subarea; this may include the use of LIDs together with Tacoma Power's participation in the cost of undergrounding (currently set at 30%);
- project partnering opportunities where aging infrastructure can be replaced with shared restoration costs; and
- Investigating grant application opportunities for funding of power system conversion in advance of development.

The City of Tacoma Comprehensive Plan Land Use Element includes the following policy to promote the undergrounding of utility lines:

- LU-UAD-29 Utility Lines: Encourage the agencies responsible for utility lines to work together to achieving the long-range goal of undergrounding all utility lines.

3.13.4.4 Unavoidable Adverse Impacts

With implementation of appropriate mitigation measures, no significant unavoidable adverse impacts relative to power are anticipated.

3.13.5 COMMUNICATIONS/DATA

3.13.5.1 Affected Environment

The North Downtown Subarea is provided with cable television and Internet connectivity services by Click! Network, a broadband cable system owned by Tacoma Power, which is a division of Tacoma Public Utilities.

3.13.5.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to communications/data would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The action alternative would continue redevelopment of properties within the North Downtown subarea for urban uses and activities at various intensities. Higher intensity development would increase demand for telecommunications services. The Click! Network is committed to expanding its telecommunications services to meet the additional needs of future growth.

3.13.5.3 Mitigation Measure

No mitigation measures are proposed.

3.13.5.4 Unavoidable Adverse Impacts

No significant unavoidable adverse impacts relative to communications/data are anticipated.

3.13.6 SOLID WASTE

3.13.6.1 Affected Environment

Solid Waste collection services are provided to the North Downtown Subarea by the City of Tacoma. The Environmental Services Solid Waste Management (SWM) Division of the Public Works Department is an "enterprise" utility solely funded by rate revenues. The SWM Division has provided mandatory solid waste collection and disposal services within the City since 1929.

Solid waste collection service is provided for single and multi-family housing units, commercial and industrial customers and all other solid waste customers within the City limits. The City owns and operates its own fleet of automated collection vehicles its own landfill. Weekly garbage collection service is mandatory for all residents. Recycling and yard waste collection is an optional biweekly service that is available at no additional cost to residential customers.

The City has owned and operated the Tacoma Landfill at 3510 South Mullen Street within the City limits since 1960. The landfill was declared a federal superfund site by the U.S. Environmental Protection Agency in 1983 and has been operating under a Federal Consent Decree since 1988. It is required to be closed by December 2014 per the Landfill Consent Decree signed by the City and EPA. The City, under a 20-year contract with Pierce County Recycling, Composting, and Disposal, LLC, established in 2000, delivers all non-processible and non-recyclable materials and waste not placed in the Tacoma Landfill to the 304th Street Landfill located in Pierce County.

Level of Service Standard

The level of service is 1.13 tons per capita per year.

3.13.6.2 Impacts

No Action Alternative

Development within the North Downtown Subarea would occur on a project-by-project basis consistent with development regulations in-effect at the time development is proposed. Impacts to solid waste would be evaluated based on each site-specific project. Broad area-wide cumulative impact analysis would not occur and the advantages of upfront SEPA compliance would not be possible.

Action Alternative

The action alternative will continue development of the lands within the North Downtown Subarea for urban uses and activities at various intensities. Development will increase demand for solid waste services; higher intensity development alternatives will create correspondingly higher demand. Additional solid waste production, if not properly handled, may result in increased vectors and public nuisance.

Table 3.13-2 provides estimates of the amounts of solid waste that are projected to be generated under each of the three development alternatives.

**Table 3.13-2
Alternatives 1-3 – Solid Waste Generation**

	Projected Residents	Annual Solid Waste Generation¹
Action Alternative	30,000	33,900 tons

¹based on LOS of 1.13 tons per capita per year.

3.13.6.3 Mitigation Measures

The following mitigation measures apply to all alternatives.

The City of Tacoma Public Works Department is committed to expanding its solid waste services to meet the additional needs of future growth at the level of service standard noted above.

The City of Tacoma Comprehensive Plan Environmental Element includes the following policy on solid waste and recycling that can help mitigate adverse impacts of increase solid waste production:

- E-SWR-1 Waste Recycling: Support programs designed to seek solutions for disposal problems, to develop means of recycling waste material in order to relieve the problems of waste disposal and to lessen the drain on our natural resources.

The City of Tacoma's *Climate Action Plan* includes recommendations for reuse and recycling that can help mitigate adverse impacts of increase solid waste production. The Plan's strategies seek to maximize commercial and residential recycling, ramping up to 100% recycling. Recommendations include exploring home composting programs and diverting more organic waste from landfill disposal. Other strategies emphasize reuse of materials and reducing waste generation through reusing older buildings and encouraging the deconstruction and recycling of structures being demolished in the city.

The North Downtown Subarea Plan includes the following recommendation that would help mitigate increase solid waste production:

- RECOMMENDATION OS-10: Initiate a Downtown trash and recycling bin program that will improve the efficiency and consistency of Downtown trash and recycling management.

3.13.6.4 Unavoidable Adverse Impacts

With application of appropriate mitigation measures, no significant unavoidable adverse impacts relative to communications/data are anticipated.

SECTION IV

COMMENTS AND RESPONSES

SECTION IV COMMENTS AND RESPONSES

4.1 COMMENTS

One comment letter on the Draft Environmental Impact Statement (Draft EIS) was received during the 30-day comment period from May 15, 2014 to June 16, 2014. The letter was submitted by the Washington State Department of Archaeology and Historic Preservation, and a copy of the letter is included at the end of Section IV.

The letter was generally supportive, and included two comments relevant to the Draft EIS, numbered 8 and 9 in the letter. Both of these comments recommended changes to text regarding the rehabilitation of historic buildings on page 3.9-11 of the Draft EIS. In response to these comments, changes to the text were made as requested on page 3.9-11 of this Final EIS. Corresponding changes were also made to the Draft North Downtown Subarea Plan.

4.2 PUBLIC HEARING

A public hearing on the Tacoma North Downtown Subarea Plan and Draft EIS was held on May 29, 2014, 5:30 p.m. at Bates Technical College, Downtown Campus Auditorium, 1101 S. Yakima Ave, Tacoma, WA. The public hearing was facilitated by Ian Munce of the City of Tacoma's Planning and Development Services Department. Eight people provided oral testimony: Council Member Robert Thoms, Elizabeth Burris, Marty Mattes, Denny Faker, Corine Dixon, Ben Han, Jori Adkins, and Ruby Chambers. In general, the testimony was supportive of the Subarea Plan and EIS, and none of the testimony warranted written responses in the Final EIS. A transcript of the public hearing is included at the end of this Section.

June 16, 2014

Mr. Ian Munce
SEPA Responsible Official
Planning and Development Services
City of Tacoma
747 Market Street, Room 345
Tacoma, Washington 98402

In future correspondence please refer to:

Log: 061614-20-PI

Re: North Downtown Sub Area Plan and Draft Environmental Impact Statement

Dear Mr. Munce:

The Washington State Department of Archaeology and Historic Preservation (DAHP) is in receipt of the Draft North Downtown Subarea Plan (dated May 2014) and the Draft Environmental Impact Statement (DEIS). These documents have been reviewed on behalf of the State Historic Preservation Officer (SHPO) under provisions of the State Environmental Policy Act (SEPA). In response, I am providing the following comments and recommendations for your consideration:

1. On page 10 in Table 1-1 regarding draft recommendations, I recommend including another recommendation under economic development that touches upon historic preservation. Suggested wording might read something like the following:
Work with the Landmarks Commission, Historic Tacoma, DAHP, and other agencies/organizations to stimulate economic activity by preserving, rehabilitating, and interpreting historic properties.
2. On page 11, I recommend including another plan recommendation to encourage in-fill development or additions to be compatible with surrounding development. Wording may read something like the following:
Work with property owners and developers to make sure in-fill construction in historic districts/conservation areas or new additions are sensitive to the character of the district or nearby historic properties.
3. In the section on Consistency with Existing Plans and Policy beginning on page 30, it would be important to mention and describe the Historic Preservation Element of the City's comprehensive plan.
4. In the discussion on Development Capacity beginning on page 54, I note that historic structures are calculated as "undevelopable." While this is appropriate for planning purposes and conservatively calculating development capacity, I recommend a note or brief paragraph be included on page 56 to explain that, while it may be inappropriate to develop many historic structures, in actuality "rehabilitation" of historic structures is appropriate when protective mechanisms and reviews are in place. Mention of the Old City Hall and the Elk's Temple cited elsewhere in the plan could be used as examples.
5. Thank you for mentioning Transfer of Development Rights (TDR) and Live-Work/Work-Live as strategies on pages 57 and 58. Mention of the Landscape Conservation and



Local Infrastructure Program on page 58 is very interesting. A question is whether a similar program could be crafted to serve as a mechanism to assist historic rehabilitation efforts?

6. Thank you for including the section 5 on Historic Resources in the plan. Given the number of key historic properties and districts in the city, including this section is key not only in protecting such resources but also in achieving the goals of the subarea plan.
7. In the first paragraph on page 96, the plan states: "This unfortunate scenario is the result of the high cost of renovating deteriorated buildings and making them code-compliant..." This sentence gives the impression that renovating deteriorated buildings is inherently "high cost" whereas in actuality rehabilitation costs can be driven by many different factors that are not necessarily higher than new construction. Therefore, we recommend revising the sentence to read something like the following: "This unfortunate scenario is the result of the *often perceived* high cost of renovating deteriorated buildings..."
8. A similar recommendation is made in regard to similar text found on page 3.9-11 in the DEIS.
9. Also near the bottom of page 3.9-11 in the DEIS, I recommend a change to the third bullet point to read something like the following:
lack of code flexibility and/or interpretation of regulations that create unnecessary barriers to the rehabilitation of historic buildings.
10. Thank you for mentioning on page 97 and the sidebar on page 98 about the award given to the City of Tacoma of the Historic Property Maintenance Code. The proper reference to the award on page 97 should be: *The Washington State Historic Preservation Officer* and on page 98 should read "...the 2014 Washington State Historic Preservation Officer's Awards for Outstanding Achievement in Historic Preservation."

In closing, thank you for the opportunity to review and comment on the Draft North Downtown Subarea Plan. On behalf of the State Historic Preservation Officer and DAHP staff, we look forward to working with the City of Tacoma to assist implementing the preservation measures called for in the plan. Should you have any comments or questions about these comments, please do not hesitate to contact me at 360-586-3073 or greg.griffith@dahp.wa.gov.

Sincerely,



Gregory Griffith
Deputy State Historic Preservation Officer

c: Reuben McKnight, Historic Preservation Officer



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NORTH DOWNTOWN

SUBAREA PLAN AND ENVIRONMENTAL IMPACT STATEMENT

PUBLIC HEARING

Main Building Auditorium
Bates Technical College
1101 South Yakima Avenue
Tacoma, Washington

May 29, 2014
5:30 p.m.

GINA M. CLARKE, CCR
9115 - 171st Street Court East
Puyallup, WA 98375
(253)279-3465

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PROCEEDINGS

MR. MUNCE: Good evening, everyone. Thank you for coming out. My name is Ian Munce. I work for Planning and Development Services for the City of Tacoma.

For the last year or so, we've had pretty extensive outreach work. We're doing this subarea plan -- you obviously got our notice because you're here -- and an Environmental Impact Statement. We have been doing that work jointly with Bates Technical College. Marty Mattes here is the Director of Facilities for Bates. We did a similar project in South Downtown. We did that jointly with UWT.

Basically, there's three parts to the evening. It will be a very short evening, I hope, but the first part of the evening is just to give you an overview of why we're here, where we're going.

The second part will be Gina, our court reporter, is here and she will take down testimony that you want to give tonight orally, but you can also submit written comments through June 16th.

This is the first of a series of opportunities to comment -- not your last, but the first. We're going to use this opportunity to finalize what's called an Environmental Impact Statement which basically looks at the implications

1 of build-out here in the North Downtown core and Stadium.
2 That's our focus area. So we're looking at those impacts,
3 how we can mitigate for them.

4 So the first part is to go through some slides.
5 Then we'll take your testimony. Then after the hearing is
6 over, I'll stay as long as you want and talk to people about
7 individual issues so you can be prepared to comment going
8 forward.

9 So I'm seeing lots of friendly faces. Thank you.
10 A few smiles, more smiles -- doing better. Okay.

11 So we'll look at the screen here -- and you can
12 read it above -- talking about the boundaries, the area that
13 we're working in. We're talking about a vision statement
14 that we've developed jointly with the community. That
15 vision statement is not finalized until the Council acts,
16 so you have a chance to impact the vision statement. We'll
17 talk about key issues that have been addressed in the
18 Subarea Plan identified as part of the public outreach.
19 We'll talk a little bit about the impact statement and then
20 the next steps.

21 So first of all, this boundary -- there's really
22 two things shown on this. The Hilltop is shown to the left
23 in brown. But the boundary of our project is the downtown
24 core -- thank you very much -- so here's our boundary here,
25 coming up here, bringing in part of Thea Foss, the downtown

1 commercial core.

2 We've received some funding for this. We have
3 three subareas in downtown: North Downtown and South that
4 takes us down to the Dome. In our case, we're looking at
5 520 acres. We initiated the project a year ago, as I said.
6 We started out with a community meeting, got a lot of
7 issues. One issue in particular was the whole future of
8 Schuster slope, and we'll come back to that; issues with
9 parking on-street and off-street; issues about setting the
10 stage with this plan for the Link extension coming up
11 Stadium, coming up Stadium along MLK. So we had steering
12 committee meetings every other Wednesday beginning in
13 September. We met here every few weeks.

14 We pretty much -- the document that we have on our
15 website that we referenced in the postcards you got, there's
16 pretty much been consensus of those who come to meetings,
17 with a couple of exceptions which you may hear about a
18 little later. But we started off saying, "What issues are
19 important to the community?" I'm not asking you to read
20 this now, but this is the vision statement where we talk
21 about the importance of having a center here, open spaces,
22 cultural identify. Partnerships, partnerships, and
23 partnerships is the real theme of all the work we've been
24 doing downtown, because what we're really trying to do is
25 reenergize, revitalize, take some of the great things that

1 have been happening in the Stadium District and see them
2 happen in the Dome District, how we can revitalize more
3 areas.

4 Some of the issues we identified and worked on is
5 there's a business association in Stadium. For those who
6 aren't familiar, Denny Faker, the good-looking gentleman
7 with the gray hair and the open-neck shirt, is the president
8 of the business association and he's been tremendously
9 helpful all the way through. One of the things they wanted
10 was to have the business association's boundaries expanded
11 to reflect where their membership is. We have a proposal on
12 that.

13 I mentioned the Stadium Way slope. A lot of
14 issues -- a lot of interest in reestablishing the bayside
15 trails coming down the hill to Schuster. The Schuster
16 Promenade down below is going to be redeveloped as more
17 pedestrian and bike friendly so we'll have more access along
18 the waterfront. A big Stadium issue has been making those
19 connections down the hill. I'm seeing some nods here.

20 Council Member Thoms has just come in to give the
21 welcoming remarks.

22 MR. THOMS: Good evening.

23 MR. MUNCE: So, Councilman, we're just going over
24 some of the key issues.

25 One of the things that doing a Subarea Plan is so

1 important for is it qualifies us for federal and state
2 transportation funding; and for those of you who have been
3 following the Link extension issue, we needed to get a major
4 federal grant to make that happen. We have every chance of
5 doing that as long as we can show how that project will help
6 the neighborhood accelerate and make more opportunities
7 available, so what we're doing is basically setting the
8 stage for that Link grant application which could be a
9 matter of only three years away as far as getting started on
10 that if we do everything right.

11 Right now in the downtown area, in the South
12 Downtown we don't have any minimum parking requirements for
13 off-street parking, no maximum requirements. We are
14 proposing basically leaving it to the private parties to
15 figure out their own parking needs. We are proposing to
16 extend that up to the Bates Technical College area. That's
17 another proposal.

18 Bates is starting a really aggressive redevelopment
19 plan. Part of their funding strategy is to show the state
20 just how important their activity is to a revitalized
21 downtown. They just got their first project downtown funded
22 and we're looking for more.

23 Parking came up in the scoping session as a really
24 critical issue, both off-street and on-street. Off-street,
25 there is no parking requirement in the pedestrian core of

1 Stadium. Some have argued and will continue to argue that
2 we need to have a parking requirement there. On-street,
3 people are really insistent that we not lose more on-street
4 parking as more activities come about, and so the plan has
5 the objective of maintaining 420 spaces in the core Stadium
6 area.

7 What I'm trying to give you a sense of is we went
8 out into the community and said, "If want to revitalize and
9 accelerate, what issues do we have to focus on," and these
10 were the issues we started with. Here are some specifics:
11 expanding the Stadium Business District boundaries from the
12 small area on your left to the larger area on the right.
13 That ties in with City funding priorities and other
14 priorities that go with being part of a business
15 association.

16 A lot of interest from the condo associations going
17 down the hill and being involved in the Schuster slope
18 design standards, and we have come up with some consensus
19 standards for managing that slope, removing the invasive
20 species, providing additional views. We have negotiated,
21 with Councilman Thoms's help, some language with
22 Environmental Services that I won't go into but is in the
23 plan and you can definitely comment on.

24 As part of this initiative, Environmental Services
25 is contracting with Metro Parks to do a plan by next March

1 to move forward with removing invasives, getting the trails
2 reestablished. Those who want can be involved in that
3 process, and talk to me afterwards if you want to be more
4 involved in that particular project. Oldtimers here
5 remember when those trails were actively used. We want to
6 get back to those days again and also have some better slope
7 management.

8 So these are the design standards, just so you know
9 that they are there.

10 I mentioned integrating with Link. This here is
11 the existing stations. Here's the proposal coming up,
12 coming along MLK up by MultiCare and along to St. Joe's at
13 19th Street.

14 So our work here, with your help, sets the stage
15 for that competitive national grant, and the question for
16 the federal government is, "Why should they fund here rather
17 than Tucson or somewhere else?" So we're in a national
18 competition for limited dollars. The more we can show the
19 benefits of tying education to job opportunities, to the
20 hospitals, to existing Pierce Transit operations, the more
21 chances we have of being funded. There's \$50 million right
22 now in Sound Transit 2, the initiative that passed a few
23 years ago. That's available. We've learned in the last
24 couple of days that we more than likely have about
25 \$9 million of other money that's allocated, and we have

1 applications in for more, so we need the \$50 million from
2 the federal government to complete the gap and we set the
3 stage, again with your help. I mean, if we have
4 dissension -- which is fine -- that we can't resolve, we're
5 not going to be as competitive, so we really are trying to
6 get a consensus community vision, all saying the same sorts
7 of things.

8 Here's the exact proposal to expand the reduced
9 parking area. Right now it comes here in the light brown --
10 Cheri, help me here. Over here as well?

11 MS. GIBBONS: The blue is the proposed expansion.

12 MR. MUNCE: Okay. So the blue is the proposed --
13 here's Wright Park, just to orient you -- and so we propose
14 to extend the reduced parking up the hill, so no minimums,
15 no maximums.

16 I recognize some of you are familiar with
17 development: Every parking space in a new structure garage
18 is about 30 to 40 thousand dollars, so if we require one
19 space per unit, that's a lot. If an apartment owner thinks
20 they can do that and still rent their buildings with half a
21 space -- you know, other people won't have a car or will
22 park it somewhere else -- that makes the project more
23 affordable.

24 This is the plug for Bates and the work they're
25 doing in redeveloping their downtown area. You see the West

1 Annex Building that's proposed for redevelopment. We can
2 talk more about this again in the third stage of the
3 evening, which is the informal process.

4 This is the work we did with the business
5 association on on-street parking, working with Public Works,
6 identifying existing parking and looking then at how do we
7 maintain that as we add bike lanes, as we add Link, as we
8 add other services. So far it has emerged as a major
9 priority. We're not here to tell you this evening what the
10 answer is. I mean, we really are here for you to tell us
11 what we missed, what we got wrong, because we'll be going on
12 from here.

13 Here's the proposal that the Stadium Business
14 Association brought up. That has not been included in the
15 document because there was a split opinion on this and we
16 can -- this discussion will continue because this issue has
17 not been resolved to everyone's satisfaction.

18 We have a Draft Environmental Impact Statement.
19 Based on the comments we get this evening through June 16th,
20 we will finalize that document. It will then become part of
21 what goes forward to the Planning Commission and City
22 Council.

23 We're basically saying as redevelopment occurs in
24 North Downtown and the downtown core, you won't have to do a
25 separate traffic study for every project; you won't have to

1 do a lot of data collection. We've done that data
2 collection, in our opinion, well. You may disagree. We
3 think we've done a good job of it. So when UWT built their
4 new campus or their new Y building on Market Street, they
5 saved four months in their construction process and \$40,000
6 in fees in just being able to be preapproved, and that's
7 really what this is all about, is to say all the development
8 doesn't have to go to Seattle.

9 So this is the postcard that hopefully brought you
10 here this evening. It talks about the comment period
11 through June 16th. We have a public hearing on May 29th --
12 that's our hearing tonight -- okay, May 29, tonight. Then
13 we will be going on to discuss with the Planning Commission
14 on June 18th the comments we receive, but that's just the
15 beginning. This is the beginning, so if you have concerns
16 or issues, tell us, please, this evening. Tell us after the
17 meeting; tell us again. Contact me or Cheri and we'll talk
18 about it some more. But the idea is to get your concurrence
19 so we can go to Council and say we have a document that we
20 feel we've addressed all the issues except for one or two.
21 That's our goal.

22 So we'll issue the final EIS in June. July 16th,
23 the Planning Commission. The Planning Commission makes
24 recommendations -- all these are public meetings -- goes on
25 to the City Council for their review and then City Council

1 adoption in September.

2 The idea is at the end of this work, people will be
3 able to go straight and get their building permits and not
4 have to do separate reviews that have in the past taken a
5 long time. And our competitors -- if you look at that in
6 these terms -- up in Seattle can take two years to review
7 some of these things. What we're saying is, "Invest here:
8 We can get you permits expeditiously."

9 And so before we start taking public comment, I
10 would like to have Council Member Thoms say a few words.
11 Probably negative about me and my work, but...

12 MR. THOMS: No, you don't have to -- I mean, I
13 will --

14 MR. MUNCE: Just please do. Just say something,
15 and then we'll start the public hearing.

16 MR. THOMS: Yeah, I mean, I will say, this is --
17 what we're doing tonight, although it doesn't get the same
18 amount of coverage as some of the other things that are
19 happening in the city, for our neighborhoods and for our
20 business districts this is just as important as anything
21 we're doing, and I would even put that up with the charter
22 review stuff in that this is how we're going to develop the
23 city out moving forward, so I'm glad this is a fairly large
24 group as to some of the meetings we had.

25 And as Ian said, all the way up until that last

1 September time frame, we just did amendments to the Hilltop
2 Subarea Plan when we were (inaudible) amendment that
3 citizens brought forward between the time that we did the
4 first reading and final passage, so it was very dynamic.
5 And I appreciate you guys participating, because we really
6 do need to wrestle with this, not only with staff and with
7 Council, but also with the citizens to make sure, like you
8 saw with the Stadium District, which you brought up, Denny,
9 is having the requirement for parking versus having a policy
10 of not requiring it. There's pluses and minuses to both of
11 them, so we want to make sure that we're doing this in a way
12 that doesn't inadvertently harm our neighborhoods just so we
13 are more developer friendly.

14 So I take to heart what we learn at these meetings
15 and continue to work with Ian and the rest of our staff to
16 make sure that we implement a policy that's wise for our
17 future, so I think these are very helpful. We just did the
18 South Downtown. Hilltop just went through, and so this is
19 the next one.

20 MR. MUNCE: And you can make the announcement now
21 about our government award.

22 MR. THOMS: Yes. We're going on June 20th --

23 MR. MUNCE: Yes.

24 MR. THOMS: -- to Spokane here. The City has
25 gotten an award that Ian and I are going to go accept for

1 the work on this, because this is sort of a little bit
2 leaning forward as it relates to getting your ducks in a row
3 for these EIS's so that when you are going to do
4 development, you've already got a lot of the sort of the
5 nuts and bolts of the regulatory stuff squared away so you
6 are more competitive.

7 I was just back in D.C. earlier in May with the
8 Chamber of Commerce, and when we met with the Department of
9 Transportation at the request of Senator Murray, certainly
10 having these types of things in place helps us be
11 competitive with our Small Starts grant, which is the
12 Department of Transportation grant that we're going to look
13 for to finish out the last third of the Link expansion, so
14 if we do this well now, it will set us up going into the
15 future.

16 The big game, in my mind, with Sound Transit is
17 going to be ST3 which will get us going north towards the
18 airport so we're linked totally with the rest of the region,
19 so I want to just bank ST2, do it right, and then move into
20 ST3 and make the case that Tacoma is ready to leap into the
21 rest of it.

22 MR. MUNCE: Thank you, Councilman Thoms.

23 Are there any burning questions about the procedure
24 before we start taking comments? If someone really has a
25 burning concern about what we're doing, I'd like to address

1 it now.

2 Going once...

3 So, basically, if you would, come up and talk a
4 little slower than me, because I know Gina is going to be
5 mad at me for talking so fast. And if your name isn't
6 easily recognizable, spell it for us, if you would, because
7 we are creating a record. My comments aren't particularly
8 important. Yours are, so we want to get those down. We
9 will make a transcript of this evening's remarks and add it
10 to the written comments and it will go to the Planning
11 Commission and on to the Council.

12 So if you have questions, just get up and say them.
13 I can't answer them right now, but if you have a question,
14 ask it and we'll get back to you. If you have comments,
15 we'll take them, and I'll stay afterwards and try and answer
16 any particular concerns.

17 I know Marty wants to go first and then Liz wants
18 to go second because they've got other commitments. So,
19 Marty, why don't you go first and then Liz.

20 Did I do okay for you?

21 MS. BURRIS: Yes.

22 MR. MATTES: Thank you, Ian.

23 I'm Marty Mattes, Director of Facilities and
24 Operations for Bates Technical College.

25 This coming year, the college will have been in

1 Tacoma in the downtown area for 75 years. We started 75
2 years ago in the Hawthorne School that was located down
3 where the Tacoma Dome is currently at, and we've been a
4 committed part of this community for that long and we are
5 looking for the future to stay a committed part of the
6 community. And economic development is very integral to
7 what we believe we are here to provide for our community,
8 so we teach technical trade programs. We represent over 50
9 trade training areas that we provide education in. We
10 started with apprenticeship; we still have strong ties with
11 apprenticeship.

12 I'd like to say that I think what we bring to the
13 table is an educated community. We've trained many people
14 that are in this room: your children, your parents and
15 grandparents, and we plan to train your future grandchildren
16 and great-grandchildren. What we pride ourselves on is
17 trade training, workplace training, job training skills, and
18 that means that we're bringing people into employment within
19 our region: local small businesses, large industry
20 facilities such as our hospitals and seaport industries down
21 here. We want to see this region, and particularly the
22 North Downtown where we're physically located, grow and
23 aspire to great things.

24 I'd like to say that I've been at every meeting.
25 Ian and Cheri have done a fantastic job with communicating

1 out to the public, with getting information out, bringing
2 people to the table. We had a core group of probably about
3 20 people on average that attended the meetings and they
4 were great, because we didn't all agree and nobody yelled.
5 We did have arguments, but that was to share our differences
6 of our interests, and everybody shared the same interests of
7 the vitality and the growth and the economic development for
8 our arena in this area. So we aired our interests,
9 identified what the differences were, talked about how could
10 we accommodate those, and none of it was selfish. It was
11 all for the betterment of the community.

12 When we talked about parking, I'll just tell you,
13 the first meeting we thought was going to be expressing what
14 this whole process was about. I think 90 percent of the
15 meeting was about parking. And then the last meeting that
16 we had also kind of tended to focus back around to the
17 parking, but it was good because the first meeting was
18 heated and parking was a hot topic. You know, some people
19 wanted more street parking. Some people wanted the vehicles
20 off the curbs in front of their residences and their private
21 businesses. In the end, I think we came up with proposals,
22 with the exception of this one area that Ian mentioned that
23 there's still some resolution that needs to come about.
24 Everybody brought to the table valuable input that was
25 discussed, considered, weighted back and forth.

1 So I think that, you know, whatever concerns you
2 may have -- and I hope that if you have them, you bring them
3 forward, because if you don't, they won't be heard; they
4 won't be considered, and they won't be incorporated into
5 being addressed. Though I don't have any concerns to bring
6 tonight because I've been able to share those throughout
7 this whole process, I want to encourage anyone in the
8 community that hasn't participated to bring them forward so
9 they can be aired, reviewed, considered, and addressed.

10 And I want to say thank you to Ian and Cheri for
11 the fantastic job that the City has done in facilitating
12 this. Thank you.

13 MR. MUNCE: Liz, you're up.

14 MS. BURRIS: Good evening. Thank you, Ian, Cheri.
15 It's been a pleasure to be on this committee, on the
16 steering committee.

17 My name is Elizabeth Burris. I am the chair of the
18 New Tacoma Neighborhood Council. Our Neighborhood Council
19 encompasses this entire area of north Tacoma. We go into
20 the Stadium Business District. We go up to L Street. We go
21 down to 25th. So all the folks, our neighbors, we're real
22 concerned and we want to make business viable and just keep
23 that push on our wonderful, lovely city.

24 Just as a postnote, I've got to say the committee's
25 been great, because we've had input by neighbors -- most

1 notable, folks from the Theater District who actually put in
2 their incorporation of their dreams in the infamous
3 intersection -- I don't know if folks can remember the Row
4 crosswalk deal -- okay, on 6th Avenue, St. Helens, Baker --
5 really, what that area should look like in the final dream
6 of this city.

7 But as a postnote, I'd like to just tell you that
8 our city, we are really going places. Just last week, New
9 Tacoma submitted a project to an organization called
10 Neighborhoods USA and this is a neighborhood organization of
11 people all over the United States, and there are some folks
12 from Philippines, Japan, and the Netherlands also coming to
13 this meeting. And our project, the North Gateway Theater
14 District, which if you haven't gone by there to see the
15 Goddess of Commerce, you just must. But this whole project,
16 we received Second Place for Neighborhood of the Year and
17 it's really a big deal. I mean, we got the plaque; we got
18 some money, but again, it's just another thing of putting
19 the livability of Tacoma on the map. And, you know, there's
20 other projects around the city, but, you know, I just think
21 it's a marvelous thing, and with the addition in this
22 document of incorporating the ideas and the dreams of the
23 neighbors, it's just going to make Tacoma so much more
24 livable, and I'm just very, very excited at what's going on.

25 And all of us citizens, we should be so very proud

1 of just the great talent that we've got in the city, in our
2 neighbors, in the businesses that all want to work together
3 to make this just a fabulous place to live, work, and
4 play -- and I'm not going to get into the parking thing.
5 We're more into wanting people just to live, work, play,
6 take Transit and just be a designation location.

7 Thank you.

8 MR. MUNCE: So anyone who wants to grab the mic,
9 walk up slowly to the mic, please, and go ahead. Otherwise,
10 it will be a very short meeting.

11 Come on, Denny.

12 MR. FAKER: Well, I was waiting for it to be -- all
13 right. I was waiting to see if any of our guests wanted to
14 get up and say anything first.

15 I am Denny Faker. I'm from the Stadium Business
16 District. I have been the manager of the Stadium Business
17 District for 16 years now.

18 One thing that I think people in Tacoma are
19 starting to realize more and more all the time is that the
20 people, the citizens, the business owners and operators know
21 their neighborhoods and their districts better than anybody;
22 and for a lot of years, that's been a fact that hasn't
23 really been so much realized by the City itself, the City
24 government. But more and more, all the time I'm seeing
25 where the City is starting to respect that knowledge and

1 respect that history that we have and how ingrained some of
2 us are in our neighborhoods and in our districts.

3 So when this subarea planning committee idea came
4 about, I was very happy to come down and be Marty's guest
5 down here at the Bates school and keep in touch with Robert
6 Thoms, our city councilman who has been real active and
7 sensitive to what people want and do. He's a great
8 councilman. And for Ian and Cheri to be there to hold our
9 hand, so to speak, but mostly to direct us in such a way
10 that when we come up with an idea, we just aren't running in
11 and holding a neighborhood meeting and yelling and shouting.
12 We're learning and finding out how to do things in such a
13 way that we really do have the ability to make an impact
14 once we take a proposal or a statement and go to the higher
15 people in the City government.

16 This really has fascinated me, this whole Subarea
17 Plan idea. It's a 20-year plan, and so the City of Tacoma
18 is saying, "Citizens and business people, we want you to get
19 together. We want you to enjoy the company of our staff and
20 we want you to come back to us and tell us over the next 20
21 years, what do you need? What do you want? What do you
22 foresee for your district?" That is so big.

23 I own a little coffee shop up in the district and
24 it's at the door of Stadium Thriftway and so my job is to
25 stand and drink coffee and talk to people all morning long

1 while the girls make coffee and everybody has a good time
2 and gets buzzed on caffeine and goes back to work. But so
3 much of the conversation is things that I'm able to be
4 involved in and enjoy as the manager of the district, and
5 it's amazing how much the different citizens and customers
6 there at the store like to get involved in the conversation
7 and are surprised by what goes on and how nicely the City is
8 doing it these days. We are included. We count. Our
9 voice, our opinions, our intentions really matter, and this
10 is just one of the examples of how this is working for us.

11 Yeah, I'm kind of known as the guy that makes a big
12 deal out of parking all the time because of the situation
13 that we have up in the Stadium District. It's more unique
14 to the Stadium District than it is to a lot of other parts
15 of the city. A couple of things that have bugged me real
16 bad have to do with the fact that as small public work
17 improvements go on, maybe building out the sidewalks and the
18 like, a couple of parking spaces disappear. Stadium Way got
19 redone and we lost a whole bunch of parking all the way down
20 Stadium Way.

21 I was on the committee that helped plan the remodel
22 and reconstruction of Stadium High School, and, yeah, we
23 built a parking garage, but I wanted it to be about twice as
24 big as it is. At this point, students from the high school
25 are parking way out into the neighborhood in front of

1 people's front doors.

2 There's not enough off-street parking at the
3 hospitals. Tacoma General runs courtesy vans that take
4 their employees up and down the residential streets so that
5 they can park their cars up there and get a ride to the
6 hospital. This starts adding up pretty big for a guy that's
7 trying to help the businesses survive.

8 So government across the nation is known to talk
9 about push-out and push-in of parking. So, for example, a
10 small business district, they call it push-out when the
11 district gets so busy that their customers and their
12 employees start to push out a little bit into the
13 residential. Well, we're suffering push-in. We've got
14 people out there for other reasons than doing business in
15 the district pushing into our district, so naturally I'm
16 sensitive, naturally I'm kind of upset that we're not giving
17 any better thought to the future.

18 Even if we do continue -- and I fought real hard to
19 get the extension of the light rail in -- but even if we do
20 continue to think about light rail, bike paths, and
21 walkability, if we are going to continue to grow -- and the
22 Stadium District has a pretty high limit on new
23 construction. I mean, we're the highest, the most high of
24 all the business districts with our height restriction. We
25 have to at least maintain the parking type of limit that we

1 have now in order for us to be able to grow. This isn't
2 Manhattan. We don't have a thousand miles of subway running
3 underground that stops at every street corner with people
4 coming up out of the stairs, so we've got to think about our
5 future.

6 A couple of months ago, I was down at a City
7 Council meeting and I was speaking to the Council about
8 parking. I forget what introduced it, but it was the issue,
9 and I brought to everybody's attention that there had just
10 been a mayoral election in Seattle and the past mayor had
11 lost his seat, and of the three biggest issues that were
12 discussed in the news media, two of them were parking and
13 transportation. The mayor got canned by the people, so the
14 people have to speak.

15 I think it's important for us to speak about
16 parking and transportation, street conditions, walkability,
17 bike paths, light rail. You name it, we need to do it now
18 and we need to consider the future because our kids and our
19 grandkids -- and speaking in a business way, the kids of our
20 businesses and their kids, which would be owners and future
21 owners -- we need to be able to park our cars.

22 Now, I was able to work with Ian and the other
23 people on the committee to get some parking put into this
24 proposal, that, number one, the Stadium District should not
25 lose any of the parking that it has now. In the last more

1 than 18 months, I've lost 50 parking stalls in the Stadium
2 District. It almost seems impossible, but it's true. And
3 if that goes on like that, we're dead ducks. So I kind of
4 feel like I've had to draw a line in the sand and I've
5 become kind of a thorn in some people's sides, but
6 somebody's got to stand up and stand for this. That's so
7 much of what the parking talk is about. It's not frivolous.
8 It's very important and it's part of our future.

9 One of the things that we weren't able to get built
10 into this, because it really is such a huge issue of its own
11 and something that maybe we have to keep working with the
12 city government is that we have always in the past had
13 off-street parking requirement so that if we were going to
14 get together and build a high-rise building up on a street
15 corner, we would be required by the City to have at least so
16 many off-street, on their our prop- -- on our own property
17 parking spaces. Well, I don't know what happened here.
18 Things fell through the crack about a year and a half ago or
19 so, a couple of years ago, and it turns out that right now
20 in the Stadium District with our high-rise allowances, we
21 have zero off-street parking requirement by the City.

22 So if a person had a hankering and the dough to do
23 it, they could come in and build a 15- or 20-story building
24 and not have to provide one single parking spot off the curb
25 side on their own property. Now, a lot of people say,

1 "Well, you know, what builder is going to do that? You
2 know, give those guys some credit for having some common
3 sense." Well, I don't know that that's the best way to
4 entrust our future: "Give them credit. They'll do it."
5 The least that we need to do is have a requirement so that
6 when the investor and the designer and the architect and the
7 builder and the construction company all sit down around the
8 table and they're talking about the hundreds of things that
9 have to be discussed when you're planning a big, new
10 building and somebody says, "Oh, by the way, we should talk
11 about parking," and the question is asked, "Well, what's the
12 City's requirement?" "Oh, nothing, zero." "No?" "Yeah,
13 it's zero." "Oh, okay. Well, how many do you think we
14 should have, then?" Where does the thing start? The bar is
15 so low that common sense maybe doesn't even get used.

16 So in this case, I'm disappointed in the City. I
17 think that there should be on-street parking required, and I
18 think that is what sets the bar so that then they do start
19 somewhere discussing, "Well, how many should we have, then?
20 What's common sense?" Not, "Well, the City has zero, so
21 maybe it's not very important. Let's move on to the next
22 subject." So anyway, that's how come I got to be the bad
23 guy about parking here, and I feel like the good guy doing
24 it.

25 And other than that, once again, I'm very proud

1 that we got the citizens together and these business people
2 together that we did, with the help of our government, and
3 the school allowing us to come here and meet. I am real
4 happy with the way this thing reads but for my on-street
5 parking issue. I'll stay on that, believe me. It's one of
6 those things where they look out the window down at the
7 Municipal Building and they go, "Oh, no, here he comes
8 again," so I'll stay fighting it because I believe in it.

9 But I really feel good about what I said: that the
10 City has allowed us to have a voice not just in this 20-year
11 plan, but in so many other things that I could go on and
12 talk about that are just great opportunities. I find myself
13 thanking the Mayor and the Council very often for the
14 opportunity that they're allowing us to have as the citizens
15 of Tacoma. This is a good town.

16 So thank you. Keep up the good work, everybody.

17 MR. MUNCE: So we have some new faces here this
18 evening. We'd love to have some new questions or comments.

19 MS. DIXON: I don't have a comment. I don't want
20 to talk. I just have a question.

21 MR. MUNCE: No, no. Please come up.

22 MS. DIXON: We could do it afterwards.

23 MR. MUNCE: Please come up to the --

24 MS. DIXON: Well, I don't have any comments per se,
25 except I just have a question -- two questions.

1 MR. MUNCE: Okay. That gets them on the record and
2 them we can address them.

3 MS. DIXON: Oh, you want me -- okay.

4 My name is Corine Dixon and I live at One North
5 Stadium Way, Number 14, in Denny's district, and although
6 our condo is one of the tallest ones, we do have plenty of
7 parking, off-street parking. But we also have a problem
8 with street -- I understand the street parking from a
9 business point of view.

10 My question is, as I understood Denny, the Stadium
11 District is only the only one that does not have off-street
12 parking requirements or doesn't the city anywhere?

13 MR. MUNCE: The answer is, in certain zones we're
14 trying to incent mixtures development. It's not city-wide.
15 It's not even Stadium District-wide. It's in the pedestrian
16 core around Thriftway.

17 MS. DIXON: Okay. Well, there are a lot of
18 apartment houses in that area. There a lot of -- many -- I
19 mean, that is an apartment residential area with some new
20 condominiums, and I guess to me personally it makes no sense
21 to require off-street parking for the new ones.

22 MR. MUNCE: New residential development will
23 continue to have off-street parking requirements. It's just
24 in the commercial core of Stadium, the Hilltop, certain
25 other areas we've targeted to try and encourage development,

1 but it's not in the residential areas.

2 MS. DIXON: So you're trying to encourage
3 businesses to come in?

4 MR. MUNCE: Exactly.

5 MS. DIXON: But if there are no places to park, why
6 would businesses want to be there?

7 MR. MUNCE: Great question. Thank you. We'll talk
8 afterwards.

9 MS. DIXON: All right, all right.

10 The second question -- and I think Denny maybe
11 answered it -- I'm interested in the slope. I have been out
12 traveling a lot, so I haven't been aware of these meetings
13 that were going on. Denny told me.

14 The North Slope vegetation plan, which I understand
15 is part of this plan --

16 MR. MUNCE: Correct.

17 MS. DIXON: -- that has not yet been defined -- or
18 there's a public hearing process for that one as well; is
19 that right?

20 MR. MUNCE: That is one of the agenda items for
21 this evening and we'll be taking comments all the way
22 through June 16th. We'll be taking comments on the same
23 issue before the Planning Commission and City Council, so
24 this is an opportunity to get your comments in on Schuster
25 slope management.

1 MS. DIXON: Where is that plan? I haven't been --

2 MR. MUNCE: The plan, if you insist, we'll get you
3 a hard copy, but otherwise it is online.

4 MS. DIXON: Oh, it is online?

5 MR. MUNCE: And we gave you the address on the
6 postcard. But one way or the other, we'll get you that
7 information.

8 MS. DIXON: Okay, I looked at that, but it didn't
9 make any sense.

10 Okay. Well, I won't talk -- I won't take any more
11 time. I'm finished.

12 MR. MUNCE: I've got an extract for you.

13 Any more questions and comments? I'm not really
14 supposed to address comments, but I can't help myself.

15 MR. HAN: My name is Ben Han. I'm a planner with
16 Pierce Transit. My job is to deal with everything bus stop
17 related, from design to dealing with comments about bus
18 stops, to improving bus stops all over Pierce Transit's
19 service area.

20 I've had the pleasure of working with Ian and Cheri
21 over the past few months and kind of joined in, although a
22 little late in the game. We've been involved since the
23 beginning, as I understand it, but I personally began
24 getting involved in October, and I just kind of want to say
25 how -- I guess I have to say something for Transit.

1 I just have to say, like, I personally am very
2 interested in the North Downtown subarea because the North
3 Downtown area represents some of the highest Transit
4 ridership in our entire service area. I mean, Commerce
5 Street -- Commerce and Pacific Streets alone deal with
6 several thousand people a day. The average daily ridership
7 within North Downtown per bus stop is about four times
8 higher than the entire service area that we serve.

9 I just really want to say again it's been a real
10 pleasure working with Ian and Cheri, and they've been really
11 accommodating with my comments, and I know I've been writing
12 some pretty lengthy comments myself, so I really think this
13 work kind of reflects the City's willingness to generally
14 listen to everyone. And as you probably heard from everyone
15 else participating, that this work really does represent how
16 active the City has been in listening to people's comments.

17 I think essentially that's all I really wanted to
18 say, but also I just kind of want to put myself out there,
19 so if you have any questions, you can talk to me.

20 MR. MUNCE: Further comments? Or we'll close the
21 public hearing and just answer questions.

22 MS. ADKINS: I'm Jori Adkins and I live in the Dome
23 District, and I was very involved in the South Downtown
24 plan.

25 I just want to talk a little bit about the Link and

1 the extension of the Link and how wonderful it is that we're
2 tying all these neighborhoods together and the extension of
3 it from the Dome District through town and finally it's
4 going to actually go somewhere, through Stadium and then
5 wrapping around.

6 I, of course, used the Link to get here tonight and
7 then walked up the hill. I use it all the time since I
8 actually live downtown, and I just think that some of these
9 things that you guys are working on, like the whole parking
10 thing to me, I think the city is in transition and it's a
11 thing that, you know, we will have a major, like, battle
12 about because it isn't settled yet and the city hasn't got a
13 lot of people living downtown like I do so that you can
14 actually use the Link and use buses to get around and so
15 people assume that you're going to have to use cars, but you
16 really don't.

17 In Seattle, I moved there in -- what -- '87 or
18 something like that, and everybody used cars and most
19 everybody left the city at 5:00. It was amazing to stand in
20 the middle of, like, First Avenue at 5:00 and there would be
21 nobody, and that's the way it is here. But look what's
22 happened now. Seattle, it's like there are people living
23 downtown. There's like 40,000 people living downtown now
24 and Capital Hill has like 60,000 people, so it makes a big
25 difference when you have something like that happen. People

1 use -- they build without putting parking in.

2 So it's a transition and we are going to have a
3 period of probably this next 20 years where we are, like,
4 battling that whole thing, and it's just something, I think,
5 to think about and realize that it's not one or the other.
6 It's like finding some way to make it work for this time of
7 transition.

8 Thank you.

9 MR. MUNCE: Other comments?

10 MS. CHAMBERS: I'll do one.

11 MR. MUNCE: Please. Someone we haven't heard from
12 before.

13 MS. CHAMBERS: So my name is Ruby Chambers, and my
14 husband, George, and I own two building in downtown Tacoma
15 in the Theater District and we have been a big part of the
16 development of Opera Alley, and it's just been a real honor
17 to be involved in this whole project downtown and see what's
18 going on, and we're just noticing more and more people, more
19 and more pedestrians and more and more bicyclists. I mean,
20 I can remember being in Opera Alley 12 years ago working on
21 the building and on a Saturday, you'd see nobody and, like,
22 if you saw them, they looked like they were lost or afraid.
23 Now you see families and people and groups and it's just --
24 it's just wonderful, and I just want to share with you our
25 joy and how proud we are to be so involved with downtown

1 Tacoma.

2 MR. MUNCE: We'll also take some critical comments.
3 Seriously, any more comments?

4 I think I'm getting ready to close the hearing
5 portion of it. As I say, a transcript of this will go to
6 the Planning Commission, especially as the remarks were so
7 favorable. I'll underscore my compliments. Thank you.

8 So we'll finish the hearing. I'm going to stay as
9 long as you want to answer particular questions that you
10 have and then we'll take written comments through June 16th.
11 And as you've signed up, we will punish you by sending you
12 more information as to the next hearings so we keep you in
13 the loop.

14 So thank you all for coming, and if there are no
15 more comments, we are officially adjourned.

16

17 (The hearing was adjourned at 6:18 p.m.)

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APPENDIX A
DISTRIBUTION LIST
Tacoma North Downtown Subarea Plan
Final EIS
-July 2014-

The following State and Federal Agencies received notification:

<p>City of Federal Way Planning Director 33325 8th Avenue South Federal Way, WA 98003</p>
<p>City of Fife Planning Director 5411 23rd Street East, Fife, WA 98424</p>
<p>City of Fircrest Planning Director 115 Ramsdell Street Fircrest, WA 98466</p>
<p>City of Gig Harbor Planning Director 3510 Grandview Street Gig Harbor, WA 98335</p>
<p>City of Lakewood Planning Director 6000 Main Street Lakewood, WA 98499</p>
<p>City of Milton Planning Director 1000 Laurel Street Milton, WA 98354 Notice of Availability sent</p>
<p>City of Puyallup Planning Director 333 South Meridian, 2nd Floor Puyallup, WA 98371</p>

<p>City of University Place Planning Director 3715 Bridgeport Way West, #B2 University Place, WA 98466</p>
<p>Environmental Protection Agency Howard Orlean 1200 6th Avenue Mail Stop ECL-11 Seattle, WA 98101</p>
<p>Environmental Protection Agency Kris Flint 1200 6th Avenue Mail Stop ECL-11 Seattle, WA 98101</p>
<p>Joint Base Lewis/McChord Lang Tran, 62 CES/CECP 555 Barnes Boulevard McChord AFB, WA 98438</p>
<p>Metro Parks Tacoma Lois Stark 4702 South 19th Street Tacoma, WA 98405</p>
<p>National Marine Fisheries Service Kathe Howe 7600 Sand Point Way NE Seattle, WA 98115</p>
<p>Pierce County Planning Director 2401 South 35th Street Tacoma, WA 98409</p>
<p>Pierce County Executive 930 Tacoma Avenue South Tacoma, WA 98402</p>
<p>Pierce Transit Pierce Transit Headquarters P.O. Box 99070 3701 96th St SW Lakewood, WA 98496-0070</p>
<p>Port of Tacoma Planning</p>

P.O. Box 1837 Tacoma, WA 98401
Port of Tacoma John Wolfe One Sitcum Plaza Tacoma, WA 98421
Port of Tacoma SEPA Official P.O. BOX 1837 Tacoma, WA 98401
Puget Sound Clean Air Agency Paul Carr 1904 3 rd Avenue, Suite 105 Seattle, WA 98101
Puget Sound Partnership Chris Townsend P.O. Box 40900 Olympia, WA 98504
Puget Sound Regional Council Rocky Piro 1011 Western Avenue Seattle, WA 98104
The Puyallup Tribe of Indians Andrea George 3009 Portland Avenue Tacoma, WA 98404
The Puyallup Tribe of Indians Bill Sullivan 3009 East Portland Avenue, Tacoma, WA 98404
The Puyallup Tribe of Indians David Duenos 3009 East Portland Avenue, Tacoma, WA 98404
The Puyallup Tribe of Indians Jeffrey P. Thomas 6824 Pioneer Way West Puyallup, WA 98424
The Puyallup Tribe of Indians

<p>Raul Ramos, Tribal Council 3009 East Portland Avenue, Tacoma, WA 98404</p>
<p>The Puyallup Tribe of Indians Teddy Wallace 3009 East Portland Avenue Tacoma, WA 98404</p>
<p>Sound Transit Kate Johnson 401 South Jackson Street Seattle, WA 98104</p>
<p>Sound Transit Mike Merrick 401 South Jackson Seattle, WA 98104</p>
<p>Tacoma Pierce County Health Department Brad Harp, EH-3129 3629 South 'D' Street Tacoma, WA 98418</p>
<p>Tacoma Pierce County Health Department Sherrilyn Reed, EH-3129 3629 South 'D' Street Tacoma, WA 98418</p>
<p>U.S. Army Corps of Engineers Ron Wilcox P.O. Box C-3755 Seattle, WA 98124</p>
<p>U.S. Coast Guard District Planning Office 915 Second Avenue Seattle, WA 98101</p>
<p>U.S. Department of the Army – Directorate of Public Works Environment Division (B Vanhoesen) Building 2012 Ligget Ave Box 339500 MS 17 JBLM, WA 98433</p>
<p>U.S. Department of Housing and Urban Development Seattle Regional Office, Mary McBride 909 First Avenue, Suite 200 Seattle, WA 98104</p>

<p>U.S. Department of Fish and Wildlife 48 Devonshire Road Montesano, WA 98563</p>
<p>U.S. Department of Fish and Wildlife Katie Knight 600 Capitol Way North Olympia, WA 98501</p>
<p>U.S. Department of Fish and Wildlife P.O. Box 73249 Puyallup, WA 98373</p>
<p>Washington State Dept of Ecology SEPA Unit PO Box 47703 Olympia WA 98504-7703</p>
<p>Washington State Department of Health Kelly Cooper P.O. Box 47820 Olympia WA 98504</p>
<p>Washington State Department of Natural Resources Hugo Flores P.O. Box 47027 Olympia, WA 98504</p>
<p>Washington State Department of Transportation Katherine Klockenteger P.O. Box 47325 Olympia, WA 98504</p>
<p>Washington State Department of Transportation Dale Severson P.O. Box 47440 Olympia, WA 98504</p>
<p>Washington State Department of Transportation David Smelser P.O. Box 47407 Olympia, WA 98504</p>
<p>Washington State Department of Social and Health Services Elizabeth McNagny P.O. Box 45848 Olympia, WA 98504</p>

<p>Washington State Ferries Kojo Fordjour 3901 3rd Avenue, Suite 500 Seattle, WA 98121</p>
<p>Washington State Growth Management Services Review Team P.O. Box 42525 Olympia, WA 98504</p>
<p>Washington State Office of Archaeology & Historic Preservation Greg Griffith P.O. Box 48343 Olympia, WA 98504</p>
<p>Washington State Office of Archaeology & Historic Preservation Gretchen Kaehler P.O. Box 48343 Olympia, WA 98501</p>

Additional notices were sent to the following agencies and groups as appropriate:

- The North Downtown Subarea Plan & EIS Steering Committee members – Via Email
- Residents, businesses, and tax-payers within the North Downtown Subarea and within 400 feet of the Subarea boundaries – Via Us Mail
- Other identified interested parties and stakeholders – Via Email and US Mail

APPENDIX B

A New Approach to Growth Allocations for Tacoma's Urban Centers

Report Prepared by VIA Architecture

DRAFT: September 27, 2013

1. Introduction

This report documents a project to establish improved growth and employment forecasts for the City of Tacoma that properly reflect the City's aspirations to concentrate growth in its downtown core and mixed-use centers. The results of this work will inform the City of Tacoma's Transportation Master Plan and transportation modeling efforts.

The project consists of the following components:

- Reconfigure the Traffic Analysis Zones (TAZ) to align with Tacoma's planning boundaries
- Perform development capacity estimates for Tacoma's Regional Growth Centers (RGC), Manufacturing/Industrial Centers (MIC), and Mixed Use Centers (MUC)
- Distribute Tacoma's total population and employment allocations for 2030 and 2040 to the RGCs, MICs, and MUCs

Methods and results are described below.

2. TAZ Reconfiguration

Pierce County and the Puget Sound Regional Council (PSRC) have each developed a set of traffic analysis zones (TAZs) that cover Tacoma's geography. However, both TAZ sets have numerous boundaries that do not align with the planning boundaries for Tacoma's Regional

Growth Centers (RGC), Manufacturing/Industrial Centers (MIC), Mixed-use Centers (MUC), and are even misaligned with the city limits in some cases.

Pierce County's and PSRC's established TAZ sets are fairly similar in terms of granularity and orientation. After consulting with staff from both organizations, it was decided that the PSRC "3700" TAZ set would be the best choice to form the base for subsequent modifications to align the TAZ boundaries with Tacoma's planning area boundaries.

The first draft of TAZ reconfiguration involved aligning TAZs with planning boundaries at the expense of alignment with street networks. Although this approach minimized the need to create brand new TAZs, Pierce County and PSRC both advised that the TAZ set would be more defensible and meaningful if it also maintained TAZ boundary alignment with important street networks.

PSRC staff made modifications to the first draft TAZ set, reintroducing numerous new TAZs with boundaries aligned to street networks, while preserving the boundary alignments with Tacoma's planning areas. The final TAZ set has a total of 3868 TAZs, as mapped in **Figure 1**. The TAZ set is also available in GIS shapefile format.

3. Citywide Allocations

Allocations for population and employment were developed for the 2030 and 2040 planning horizons. For 2030, the allocations used for the City as a whole are those established by Pierce County in compliance with the Growth Management Act (GMA). For 2040, the allocations used were taken from the PSRC's VISION 2040 report, and are based on data generated by the State of Washington's Office of Financial Management. These total allocations are shown in **Table 1**.

The assumptions made to distribute the total allocations between Tacoma's RGCs, MICs, and aggregated MUCs are also shown in **Table 1**.

These assumptions reflect local and regional intentions to concentrate growth in urban centers, and are also informed by broad assessment of existing conditions and future potential, such as can be found in the South Downtown Subarea Plan.

4. MUC Allocations

Once allocations were determined for the aggregated MUCs as shown in **Table 1**, they had to be divided among the individual MUCs. Allocations to individual MUCs were determined according to development capacity, which was estimated at the parcel level as described in **Section 6** below. Each MUC was allocated population and employment proportional to its fraction of the total capacity found in all the MUCs, as shown in **Table 3**. For example, if a MUC comprised 10% of the population capacity found in all the MUCs, and 15% of the employment capacity found in all the MUCs, then that MUC received 10% of the total MUC population allocation, and 15% of the total MUC employment allocation.

5. TAZ Allocations

Allocations to individual TAZs within each RGC, MIC, and MUC were determined according to development capacity, similar to the method used to divide the total MUC allocation between the individual MUCs. Each center's total population and employment allocation was distributed among TAZs proportional to the fraction of the center's total population and employment capacity within each TAZ. The allocations by TAZ for each RGC, MUC, and MIC are given in **Tables 4 through 20**.

6. Development Capacity

In order for areas to absorb their allocations, there must be sufficient development capacity. Capacity estimates for population and employment were derived for each of the RGCs, MICs, and MUCs, as shown in **Tables 2 and 3**.

First of all, parcels with the following uses were designated as undevelopable:

- schools
- historic structures
- parks and greenbelts
- religious services
- hospitals
- significant government offices
- utilities
- right-of-way (including rail)

To account for the dependence of future development potential on the value of existing improvements, parcels with an improvement-value-to-land-value ratio greater than 2 were designated as undevelopable. A map of developable and undevelopable parcels is provided in **Figure 2**.

For all parcels not identified as undevelopable, development capacity was calculated according to an assumed capacity of population and employment based on the zoning, as shown in **Table 21**. Capacities for zones in the RGCs and MUCs were based on 70% lot coverage, along with zone-specific assumptions for average number of floors, and for residential-commercial use mix. Residential floor area capacity was converted to population using an average unit size of 1000 square feet, and an average household size of 2.32, which is Pierce County's projected year 2022 average household size for Tacoma. Commercial floor area capacity was converted to employment assuming an average of 375 square feet per employee.

Note that the estimated capacities for mixed-use zones shown in **Table 21** are significantly higher than those assumed in the 2007 Pierce County Buildable Lands report. We believe that these discrepancies are due to the County's higher weighting of past trends, and that the

higher capacities are justified based on the kind of development that can be expected to occur in the future.

Figure 1: Modified TAZ set with boundaries that align with Tacoma's planning areas

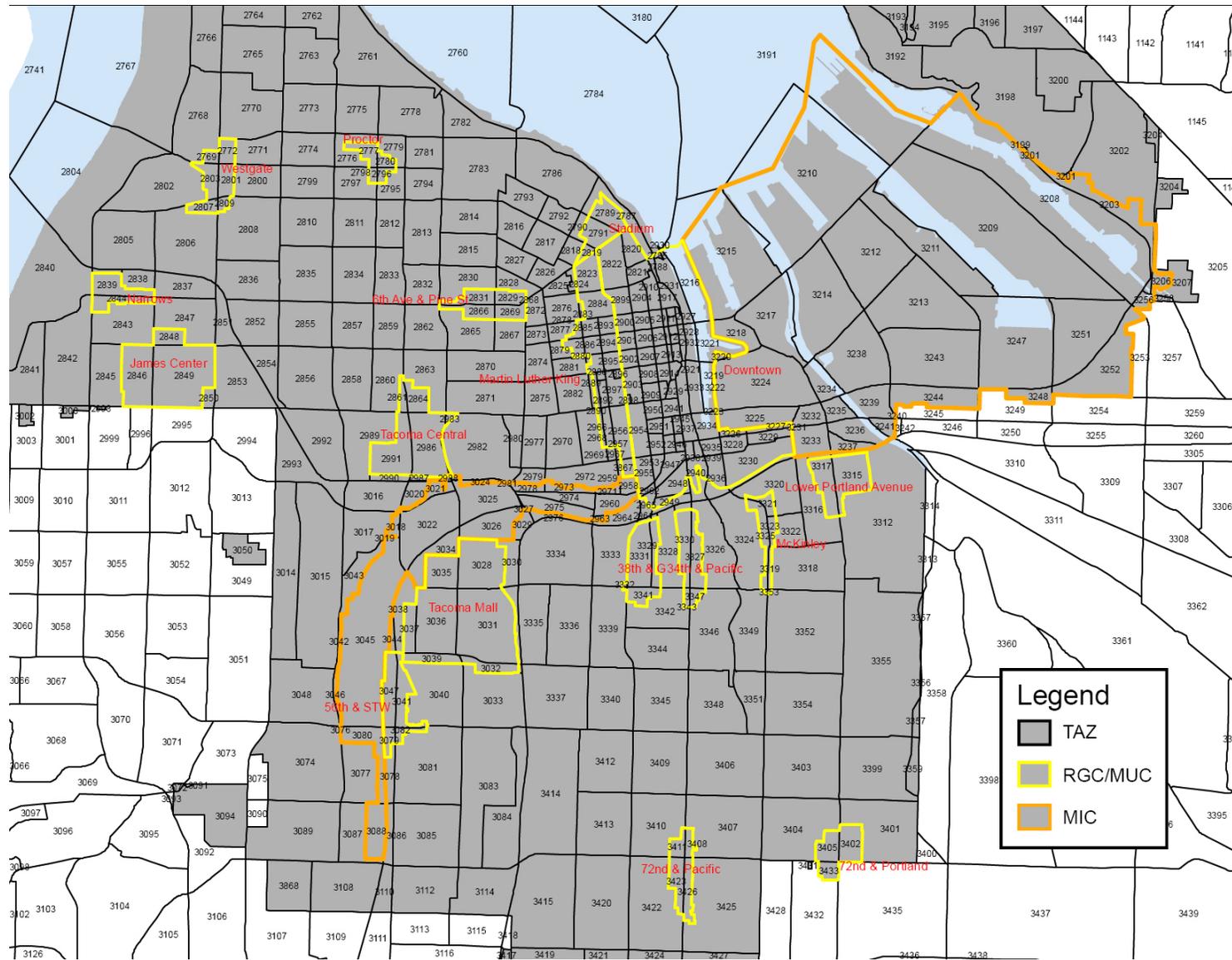


Figure 2: Undevelopable Parcels

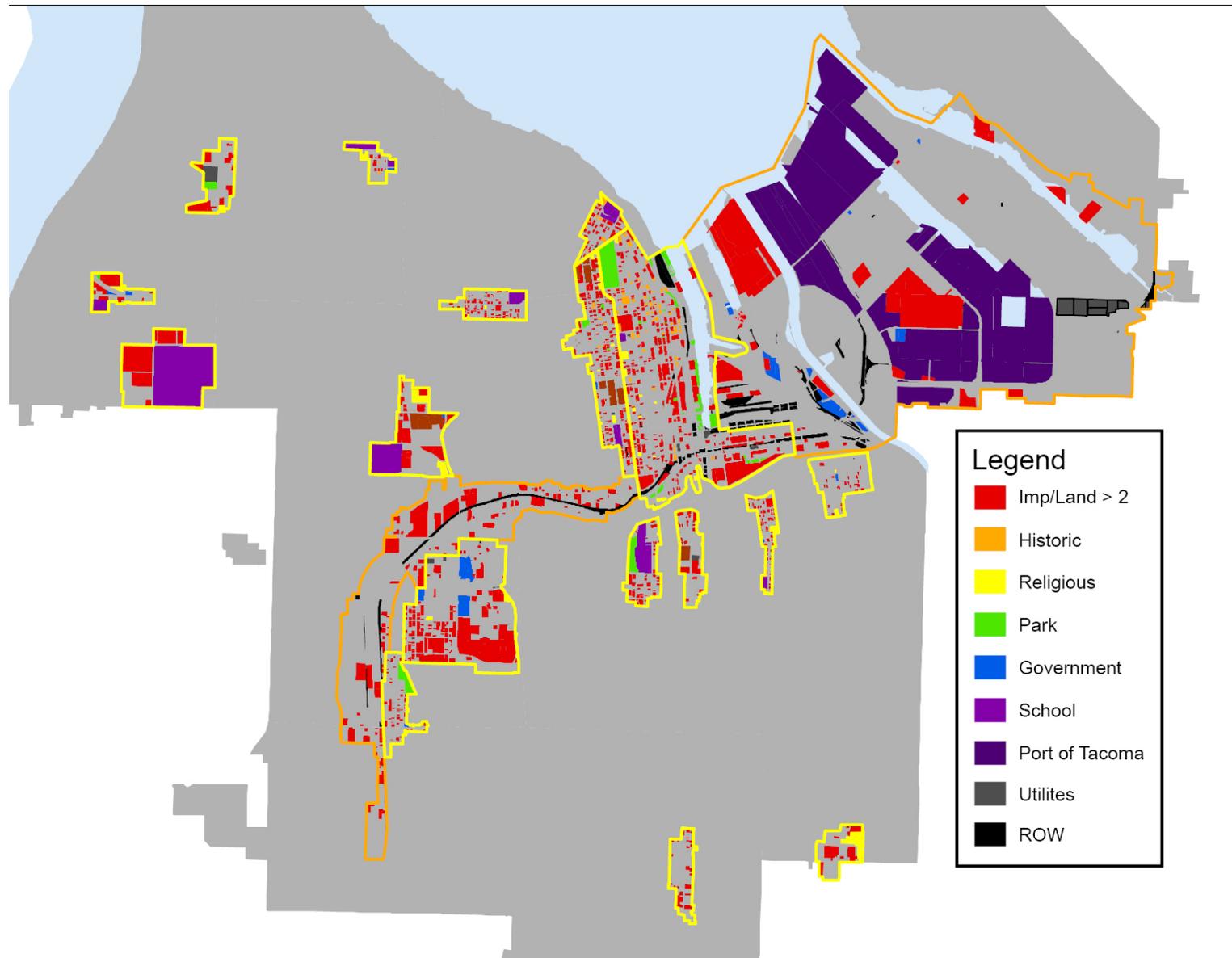


Table 1: Citywide allocations

	population allocations			employment allocations		
	percent	2030	2040	percent	2030	2040
Tacoma	100%	78,600	127,000	100%	64,200	97,000
Downtown Regional Growth Center	60%	47,160	76,200	70%	44,940	67,900
North Downtown	26%	20,080	32,445	30%	19,470	29,417
South Downtown	26%	20,080	32,445	30%	19,470	29,417
Martin Luther King	9%	7,000	11,310	9%	6,000	9,065
Tacoma Mall Regional Growth Center	6%	5,000	8,079	0	5,000	7,555
Tideflats Manufacturing/Industrial Center	0%	0	0	8%	5,000	7,555
South Tacoma Manufacturing/Industrial Center	0%	0	0	8%	5,000	7,555
remaining allocation	34%	26,440	42,721	7%	4,260	6,436
% of remaining allocation to MUCs	50%			80%		
MUCs	17%	13,220	21,361	5%	3,408	5,149
Outside all centers	17%	13,220	21,361	1%	852	1,287

Table 2: Citywide parcel area, development capacity, and allocations

	Parcel Area (acres)	Capacity		Capacity minus 25% market factor		Percent of total allocation		2030 allocation		2040 allocation	
		pop.	empl.	pop.	empl.	pop.	empl.	pop.	empl.	pop.	empl.
All Tacoma	24,053					100%	100%	78,600	64,200	127,000	97,000
Centers	6,812	266,419	285,136	199,814	213,852	83%	99%	65,380	63,348	105,639	95,713
Outside Centers	17,241					17%	1%	13,220	852	21,361	1,287
Downtown Regional Growth Center	818	127,547	91,011	95,660	68,258	60%	70%	47,160	44,940	76,200	67,900
North Downtown	283	52,666	41,008	39,499	30,756	26%	30%	20,080	19,470	32,445	29,417
South Downtown	365	57,789	34,706	43,342	26,029	26%	30%	20,080	19,470	32,445	29,417
Martin Luther King	170	17,092	15,297	12,819	11,473	9%	9%	7,000	6,000	11,310	9,065
Tacoma Mall Regional Growth Center	389	49,862	44,760	37,396	33,570	6%	8%	5,000	5,000	8,079	7,555
Tideflats Manufacturing/Industrial Center	3,912	0	57,762	0	43,321	0%	8%	0	5,000	0	7,555
South Tacoma Manufacturing/Industrial Center	690	0	22,303	0	16,727	0%	8%	0	5,000	0	7,555
Total for 13 Mixed Use Centers	1,003	89,009	69,300	66,757	51,975	17%	5%	13,220	3,408	21,361	5,149

2.32 average household size

25% market factor capacity reduction

2 maximum improvement-to-land-value ratio for redevelopable parcel

Table 3: MUC parcel area, development capacity, and allocations

	Parcel Area (acres)	Capacity		Capacity minus 25% market factor		Percent of MUC capacity		2030 allocation		2040 allocation	
		pop.	empl.	pop.	empl.	pop.	empl.	pop.	empl.	pop.	empl.
Total for 13 Mixed Use Centers	1,003	89,009	69,300	66,757	51,975	100%	100%	13,220	3,408	21,361	5,149
34th & Pacific	58	7,171	7,466	5,378	5,599	8%	11%	1,065	367	1,721	555
38th & G	58	6,139	1,592	4,604	1,194	7%	2%	912	78	1,473	118
56th & STW	64	5,534	8,651	4,151	6,488	6%	12%	822	425	1,328	643
6th Ave & Pine St	55	8,488	1,329	6,366	997	10%	2%	1,261	65	2,037	99
72nd & Pacific	59	10,571	7,002	7,928	5,252	12%	10%	1,570	344	2,537	520
72nd & Portland	68	7,110	6,815	5,332	5,112	8%	10%	1,056	335	1,706	506
James Center	228	6,589	4,746	4,942	3,559	7%	7%	979	233	1,581	353
Lower Portland Ave	64	10,629	8,533	7,972	6,400	12%	12%	1,579	420	2,551	634
McKinley	31	3,618	475	2,714	356	4%	1%	537	23	868	35
Narrows	40	3,200	706	2,400	529	4%	1%	475	35	768	52
Proctor	26	2,472	915	1,854	686	3%	1%	367	45	593	68
Tacoma Central	175	10,814	13,730	8,111	10,297	12%	20%	1,606	675	2,595	1,020
Westgate	77	6,674	7,340	5,005	5,505	7%	11%	991	361	1,602	545

2.32 average household size

25% market factor capacity reduction

2 maximum improvement-to-land-value ratio for redevelopable parcel

Table 4: North Downtown allocations by TAZ

North Downtown						
TAZ	Population			Employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,788	0	0	0	0	0	0
2,789	514	261	422	64	41	61
2,791	1,506	766	1,237	474	300	453
2,819	309	157	253	118	75	113
2,820	2,567	1,305	2,109	738	467	706
2,821	2,338	1,189	1,920	672	425	643
2,822	1,961	997	1,611	564	357	539
2,899	2,366	1,203	1,944	786	498	752
2,900	0	0	0	0	0	0
2,901	1,520	773	1,249	751	475	718
2,902	1,392	708	1,143	400	253	383
2,904	2,755	1,400	2,263	2,523	1,597	2,414
2,905	1,732	881	1,423	1,722	1,090	1,647
2,906	2,498	1,270	2,052	2,679	1,696	2,563
2,907	1,727	878	1,419	496	314	475
2,910	2,391	1,216	1,964	2,753	1,743	2,633
2,911	1,012	515	831	1,165	738	1,114
2,912	834	424	685	960	608	918
2,913	1,561	793	1,282	1,797	1,137	1,718
2,917	1,235	628	1,014	1,422	900	1,360
2,918	273	139	224	314	199	300
2,919	0	0	0	0	0	0
2,920	485	246	398	558	353	533
2,922	469	238	385	540	342	516
2,923	63	32	51	72	46	69
2,924	0	0	0	0	0	0
2,925	384	195	316	442	280	423
2,926	1,152	586	946	1,326	840	1,269
2,927	0	0	0	0	0	0
2,928	403	205	331	464	294	443
3,216	1,799	915	1,478	2,068	1,309	1,978
3,221	4,253	2,162	3,493	4,889	3,095	4,676
TOTALS	39,499	20,080	32,445	30,756	19,470	29,417

Table 5: South Downtown allocations by TAZ

South Downtown						
TAZ	Population			Employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,898	303	141	227	87	65	99
2,903	2,228	1,032	1,668	640	479	724
2,908	2,680	1,241	2,006	2,400	1,795	2,712
2,909	2,362	1,094	1,768	1,167	873	1,319
2,914	137	63	102	153	115	173
2,915	584	270	437	288	216	326
2,916	42	19	31	21	15	23
2,921	281	130	211	139	104	157
2,929	307	142	230	152	113	171
2,931	1,355	628	1,014	1,557	1,165	1,760
2,932	770	357	577	885	662	1,001
2,933	482	223	361	554	414	626
2,934	493	228	369	569	425	643
2,935	1,018	471	762	957	716	1,082
2,936	1,382	640	1,035	1,598	1,195	1,806
2,937	1,083	502	811	535	400	605
2,938	704	326	527	348	260	393
2,939	437	203	327	216	162	244
2,940	2,245	1,040	1,681	1,109	829	1,253
2,941	963	446	721	475	356	537

2,942	698	323	522	345	258	389
2,943	391	181	292	193	144	218
2,944	276	128	206	136	102	154
2,945	1,235	572	924	610	456	689
2,946	853	395	638	421	315	476
2,947	1,287	596	963	636	475	718
2,948	1,372	636	1,027	358	268	404
2,949	232	107	173	0	0	0
2,950	2,365	1,096	1,771	1,168	874	1,320
2,951	2,151	996	1,610	1,062	795	1,200
2,952	1,856	860	1,389	917	686	1,036
2,953	996	461	746	492	368	556
2,954	5,369	2,488	4,019	1,752	1,311	1,980
2,955	1,574	729	1,178	452	338	511
2,962	0	0	0	0	0	0
2,965	177	82	132	0	0	0
3,219	694	322	520	798	597	902
3,222	676	313	506	777	581	878
3,226	441	204	330	510	381	576
3,227	0	0	0	93	69	105
3,228	571	265	428	660	494	746
3,229	0	0	0	144	107	162
3,230	274	127	205	658	492	743
TOTALS	43,342	20,080	32,445	26,029	19,470	29,417

Table 6: Martin Luther King allocations by TAZ

Martin Luther King						
TAZ	Population			Employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,823	0	0	0	2,422	1,267	1,914
2,878	319	174	281	122	64	97
2,880	1,115	609	984	326	170	257
2,884	1,356	740	1,196	684	358	541
2,885	760	415	671	252	132	199
2,886	922	504	814	318	166	251
2,888	824	450	727	257	134	203
2,890	387	212	342	149	78	117
2,891	242	132	214	66	34	52
2,892	0	0	0	1,612	843	1,274
2,893	911	498	804	226	118	178
2,894	755	412	666	204	106	161
2,895	714	390	630	92	48	73
2,896	325	178	287	42	22	33
2,897	0	0	0	2,371	1,240	1,874
2,956	1,710	934	1,509	1,214	635	959
2,966	968	528	854	789	413	624
2,968	400	219	353	154	80	121
3,867	1,110	606	979	174	91	137
TOTALS	12,819	7,000	11,310	11,473	6,000	9,065

Table 7: Tacoma Mall allocations by TAZ

Tacoma Mall						
TAZ	Population			Employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,028	8,851	1,183	1,912	10,229	1,524	2,302
3,031	8,167	1,092	1,764	9,439	1,406	2,124
3,032	2,762	369	597	3,192	475	718
3,035	5,197	695	1,123	6,006	895	1,352
3,036	9,709	1,298	2,098	4,011	597	903
3,037	1,777	238	384	229	34	52
3,039	934	125	202	463	69	104
TOTALS	37,396	5,000	8,079	33,570	5,000	7,555

Table 8: 34th and Pacific allocations by TAZ

34th and Pacific						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,327	2,479	491	793	2,452	161	243
3,330	1,642	325	526	2,239	147	222
3,343	325	64	104	374	25	37
3,346	0	0	0	0	0	0
3,347	932	185	298	534	35	53
TOTALS	5,378	1,065	1,721	5,599	367	555

Table 9: 38th and G allocations by TAZ

38th and G						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,329	1,380	273	441	388	25	38
3,331	1,762	349	564	429	28	43
3,332	59	12	19	23	1	2
3,333	47	9	15	18	1	2
3,341	1,356	269	434	336	22	33
TOTALS	4,604	912	1,473	1,194	78	118

Table 10: 56th and STW allocations by TAZ

56th and STW						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,829	1,967	390	629	570	37	56
2,831	1,179	233	377	4,096	269	406
2,866	324	64	104	1,625	107	161
2,869	680	135	218	198	13	20
TOTALS	4,151	822	1,328	6,488	425	643

Table 11: 6th Ave and Pine St allocations by TAZ

6th Ave and Pine St						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,041	850	168	272	105	7	10
3,047	2,195	435	702	301	20	30
3,079	1,598	316	511	291	19	29
3,082	1,723	341	551	300	20	30
TOTALS	6,366	1,261	2,037	997	65	99

Table 12: 72nd and Pacific allocations by TAZ

72nd and Pacific						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,408	876	173	280	659	43	65
3,411	1,293	256	414	1,224	80	121
3,423	2,767	548	885	2,410	158	239
3,425	0	0	0	0	0	0
3,426	2,993	593	958	958	63	95
TOTALS	7,928	1,570	2,537	5,252	344	520

Table 13: 72nd and Portland allocations by TAZ

72nd and Portland						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,402	1,511	299	484	1,451	95	144
3,405	2,379	471	761	2,000	131	198
3,433	1,443	286	462	1,661	109	165
TOTALS	5,332	1,056	1,706	5,112	335	506

Table 14: James Center allocations by TAZ

James Center						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,845	0	0	0	0	0	0
2,846	4,900	970	1,568	3,511	230	348
2,848	42	8	13	48	3	5
2,849	0	0	0	0	0	0
TOTALS	4,942	979	1,581	3,559	233	353

Table 15: Lower Portland Ave allocations by TAZ

Lower Portland Ave						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,312	0	0	0	0	0	0
3,315	3,867	766	1,237	3,653	240	362
3,317	4,105	813	1,313	2,746	180	272
TOTALS	7,972	1,579	2,551	6,400	420	634

Table 16: McKinley allocations by TAZ

McKinley						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
3,319	432	86	138	37	2	4
3,321	478	95	153	44	3	4
3,323	290	57	93	67	4	7
3,325	1,448	287	463	183	12	18
3,350	10	2	3	4	0	0
3,352	0	0	0	0	0	0
3,353	56	11	18	21	1	2
TOTALS	2,714	537	868	356	23	35

Table 17: Narrow allocations by TAZ

Narrows						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,839	1,081	214	346	189	12	19
2,844	1,320	261	422	340	22	34
TOTALS	2,400	475	768	529	35	52

Table 18: Proctor allocations by TAZ

Proctor						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,777	423	84	135	138	9	14
2,780	482	96	154	185	12	18
2,796	480	95	154	184	12	18
2,798	468	93	150	180	12	18
TOTALS	1,854	367	593	686	45	68

Table 20: Westgate allocations by TAZ

Westgate						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,769	519	103	166	404	26	40
2,772	1,474	292	472	1,697	111	168
2,801	1,956	387	626	2,252	148	223
2,803	687	136	220	791	52	78
2,807	314	62	100	361	24	36
2,809	56	11	18	0	0	0
TOTALS	5,005	991	1,602	5,505	361	545

Table 19: Tacoma Central allocations by TAZ

Tacoma Central						
TAZ	population			employment		
	Capacity	2030 allocation	2040 allocation	Capacity	2030 allocation	2040 allocation
2,861	361	71	115	415	27	41
2,864	1,067	211	341	1,206	79	119
2,983	0	0	0	0	0	0
2,986	5,775	1,144	1,848	7,644	501	757
2,991	909	180	291	1,032	68	102
TOTALS	8,111	1,606	2,595	10,297	675	1,020

Table 21: Development Capacity by Zone

zone	height limit	average # of floors	FAR	average unit size	resid/comm. split	household density	floor area per employee	empl. density
NCX	45	4	3	1,000	75%	91	375	81
CCX	65	5	4	1,000	50%	76	375	203
UCX	75	6	4	1,000	50%	91	375	244
RCX	60	5	4	1,000	90%	137	375	41
CIX	75	5	4	1,000	5%	8	375	386
NRX	35	3	2	1,000	95%	87	375	12
URX	45	4	3	1,000	95%	116	375	16
HMX	150	10	7	1,000	0%	0	375	813
DR	90	8	6	1,000	80%	195	375	130
DMU	100	9	6	1,000	70%	192	375	220
WR	100	9	6	1,000	70%	192	375	220
DCC	400		12	1,000	50%	261	375	697
UCX-TD	75	6	4	1,000	50%	91	375	244
S8	65 - 180		4	1,000	50%	90	375	240
S9	35				0%	0		19
S10	35				0%	0		19
S11	35				0%	0		19
M1	75				0%	0		25
M2	100				0%	0		50
PMI	100				0%	0		25
C2	45				0%	0		25
R2	35				100%	6		0
R3	35				100%	14		0
R4	60				100%	46		0
R4L	35				100%	17		0

Assumptions:

- 2.32 average household size (source: 2007 Pierce County Buildable Lands Report)
- 1000 square feet average multifamily unit size
- 375 square feet average floor space per employee
- 70% average lot coverage of development
- capacities for R zones and C2 zone taken from the 2007 Pierce County Buildable Lands Report
- capacities for the S8 zone taken from the South Downtown Subarea Plan
- capacities for the S9, S10, S11, M1, M2, and PMI based on input from City of Tacoma staff