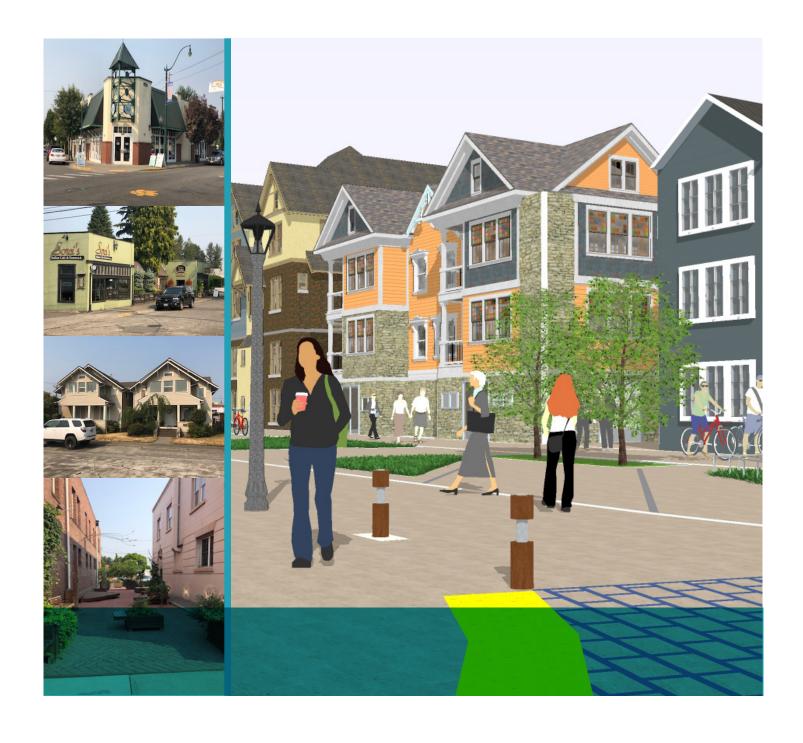
Final Supplemental Environmental Impact Statement

Sumner Town Center Subarea Plan Update and Planned Action

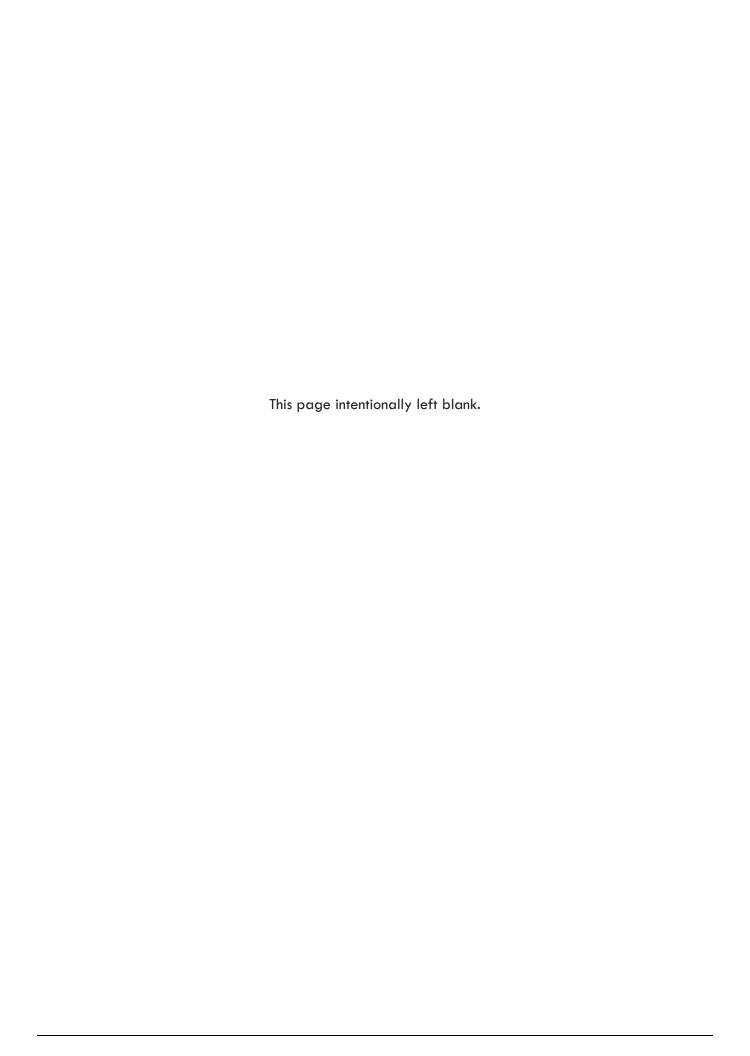
November 2018





Sumner Town Center Subarea Plan Update and Planned Action Final Supplemental Environmental Impact Statement

City of Sumner | November 2018





COMMUNITY DEVELOPMENT DEPARTMENT

253-299-5520

November 26, 2018

Subject: Sumner Town Center Subarea Plan Update and Planned Action *Final* Supplemental Environmental Impact Statement

Dear Reader:

The City of Sumner has issued a Final Supplemental Environmental Impact Statement (Final SEIS) for the Sumner Town Center Subarea Plan Update and Planned Action. The proposal also includes a form-based code, associated Comprehensive Plan and Municipal Code amendments, and a planned action for the Town Center in accordance with the provisions of the State Environmental Policy Act (SEPA).

The Final SEIS is intended to assist the public and City decision makers in considering a new plan to support Town Center and achieve a vision for a mixed use everyday downtown containing activity nodes, public spaces, pedestrian-oriented streets, and quality transit service. The Town Center Plan Update focuses on new opportunities for mixed-use housing. Alternatives consider different levels of land uses, growth, and height. Since the Draft SEIS was issued in September 2018, the Planning Commission has developed a Preferred Alternative, which is addressed in this Final SEIS.

Issues facing decision makers include consideration of a new subarea plan, form-based code, and related Comprehensive Plan and development regulation amendments, and a new Planned Action Ordinance. For each alternative the Final SEIS addresses: land use; aesthetics; fire protection; and transportation. A SEPA checklist supported a scoping notice and summarizes information from prior EIS documents supplemented on a range of topics.

The Town Center Planned Action SEIS supplements prior EIS documents addressing the original Town Center Plan Update or citywide documents addressing the Town Center cumulatively:

- City of Sumner Comprehensive Plan Update Final Environmental Impact Statement (Final EIS), June 30, 2005.
- Final EIS for City of Sumner Comprehensive Plan Update 2010, November 24, 2010.
- Sumner Comprehensive Plan Update, East Sumner Neighborhood Plan Update, Capital Facility and Transportation Plan Update, Development Regulations and Critical Areas Ordinance Update, and East Sumner Neighborhood Planned Action, Final SEIS, issued August 6, 2015.

The Final SEIS responds to comments received during the Draft SEIS Comment Period held from September 12, to October 12, 2018.

See the City's web page, http://sumnerwa.gov/town-center/ for more information, including Planning Commission and City Council meetings related to the project.

If you have questions, please contact:

Eric Mendenhall, Senior Planner City of Sumner Community Development Department 1104 Maple Street, Suite 250 Sumner, WA 98390

Ph: 253.299.5526 ericm@sumnerwa.gov

Sincerely,

Ryan Windish

Sumner Community Development Director and SEPA Responsible Official

Fact Sheet

Project Title

Sumner Town Center Subarea Plan Update and Planned Action

Proposed Action and Alternatives

The proposal includes adoption of a Town Center Subarea Plan Update that would alter Future Land Use Map designations and Zoning districts, as well as provide refreshed policies, strategies, and a form-based code. A Planned Action designation is under consideration pursuant to RCW 43.21C.440, which would facilitate future development consistent with a Planned Action Ordinance when it meets the City's Town Center Plan provisions and mitigation measures.

Three alternatives are reviewed in the Supplemental Environmental Impact Statement (SEIS):

- Alternative 1 is considered a Preferred Alternative. It would adopt the Town Center Plan Update and a form-based code. It provides the most flexible zoning with the greatest amount of commercial-mixed use zones and greatest extent of land allowed 4-6 stories. It increases height the most. It adds open space, plazas and gathering areas, and promotes multimodal travel, new landscaping, and pedestrian amenities. Density will not be specifically regulated by the form-based code, rather height, setbacks, open space, and parking requirements would ensure well-designed buildings but will indirectly control density. For purposes of the SEIS, densities are evaluated to test land use growth, aesthetics, transportation, and effects on services. Given the greater height allowed, the tested density ranges from 12-25 dwelling units per acre up to 112 units per acre.
- Alternative 2 provides a different range of dwelling types. Height in commercial/mixed-use zone ranges from 4-6 stories depending on location, with less acres of mixed use compared to Alternative 1. Height at Traffic/Fryar/Main is limited to 3-4 stories, lower than Alternative 1. Height to the southeast limited to 2-3 stories, lower than Alternative 1. Housing density tested ranges from 8-10 dwelling units per acre up to 112 units per acre. Alternative 2 has a similar range of housing capacity as Alternative 1.
- Alternative 3 No Action is a continuation of current plans and regulations. It provides a future baseline for comparison of impacts.
- The **Planning Commission** has selected Alternative 1 as part of its recommendations with the Reduced Fryar Avenue Boundary allowing a M-1 rezone to the north and the balance of the Town Center in a variety of mixed use and residential districts. Heights and density are similar to Alternative 1, but the requirement for a step-down in height along the south and east borders is added to some blocks on the district map. Other clarifications in the Town Center Plan and Form-

Based Code include: a) allowing some commercial parking to be surface parking instead of all structured; b) adjusting townhome parking styles; c) reducing minimum lot width dimension to 12-feet for single-unit attached buildings; d) removing attached units as allowed in Old Cannery district; and e) allowing commercial only uses in more districts.

Proponent & Lead Agency

City of Sumner

Location

The Town Center Study Area is located around the Sounder Station and the Central Business District and includes land on both sides of the White River. The Study Area is bounded by Zehnder Street on the north, Wood Avenue on the east, Thompson Street on the south, and the White River/Valley Avenue E/Union Pacific Railroad on the west.

Tentative Date of Implementation

Fall 2018

Responsible Official

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ericm@sumnerwa.gov

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Licenses or Permits Required

Washington Department of Commerce and other state agency review under the Growth Management Act, Sumner Planning Commission recommendations, and City Council consideration and approval.

Authors and Principal Contributors to the SEIS

This Draft Supplemental Environmental Impact Statement (SEIS) has been prepared under the direction of the City of Sumner. The following consulting firms provided research and analysis associated with this SEIS:

- City of Sumner Community Development Department: Alternatives
- BERK: SEPA compliance, land use, aesthetics, fire services, planned action ordinance
- Transpo Group: Transportation modeling, analysis, and planning

Draft SEIS Date of Issuance and Comment Period

September 12 to October 12, 2018

Final SEIS Date of Issuance

November 26, 2018

Date of Final Action

Fall 2018

Document Supplemented and Adopted

The Town Center Planned Action SEIS supplements prior EIS documents, which are adopted per WAC 197-11-630:

- City of Sumner Comprehensive Plan Update Final Environmental Impact Statement (Final EIS), June 30, 2005.
- Final EIS for City of Sumner Comprehensive Plan Update 2010, November 24, 2010. This document was supplemented with a Final SEIS February 29, 2012 (see below) to add to the analysis of the Fleishmann's property to respond to an appeal. This property is not in the 2018 Town Center Plan Update boundary.
- Sumner Comprehensive Plan Update, East Sumner Neighborhood Plan Update, Capital Facility and Transportation Plan Update, Development Regulations and Critical Areas Ordinance Update, and East Sumner Neighborhood Planned Action, Final SEIS, issued August 6, 2015.

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

Other EISs considered for relevant information include:

- Fleishmann's Industrial Park, LLC Manufacturing/Industrial Center (MIC) Overlay Expansion Final Supplemental Environmental Impact Statement (Final SEIS) issued February 29, 2012.
- City of Sumner 2013 Comprehensive Plan Annual Amendments Sumner Meadows Docket Final SEIS, issued July 25, 2014.

Location of Background Data

See relevant reports and studies associated with the Town Center Subarea Plan at: http://sumnerwa.gov/town-center/.

Purchase of Final SEIS

The Final SEIS notice of availability has been distributed to agencies, organizations, and individuals noted on the Distribution List following this Fact Sheet.

Copies of the SEIS are also available for review at City Hall:

Community Development Department 1104 Maple Street, Suite 250 Sumner, WA 98390

Alternatively, the Final SEIS can be reviewed and downloaded at the project website at: http://sumnerwa.gov/town-center/.

Compacts disk are also available and may be purchased at the City's Community Development Department for the cost of reproduction.

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Distribution List

Agencies were provided a notice of availability with a link to the document.

Federal Agencies

Federal Emergency Management Agency

NOAA Fisheries

U.S. Army Corps of Engineers

U.S. Environmental Protection Agency

U.S. Fish and Wildlife

State of Washington Agencies

Archaeology & Historic Preservation

Commerce

Corrections

Ecology

Fish and Wildlife

Health

Natural Resources

Social and Health Services

Transportation

Parks and Recreation Commission

Puget Sound Partnership

Recreation and Conservation Office

Utilities & Transportation Commission

Tribes

Puyallup Tribe

Muckleshoot Tribe

Regional Agencies

Puget Sound Regional Council

Puget Sound Clean Air Agency

Counties and Cities

City of Auburn, Planning Department

City of Bonney Lake, Planning Department

City of Edgewood, Planning Department

City of Fife, Planning Department

City of Orting, Planning Department

City of Pacific, Planning Department

City of Puyallup, Planning Department

Pierce County, Planning and Public Works

Districts, Services & Utilities

Burlington North Santa Fe Railroad

Cascade Water Alliance

Conservation District

Dieringer School District

East Pierce Fire and Rescue

Pierce County Health Department

Pierce Transit

Puget Sound Energy

Qwest

Sumner School District

Union Pacific Railroad Company

Williams Pipeline

Boards and Associations

Economic Development Board for Tacoma and

Puyallup/Sumner Chamber of Commerce

Sumner Downtown Association

Newspapers

Bonney Lake and Sumner Courier-Herald

Tacoma News Tribune

Citizens and Property Owners

Persons commenting on the Draft SEIS have been provided notice. Please see Chapter 4.

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1 Summary

1.1 Purpose of Proposed Action

In 2005, the City of Sumner adopted a Town Center Plan as a subarea element of the Comprehensive Plan under the Growth Management Act. The Town Center Plan presents a vision and strategies for the city's historic, commercial, and transit hub encompassing Main Street and the Sounder Station vicinity. The Town Center Plan intends to reinforce and strengthen the Sumner Downtown as a fully functional "everyday" downtown while maintaining its classic small-town character.

Considering community trends and needs as of 2018, the City is initiating a Town Center Plan Update. The City recognizes that the region is growing, and people want to move to Sumner and the Puget Sound region. The Town Center Plan Update seeks to answer the following question: How does Sumner plan to add more housing, a more diverse variety of housing, and keep its small-town charm? The proposal under review in this Supplemental Environmental Impact Statement (SEIS) includes adoption of a Town Center Subarea Plan Update that would alter Future Land Use Map designations and Zoning districts, as well as provide refreshed policies, strategies, and a form-based code.

A Planned Action designation is proposed under the State Environmental Policy Act pursuant to RCW 43.21C.440, which would facilitate future development consistent with a Planned Action Ordinance when it meets the City's Town Center Plan provisions and mitigation measures.

The Supplemental Environmental Impact Statement (SEIS) considers a range of alternatives, detailed further in this chapter: Alternatives 1 and 2 that review alternative land use designations, zoning, height, and growth, and Alternative 3 No Action that retains current plans and codes.

1.2 Organization of this Document

This SEIS is organized as follows:

- Chapter 1 Summary: A summary description of alternatives, and results of the environmental review
 in this SEIS is provided in this Summary.
- Chapter 2 Proposal and Alternatives: Each alternative is detailed in this chapter.
- Chapter 3 Affected Environment, Significant Impacts, and Mitigation Measures: This chapter provides an analysis of the environmental implications for land use, aesthetics, fire protection, and transportation.
- Chapter 4 Comments and Responses: This chapter describes the opportunities for commenting on the Draft SEIS, followed by the specific comments submitted and responses developed in this Final SEIS.

- Chapter 5 References: Technical information and plans considered in the SEIS are listed in references.
- Appendix A Scoping: The City issued a scoping notice to help shape the contents of this SEIS. This SEIS relies on prior documentation for the study area and is summarized and applied to the alternatives in a SEPA Checklist that supported the scoping process. The SEPA Checklist in Appendix A reflects updates to alternatives and information where appropriate since issued in May 2018.
- Appendix B Draft Planned Action Ordinance: The proposal includes consideration of a Planned Action Ordinance to facilitate the environmental review of future development as described in Section 1.1 above.
- Appendix C Transportation: A Subarea Study of Transportation is included with greater detail on current conditions, proposed system improvements, and modeling results.

1.3 State Environmental Policy Act Process

1.3.1 Purpose of SEPA and Planned Action

This Final SEIS provides a qualitative and quantitative analysis of environmental impacts associated with the Sumner Town Center Plan Update and associated development regulation amendments. The specific purpose of this SEIS is to assist the public and local government decision makers in considering future growth, infrastructure, and mitigation measures appropriate in the Downtown.

The proposal also includes the designation of a SEPA Planned Action to streamline future environmental review and permitting in the Study Area. This designation would fulfill Policy 1.1.5 of the Comprehensive Plan Permit Process Sub-element: 1.1.5 Prepare necessary documents based on the level of environmental impacts to allow for "planned action" as allowed by state law to expedite the review of projects in the Town Center and other subareas.

A planned action provides more detailed environmental analysis during an area-wide planning stage rather than at the permit review stage. (See RCW 43.21C.440 and WAC 197-11-164 to -172.) Future projects in the proposal study area developing under the designated Planned Action will not require SEPA determinations at the time of permit application if they are consistent with the type of development, traffic assumptions, and mitigation measures studied in the SEIS. All such projects would still need to be consistent with all adopted laws and regulations and would be reviewed pursuant to City adopted land use procedures.

Under the Growth Management Act (GMA), the Town Center Plan Update would be considered a subarea plan and an element of the Comprehensive Plan. The form-based code would be part of the City's GMA development regulations. The City can adopt the plan and code proposals outside the typical annual amendment process when there are comprehensive plan amendments necessary to enact a planned action ordinance; a public participation program is to guide the process. (RCW 36.70A.130 (2)(a)(v))

1.3.2 Prior SEPA Review

SEPA allows use of prior environmental documents (<u>WAC 197-11-600</u>). The City may rely on part or all prior documents and update past information through an addendum (if minor differences from prior EIS) or through a SEIS (address new alternatives and new information). The City determined that an SEIS was appropriate, and optionally conducted a 21-day scoping process; see Appendix A.

The Town Center Planned Action SEIS supplements prior EIS documents addressing the original Town Center Plan adoption in 2005 or citywide documents addressing the Town Center cumulatively:

- City of Sumner Comprehensive Plan Update Final Environmental Impact Statement (Final EIS), June 30, 2005.
- Final EIS for City of Sumner Comprehensive Plan Update 2010, November 24, 2010.
- Sumner Comprehensive Plan Update, East Sumner Neighborhood Plan Update, Capital Facility and Transportation Plan Update, Development Regulations and Critical Areas Ordinance Update, and East Sumner Neighborhood Planned Action, Final SEIS, issued August 6, 2015.

Other EISs considered for relevant information include:

- Fleischmann's Industrial Park, LLC Manufacturing/Industrial Center (MIC) Overlay Expansion Final Supplemental Environmental Impact Statement (Final SEIS) issued February 29, 2012.
- City of Sumner 2013 Comprehensive Plan Annual Amendments Sumner Meadows Docket Final SEIS, issued July 25, 2014.

1.3.3 Integrated SEPA/GMA Process

The Draft Town Center Plan is circulated concurrently with this SEIS, and this SEIS contains the details of the environmental analysis of the Town Center Plan Update proposals. Though the Town Center Plan Update and this SEIS are addressed in separate documents meeting different purposes of the Growth Management Act, State Environmental Policy Act, and Sumner's local needs, the preparation of the Plan and SEIS and community engagement process has been conducted in an integrated way.

1.4 Public Involvement

To develop the Town Center Plan Update proposals, the City held a workshop in fall 2017, winter 2018, and fall 2018. Results of the outreach can be found at this link: https://sumnerwa.gov/town-center/.

Concurrent with Plan outreach efforts, the City asked for comments on the scope of this SEIS; scoping is optional for a SEIS. The City issued a Determination of Significance and Scoping Notice on May 21, 2017 for a 21-day comment period that closed on June 11, 2018 (see Appendix A). No comments were received.

The Draft SEIS was issued with a 30-day comment period during which time written comments were being requested (see Chapter 4). The Draft Town Center Plan Update was available for comment concurrently. The Final SEIS responds to public comments.

Public meetings and hearings on the Planned Action Ordinance and other code amendments (e.g. form-based code) were held and comment periods were advertised at the project webpage: http://sumnerwa.gov/town-center/.

1.5 Objectives, Plan Concepts, and Alternatives

SEPA requires a statement of objectives identifying the purpose and need the proposal responds to. This allows alternatives to be compared by how they could attain or approximate a proposal's objectives. The Town Center Plan Update Vision and Purpose and Need serve as SEPA objectives.

Vision, Town Center Plan Update 2018

The past, present, and future vision for the Town Center is:

- Sumner, a city of excellence reinforcing its role as classic, small town Americana that goes beyond nostalgia,
- Sumner, a community that retains/strengthens a fully functional, full life cycle, "everyday" downtown,
- Sumner, a community that provides housing for all life stages and recognizes the value of a transit station for convenience of residents.

Purpose and Need 2018

- Add more and diverse housing to the Town Center to provide housing forms not available in Sumner and to support a growing community and businesses.
- Grow in a manner that respects the Town Center's small-town charm. Govern design, and promote a streetscape focus on landscaping, pedestrian movement, and sense of place.
- Support all modes of transportation serving residents, businesses, and visitors.
- Provide open space, plazas, and gathering areas.

1.5.1 Alternatives

This section describes the alternatives that are further detailed in Chapter 2.

Land Use and Growth

The proposal includes adoption of a Town Center Subarea Plan Update that would alter Future Land Use Map designations and Zoning districts, as well as provide refreshed policies and codes. Alternatives 1

and 2 were developed with community input in fall 2017 and winter 2018, and the SEPA-required No Action is based on the current Comprehensive Plan and Zoning Code.

Alternative 1 would adopt the Town Center Plan Update, form-based code, and planned action ordinance. It provides the greatest amount of commercial-mixed use zones and extent of land allowed 4-6 stories. It increases housing density and height the most. It adds gathering areas, and promotes multimodal travel, new landscaping, and pedestrian amenities. Density ranges from 12-25 dwelling units per acre up to 112 units per acre. It is considered a Preferred Alternative. It is illustrated in Exhibit 1-1.

Alternative 2 would adopt a new Town Center Plan like Alternative 1. There are less acres of mixed use and a wider range of densities (8 to 112 units per acre¹). See Exhibit 1-2. Height in commercial/mixed-use zone ranges from 4-6 stories depending on location Height at Traffic/Fryar/Main is limited to 3-4 stories, lower than Alternative 1. Height to the southeast limited to 2-3 stories, lower than Alternative 1.

Alternative 3 No Action continues current plans and regulations and provides a future baseline for comparison of impacts. See Exhibit 1-3 for current zoning. Under Alternative 3 No Action Alternative, heights range from 3-4 stories, with the Mixed-Use Development (MUD) and General Commercial (GC) allowing the greatest 4 story height. The GC, and Low and Moderate Density Residential (LDR, MDR) zones are greatest in extent of acres. Most zones have a focus on single uses: GC and commercial uses typically in a suburban pattern, and LDR, MDR, and High Density Residential (HDR) and residential uses of variable densities. The Central Business District (CBD) and MUD zones promote mixed uses more than other zones.

The **Planning Commission** has selected Alternative 1 as part of its recommendations with the Reduced Fryar Avenue Boundary allowing a M-1 rezone to the north and the balance of the Town Center in a variety of mixed use and residential districts. Heights and density are similar to Alternative 1, but the requirement for a step-down in height along the south and east borders is added to some blocks on the district map. Other clarifications in the Town Center Plan and Form-Based Code include: a) allowing some commercial parking to be surface parking instead of all structured; b) adjusting townhome parking styles; c) reducing minimum lot width dimension to 12-feet for single-unit attached buildings; d) removing attached units as allowed in Old Cannery district; and e) allowing commercial only uses in more districts.

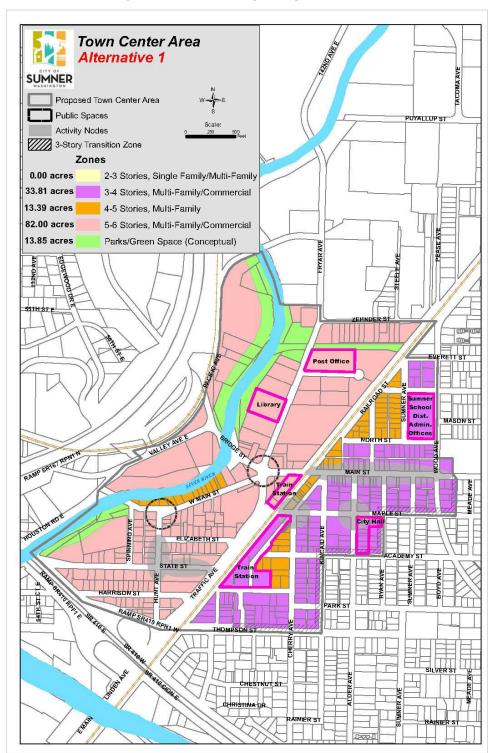
NOVEMBER 2018 1-5

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¹ Density will not be specifically regulated by the Form Based Code, rather height, setbacks, open space, and parking requirements will dictate the size of the building and indirectly density. For purposes of the SEIS, densities are evaluated to test land use growth, aesthetics, transportation, and effects on services. Development within the range tested in the SEIS will be able to rely on the Planned Action Ordinance and will not require a threshold determination when consistent with the mitigation measures and the City's codes and standards. Projects that are within the range of the SEIS analysis but that exceed the projected densities considered for the location may need to provide additional information to confirm the transportation analysis and potential mitigation.

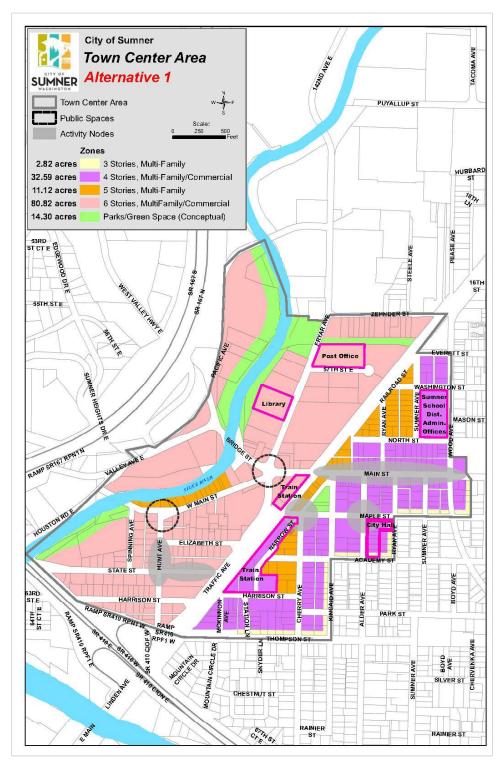
Exhibit 1-1 Alternative 1 Preferred Land Use Concept Plan

A. With Extended Fryar Avenue Boundary - August 2018



Source: City of Sumner, 2018.

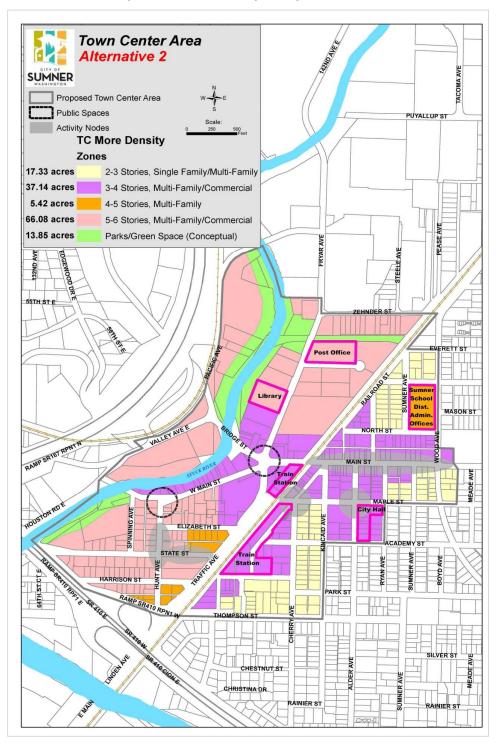
B. Reduced Fryar Avenue Boundary and Updated Open Space - August 2018



Source: City of Sumner, 2018.

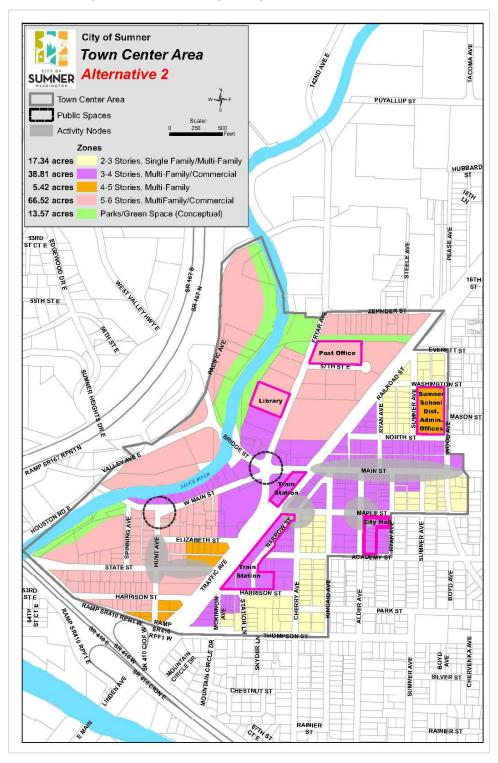
Exhibit 1-2 Alternative 2 Land Use Concept Plan

A. With Extended Fryar Avenue Boundary - August 2018



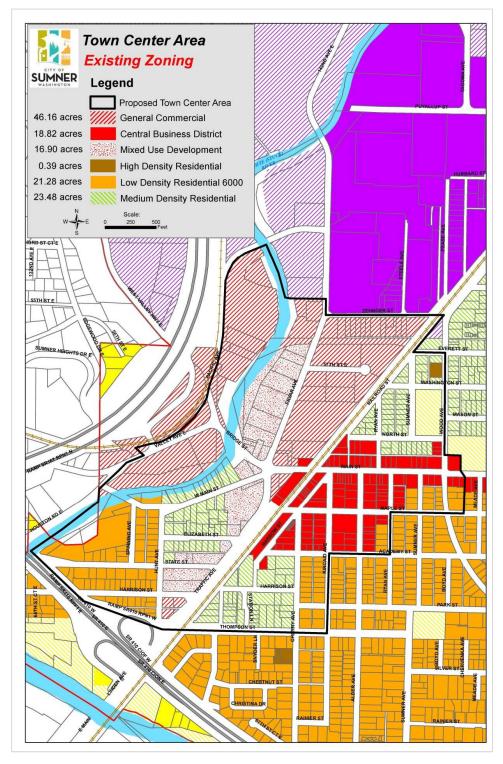
Source: City of Sumner, 2018.

B. Reduced Fryar Avenue Boundary - August 2018



Source: City of Sumner, 2018.

Exhibit 1-3 Alternative 3 No Action (Current) Zoning



Source: City of Sumner, 2018.

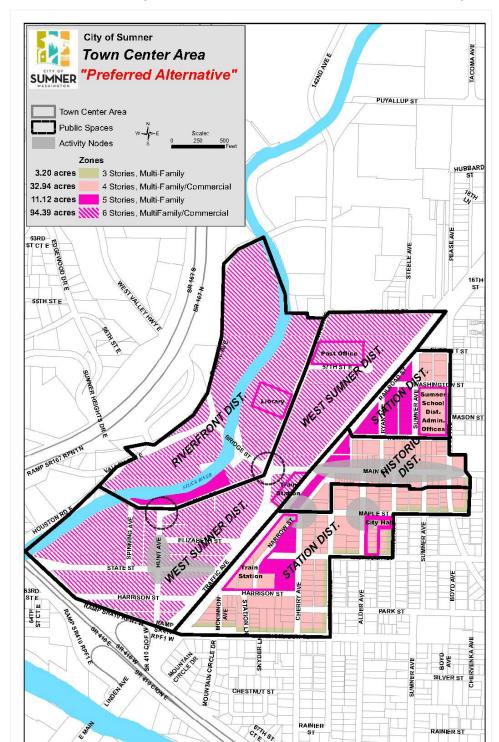


Exhibit 1-4 Planning Commission Preferred Alternative Land Use Concept Plan

Note: Similar to the No Action map, depicted zoning does not include the shoreline open space area; however, shoreline regulations will apply in any case and includes buffers of 50-200 feet.

Source: City of Sumner, 2018.

Alternatives 1 and 2 would double the City's capacity for housing. Alternative 3 allows more dwellings than exist today but would only represent less than one-quarter of the City's housing capacity. See Exhibit 1-5.

Alternative 1, and the Planning Commission Preferred Alternative, have two density options: A) assumes more density west of the railroad and less east and B) gradually increases density from west to east. Heights and uses remain the same under each density option, though Option B could be achieved with less height along the White River.

Exhibit 1-5 Growth Capacity and Assumptions – Town Center Subarea Plan Update and Planned Action

	Net Capacity
Alternative Town Center Dwelling Unit Capacity	
Alternative 1: Density Option A / Planning Commission Preferred	2,308
Alternative 1: Density Option B / Planning Commission Preferred	2,022
Alternative 2 Net Acres and Capacity	2,172
No Action per Comprehensive Plan Update 2015	339
Proposed Job Assumptions	
Action Alternatives with Job Reallocations	460
No Action Alternative Jobs: Comprehensive Plan Update 2015	408

Source: City of Sumner, 2018; BERK, 2018.

M-1 Sub-Option

At 1504 Fryar Avenue is a one-story office and warehouse development, lying west of the street at Zehnder Avenue. The property is currently for sale. Both Action Alternatives consider the potential of 5-6 stories (55-65 feet) of mixed use multi-family/commercial uses on the site, whereas Alternative 3 No Action currently applies GC zoning with a maximum of 4 stories and 45 feet.

The Pierce County Economic Development Board and the property owner are interested in Light Industrial (M-1) zone with a maximum 4-5 stories or 45-55 feet in height. Action Alternatives consider a sub-option of M-1 zoning for the property. Light industrial uses would be allowed as a primary use.

Other Alternative Features

Action Alternatives would include adoption of the Town Center Plan Update, and a new form-based code that promotes a quality pedestrian environment and guides the design and location of the building; this code focuses less on land uses. Action Alternatives would also adopt a Planned Action Ordinance to facilitate environmental review of future development.

Building on successful places like Rueben A. Knoblauch Heritage Park, the Action Alternatives propose additional placemaking and infrastructure improvements designed to encourage accessibility and interaction as the area grows and densifies:

- Activity Nodes
- Public Spaces
- Multimodal Investments

These are further described in the Town Center Plan Update and the Transportation Subarea Study in Appendix C.

Summary of Features

A summary of the alternatives' features is presented in Exhibit 1-6. Action Alternatives amend plans and codes, invest in places and infrastructure, and increase housing capacity and choices.

Exhibit 1-6 Alternative Comparison Matrix

Feature	Alternative 1: Preferred	Alternative 2	Alternative 3: No Action	Planning Commission Preferred
Town Center Plan Update	Χ	Χ		Х
Form-Based Code	Χ	Χ		Χ
Planned Action Ordinance	Χ	Χ		Χ
Placemaking and Infrastructure Investments	Χ	Χ		Χ
New Future Land Use Designations/Zones	Χ	Χ		Χ
Density Range	40-112	10-112	7-40	40-112
Housing Capacity Town Center	2,022-2,308	2,172	339	2,022-2,308
Housing Assumptions: SEIS	1,194	1,194	339	1,194
Job Assumptions: SEIS	460	460	408	460

Source: City of Sumner, 2018; BERK, 2018.

1.6 Major Issues, Significant Areas of Controversy and Uncertainty, and Issues to be Resolved

The key issues facing decision makers include:

- Approval of a Town Center Plan Update including a vision, goals and policies, land use concept including increased heights and related consistency edits to the Comprehensive Plan;
- Approval of a new form-based code and associated consistency edits in the municipal code;
- Approval of a planned action ordinance to help incentivize growth while mitigating impacts;
- Consideration of new public streets and new park investments to attract quality private investment and to serve new neighborhood residents, employees, and visitors; and

Public and private funding strategies.

1.7 Summary of Impacts and Mitigation Measures

The SEIS authors, under the guidance of the City of Sumner as lead agency, have summarized the environmental analysis of Chapter 3 in this section. The authors identify methods of analysis, environmental impacts of alternatives, mitigation measures, and environmental impacts considering mitigation measures.

1.7.1 Land Use

How did we analyze Land Use?

We evaluated each of the alternatives with respect to their ultimate development capacity, proposed changes in building types, and compatibility with local, state, and regional policies.

For the purposes of this SEIS, the thresholds of significance are:

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

What outcomes or impacts did we identify?

New growth is expected to occur under all the alternatives, although the amount of growth and composition of the mix of land uses will vary by alternative. The location of growth through 2035 is anticipated to occur on Opportunity Sites located as illustrated on Exhibit 2-8.

What is different between the alternatives?

Alternative 1 is considered a Preferred Alternative and was based on public open house input in February 2018; the Planning Commission Preferred Alternative is similar to Alternative 1 in district locations and maximum heights. Both Alternative 1 and the Planning Commission Preferred Alternative provide the most flexible zoning with the greatest amount of commercial mixed-use zones and greatest extent of land allowed 4-6 stories. Both Alternative 1 and the Planning Commission Preferred Alternative increase housing density and height the most. All Action Alternatives would both increase housing capacity in the Town Center compared to existing regulations and would produce land use impacts of a similar nature. Both Alternative 1 and the Planning Commission Preferred Alternative would rezone the entire Town Center to a mix of multi-family and commercial zoning at a range of heights from 3-6 stories. Alternative 2 would implement reduced height increases in the eastern and southern portions of the Town

Center, preserving some 2-3 story single-family/multi-family zoning in these areas to provide a more gradual transition to low-intensity zones outside the Town Center. The Alternative 3 No Action is a continuation of current plans and regulations. It provides a future baseline for comparison of impacts.

Housing capacity is the primary distinguishing change among the alternatives. Exhibit 1-5 shows the projected housing capacity under each of the alternatives. Under Action Alternatives, the Study Area would have more housing in the future, compared to Alternative 3 No Action.

Development would be allowed throughout the subarea, but is more likely on Opportunity Sites, which include parcels that are vacant or underdeveloped or larger properties that could be redeveloped in a different format with mixed uses. Beyond 2035, it is anticipated that more extensive changes could occur to existing building forms, while in the near term to 2035, growth would be more focused on Opportunity Sites.

Alternative 3 would not amend current plans or regulations. Alternatives 1 and 2 are consistent with policy language in the Comprehensive Plan that designates the Town Center Area as a "Countywide Center," with a future land use that mixes residential, commercial, and service uses.

The Town Center Plan Vision would be amended to add reference to providing housing for all life stages in proximity to transit, as well as to ensure that the Town Center serve as an "everyday" downtown and reflect a classic small-town character. Goals and policies would largely be retained in concept but would be refreshed to reference new concepts about design and the form-based code, new height and scale ranges, promoting economic development through incentives, supporting placemaking (e.g. adding parklets), and ensuring adequate parking standards and monitoring.

What are some solutions or mitigation for the impacts?

While there are some design standards that apply to portions of the Study Area as part of Alternative 3 No Action, Alternatives 1 and 2 would include a form-based code, development regulations, and design standards tailored to the Town Center Area. These regulations could limit potential land use compatibility conflicts both within the Study Area and in adjacent areas.

Project level environmental review and conditions can address land use compatibility concerns at a site level where there are unique conditions.

With mitigation, what is the ultimate outcome?

Alternatives 1 and 2 are generally consistent with the policy direction of the Comprehensive Plan. The Comprehensive Plan policies and map would need to be updated under Action Alternatives 1 and 2 to ensure full policy consistency. These Comprehensive Plan consistency amendments would occur simultaneous with the Town Center Plan Update, and no significant unavoidable adverse impacts are anticipated.

Under all alternatives, additional growth and development will occur in the Town Center Plan Area, leading to increases in height and bulk of buildings and increased land use intensity. This transition is consistent with an urban area designated as a Countywide Center in the Comprehensive Plan.

Future growth is likely to create temporary or localized land use compatibility issues as development occurs. New construction will result in changes of use and the characteristics of parcels of land, including potential demolition and displacement. The potential impacts related to these changes may differ in intensity and location in each of the alternatives. With existing and new development regulations, zoning requirements, and design guidelines, transitions between areas of different intensity can be mitigated. The change in activity levels due to increase density and employment growth would be significant and avoidable, though less than adverse by meeting City level of service policies.

1.7.2 Aesthetics

How did we analyze Aesthetics?

We analyzed the potential visual effects of the proposed Town Center Plan by examining potential changes to building height, bulk, and scale, as well as effects on scenic views and shading conditions. Existing conditions are based on field reconnaissance and imagery review. For the purposes of this SEIS, the thresholds of significance are:

- Changes in building heights, land uses, or development intensities that substantially change the
 aesthetic character of the study area or would result in development that is significantly out of scale
 with existing conditions;
- Changes to development patterns that would negatively affect existing scenic views (such as views of the White River, the Cascade foothills, or Mount Rainier); or
- Changes to development patterns that would increase building-related shading effects to the degree that it would negatively impact residential development or public spaces.

What outcomes or impacts did we identify?

The visual impacts identified in the SEIS primarily consist of changes to visual character associated with increased building heights in the Town Center. The area west of Traffic Avenue would experience the greatest increases in height over existing conditions, and increased height limits in the Main Street corridor east of Traffic Avenue could negatively affect the aesthetic character of the historic architecture. In areas currently occupied by single-family residences, increased height limits could result in localized conflicts of scale as taller, more intense development occurs adjacent to existing single-family structures. Increased building heights could also reduce the availability of street-level views in some portions of the Town Center, though taller buildings could create new private upper-floor views.

What is different between the alternatives?

The Planning Commission Preferred Alternative, Alternative 1, and Alternative 2 would increase heights in the Town Center compared to existing regulations and would produce visual impacts of a similar nature. The Planning Commission Preferred Alternative and Alternative 1 would rezone the entire Town Center to a mix of multi-family and commercial at a range of heights from 3-6 stories. However, these alternatives would include a transitional height zone along the south and east boundaries where 3 stories would be a limit. The Planning Commission Preferred Alternative extends the 3 story-step back to a greater extent.

Alternative 2 would implement reduced height increases in the eastern and southern portions of the Town Center, preserving some 2-3 story single-family/multi-family zoning in these areas to provide a more gradual transition to low-intensity zones outside the Town Center. The two alternatives would result in similar impacts in the northern and western portions of the study, as well as the eastern end of the Main Street corridor. Aesthetic impacts would be reduced under Alternative 2 in the area around the intersection of Main Street and Traffic Avenue, and in the area south of Main Street and east of Traffic Avenue.

What are some solutions or mitigation for the impacts?

The Town Center Plan update will include the adoption of a form-based code for the Town Center. This code will contain development regulation and design standards intended to preserve and enhance the livability and urban design appeal of the Town Center. The code will address many aspects of urban design and building form, including street-level setbacks, building massing and form, and site design and landscaping.

The Sumner Municipal Code also establishes procedures and thresholds for design review of new development, including single-family, multi-family, and commercial development. Smaller development projects can be processed using administrative design review, while larger developments are required to undergo design review by the City's design commission.

With mitigation, what is the ultimate outcome?

Even with implementation of mitigation measures, future growth is expected to occur in the Town Center, and as redevelopment occurs, even under the No Action Alternative, some height, bulk, and scale impacts may occur as older, low-intensity development transitions to taller buildings and more intense uses.

The overall character, significance, or magnitude of visual impacts on the analysis area depends largely on the quality of the architectural and urban design features incorporated into the development, the degree to which the overall scale and form of the development incorporates features of the local setting, and the values and preferences of those viewing the change. With proposed mitigation, particularly through implementation of design guidelines addressing height and bulk, development would meet the City's vision and standards for the Town Center, a place targeted for additional development. However, it is acknowledged that views will change under either Action Alternative compared to current conditions.

1.7.3 Fire Protection

How did we analyze Fire Protection?

Fire protection and EMS in the City of Sumner, including the Town Center study area, is provided by East Pierce Fire & Rescue (East Pierce), a combination fire district serving a population of nearly 90,000 living in and around Bonney Lake, Sumner, Lake Tapps, the Ridge Communities, South Prairie, Edgewood, and Milton.

This section is based on Sumner's Comprehensive Plan level of service policies and municipal code, consultation with East Pierce together with a review of their annual reports, and population-based estimates of demand. For the purposes of this SEIS, a significant impact is identified if the alternative would:

- Conflict with adopted levels of service for fire and emergency medical services, or
- Increase demand for special emergency services beyond operational capabilities of service providers.

What outcomes or impacts did we identify?

Impacts to fire protection and emergency medical services primarily result from increased demand generated by population or employment growth. Changes in population demographics may impact the amount of additional staffing and equipment needed to support increased service demands, particularly concerning calls related to emergency medical services.

Under all alternatives, growth and development would generate additional potential for fires or medical emergencies, which would place additional demands on East Pierce staff and further challenge the district to meet its response time target. The district would attempt, at a minimum, to maintain response times consistent with or better than current performance levels as the demand for service increases. Over time, additional staffing and equipment could be required to improve performance levels districtwide to adopted LOS standards.

Future traffic growth under all alternatives may also impact the response time of emergency vehicles as East Pierce is dependent upon the capability of the local street networks to handle traffic flow.

Additionally, the district's fleet of emergency vehicles will need to be replaced in the near future, including six fire engines and the ladder truck. (East Pierce Fire & Rescue, 2017) The district is currently preparing to include a Capital Facilities bond issue on the 2018 November ballot for replacing and remodeling its fire stations and upgrading equipment. If approved, emergency vehicles would be upgraded during the first phase of projects. (East Pierce Fire & Rescue, 2018)

Based on East Pierce review, planned personnel and equipment are anticipated to be sufficient in most cases to handle increased service needed to serve construction sites and ultimately occupied buildings. (East Pierce Fire & Rescue, 2018)

What is different between the alternatives?

Alternatives 1 and 2 are expected to result in 1,194 new dwelling units and 460 new jobs in the study area by 2035, compared to 339 new dwelling units and 408 new jobs under Alternative 3 No Action. This increases the demand for service to a greater degree with a need for 1.5 new firefighters under Action Alternatives compared to 0.5 for the No Action Alternative.

Currently, with the existing buildings, there are no fire flow or water pressure issues in the Town Center. Increased density and construction of taller buildings may impact the fire flow requirements. Taller, mixed- use buildings under all alternatives but particularly Alternatives 1 and 2 may have special International Fire Code and Building code requirements for automatic sprinkler systems and possibly improved water supply systems. The current and proposed ladder truck height will reach over 100 feet, more than sufficient for the maximum 65-foot height.

What are some solutions or mitigation for the impacts?

The City has adopted a Fire Code, which is enforced by East Pierce. Fire-resistant construction, sprinklers, and other fire protection measures may be used to reduce site-specific fire flow requirements. The City has adopted a Water System Plan and regularly updates it, which will help ensure adequate water availability and pressure.

Ongoing capital facilities improvement, budgeting, and operational planning by East Pierce and the City's periodic review of its Capital Facilities and Public Services Element in the Comprehensive Plan will allow each agency to evaluate growth and serve new development appropriately; each agency could consider adopting a population-based standard of service in addition to the response time objectives. East Pierce is proposing a bond for replacing and remodeling fire stations and upgrading equipment.

With mitigation, what is the ultimate outcome?

Future population and employment growth in the study area will continue to increase demand for fire and emergency medical services on both a local and regional level. With implementation of identified mitigation measures, however, no significant unavoidable adverse impacts to fire and emergency medical services are anticipated.

1.7.4 Transportation

How did we analyze Transportation?

Transportation impacts were evaluated consistent with the methods of the Sumner Comprehensive Plan 2015. An evaluation of traffic forecasts, intersection operations, non-motorized and transit facilities was conducted. Transportation impacts of the Alternatives were identified by comparing 2035 No Action conditions to the Action Alternatives.

What outcomes or impacts did we identify? What is different between the alternatives?

Transportation demands for all modes would be increased with the Action Alternatives compared to the No Action conditions. Intersection delays are anticipated to increase at the study intersections with the Action Alternatives compared to the No Action Alternative. The Traffic Avenue/SR 410 WB Ramps/Thompson Street and Traffic Avenue/SR 410 EB Ramps intersections are anticipated to also operate at LOS F under the Action Alternatives during the weekday PM peak hour. The evaluation includes improvements already contemplated in the City's TIP and Transportation Element and the Town Center Plan would degrade operations at these locations.

In addition, parking pressures in the Town Center would likely increase with the Action Alternatives. The Town Center Plan includes policies to both increase parking supply and improve access to alternative modes to help reduce vehicle ownership.

What are some solutions or mitigation for the impacts?

The Town Center Plan identifies street designs to create neighborhoods and thoroughfares that enhance the community. The street types identify whether mobility or access are priorities and align with the form-based code approach of the Plan. The Plan also consideration of a wheeled trolley. A trolley system would provide connectivity between West Sumner (west of Traffic Avenue) and the WinCo and Fred Meyer area as well as to the Sounder Station to reduce dependence on autos. The Town Center has a gridded network but there are sidewalks missing in some locations. As development occurs, required frontage improvements would help complete the network.

In addition, new development would be required to pay traffic impact fees to contribute towards planned improvements. With adoption of the Town Center Plan, the City should revisit the traffic impact fee to determine if the appropriate transportation improvements in the Town Center are included and if adjustments should be made to the fees for the Town Center based on the land uses changes.

Other mitigation measures include:

- Commute Trip Reduction (CTR) The City of Sumner has adopted a CTR program. The individual demand management strategies that are typical elements of the CTR and Transportation Demand Management (TDM) programs are tailored to employment and residential developments. A 5 to 10 percent reduction in overall vehicular traffic in the study area would reduce delays at the study intersection and improve overall LOS.
- Network Classifications It is unreasonable and uneconomical to build each street to accommodate every function and user and so priorities must be set. While the City already has functional and truck route classifications for the corridors within the Town Center, it is recommended that Travel Context Classifications be identified along key facilities. The Travel Context Classification is another tool for identifying whether auto, bikes, or pedestrians are the priority for each street.

- LOS Policy Increasing capacity at intersections and along the roadway system may improve LOS for vehicles; however, it could create impacts for other modes. The City may desire to revisit LOS policies to have a more multimodal LOS that gives priority to other modes and considers connectivity of the pedestrian and bicycle network and/or minimizing barriers for non-auto modes. The LOS policy could be changed for just the Town Center or the City as a whole.
- Intelligent Transportation Systems (ITS) ITS improvements such as adaptive signal control systems would improve traffic operations at intersections within the Town Center.
- Capacity Improvements Adding capacity at key intersections that are impacted by the Town Center development could improve LOS and decrease vehicle delays.

With mitigation, what is the ultimate outcome?

The overall mitigation will support mobility priorities within the Town Center and facilitate efficient and safe transportation operations. Development of the Alternatives would result in increases in all travel modes – vehicles, transit, pedestrians, and bicycles. It is anticipated that with the proposed mitigation there would continue to be congestion along the Traffic Avenue corridor and specifically at the SR 410 interchange and LOS standards may not be met. This is considered a significant and unavoidable adverse impact that would likely occur with the Action Alternatives. As described previously, the City may consider changing LOS Policies to promote multimodal LOS consistent with the proposed form-based code approach in the Town Center Plan.

2 Proposal and Alternatives

2.1 Purpose and Introduction

In 2005, the City of Sumner adopted a Town Center Plan as a subarea element of the Comprehensive Plan under the Growth Management Act. The Town Center Plan presents a vision and strategies for the city's historic, commercial, and transit hub encompassing Main Street and the Sounder Station vicinity. The Town Center Plan intends to reinforce and strengthen the Sumner Downtown as a fully functional "everyday" downtown while maintaining its classic small-town character.

Considering community trends and needs as of 2018, the City is initiating a Town Center Plan Update. The City recognizes that the region is growing, and people want to move to Sumner and the Puget Sound region. The Town Center Plan Update seeks to answer the following question: How does Sumner plan to add more housing, a more diverse variety of housing, and keep its small-town charm? The proposal under review in this Supplemental Environmental Impact Statement (SEIS) includes adoption of a Town Center Subarea Plan Update that would alter Future Land Use Map designations and Zoning districts, as well as provide refreshed policies, strategies, and a form-based code.

A Planned Action designation is proposed under the State Environmental Policy Act pursuant to RCW 43.21C.440, which would facilitate future development consistent with a Planned Action Ordinance when it meets the City's Town Center Plan provisions and mitigation measures. This designation would fulfill Policy 1.1.5 of the Comprehensive Plan Permit Process Sub-element: 1.1.5 Prepare necessary documents based on the level of environmental impacts to allow for "planned action" as allowed by state law to expedite the review of projects in the Town Center and other subareas.

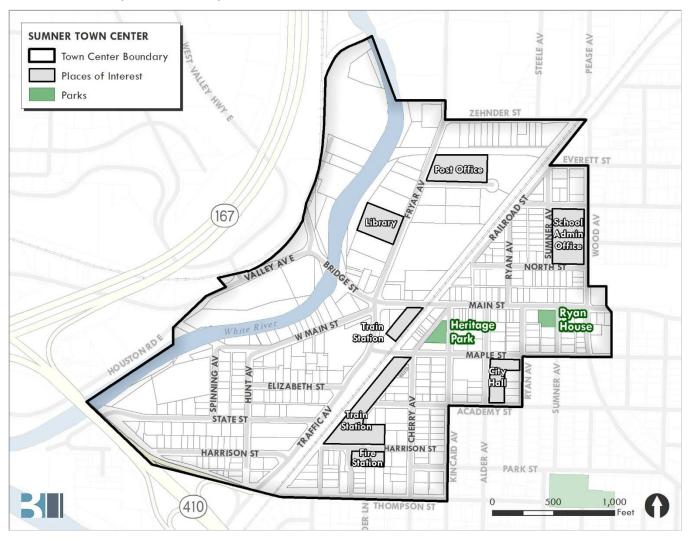
The SEIS considers a range of alternatives, detailed further in this chapter: Alternatives 1 and 2 that review alternative land use designations, zoning, height, and growth, and Alternative 3 No Action that retains current plans and codes.

2.2 Description of the Study Area

The Town Center Study Area is bounded by Zehnder Street on the north, Wood Avenue on the east, Thompson Street on the south, and the White River/Valley Avenue E/Union Pacific Railroad on the west. The Study Area is presented in Exhibit 2-1.

The Study Area is configured differently than the 2005 Subarea Plan boundary. It includes property west of the White River along Valley Avenue E and the Union Pacific/Pacific Avenue E, and excludes property developed as industrial to the north of Zehnder Street. It adds some areas of housing north to Everett Street and it excludes some blocks of housing south of Maple and Academy Street to the southeast.

Exhibit 2-1 Study Area Boundary



Source: City of Sumner, 2018; Pierce County Assessor, 2018; BERK, 2018.

With the Planning Commission Preferred Alternative, the boundary along Fryar Avenue would be reduced and the property removed designated and zoned M-1.

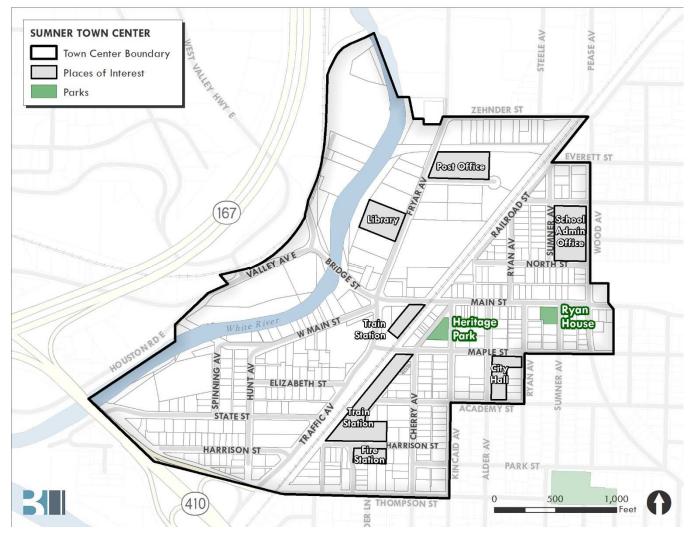


Exhibit 2-2. Planning Commission Preferred Study Area Boundary

Source: City of Sumner, 2018; Pierce County Assessor, 2018; BERK, 2018.

2.3 Objectives and Alternatives

2.3.1 Objectives

SEPA requires a statement of objectives identifying the purpose and need the proposal responds to. This allows alternatives to be compared in terms of how they could attain or approximate a proposal's objectives. The Town Center Plan Update Vision and Purpose and Need are the sources of SEPA objectives.

Vision, Town Center Plan Update 2018

The past, present, and future vision for the Town Center is:

- Sumner, a city of excellence reinforcing its role as classic, small town Americana that goes beyond nostalgia,
- Sumner, a community that retains/strengthens a fully functional, full life cycle, "everyday" downtown, and
- Sumner, a community that provides housing for all life stages and recognizes the value of a transit station for convenience of residents.

Purpose and Need 2018

- Add more and diverse housing to the Town Center to provide housing forms not available in Sumner and to support a growing community and businesses.
- Grow in a manner that respects the Town Center's small-town charm. Govern design, and promote a streetscape focus on landscaping, pedestrian movement, and sense of place.
- Support all modes of transportation serving residents, businesses, and visitors.
- Provide open space, plazas, and gathering areas.

2.3.2 Alternatives

The proposal includes adoption of a Town Center Subarea Plan Update that would alter Future Land Use Map designations and Zoning districts, as well as provide refreshed policies and strategies. Alternatives 1 and 2 were developed with community input in fall 2017 and winter 2018, and the SEPA-required No Action is based on the current Comprehensive Plan and Zoning Code.

Vision and Policies

The Town Center Plan Vision would be amended to add reference to providing housing for all life stages in proximity to transit, as well as to ensure that the Town Center serve as an "everyday" downtown and reflect a classic small-town character.

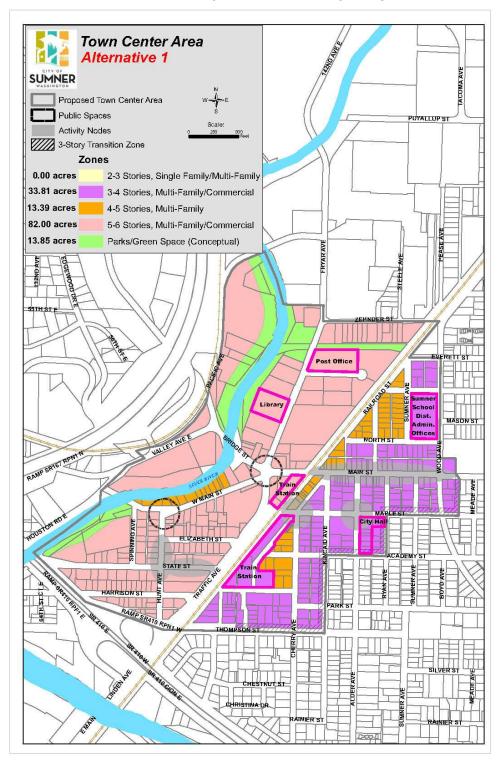
Goals and policies would largely be retained in concept but would be refreshed to reference new concepts about design and the form-based code, new height and scale ranges, promoting economic development through incentives, supporting placemaking (e.g. adding parklets), and ensuring adequate parking standards and monitoring.

Alternative Land Use and Building Height

Alternative 1 would adopt the Town Center Plan Update, form-based code, and planned action ordinance. It provides the greatest amount of commercial/mixed-use zones and extent of land allowed 4-6 stories. It increases housing density and height the most. It adds gathering areas, and promotes multimodal travel, new landscaping, and pedestrian amenities. Density ranges from 12-25 dwelling units per acre up to 112 units per acre. It is considered a Preferred Alternative. See Exhibit 2-3.

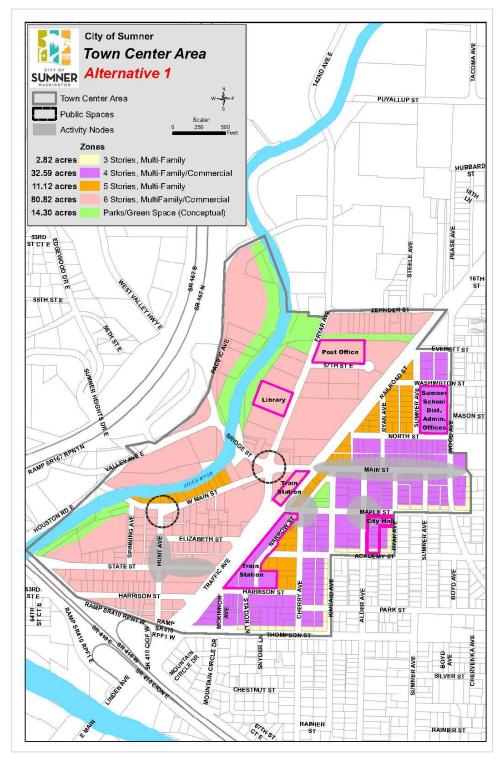
Exhibit 2-3 Alternative 1 Preferred Land Use Concept Plan

A. Alternative 1 with Extended Fryar Avenue Boundary - August 2018



Source: City of Sumner, 2018.

B. Alternative 1 with Reduced Fryar Avenue Boundary and Updated Parks/Green Space - August 2018

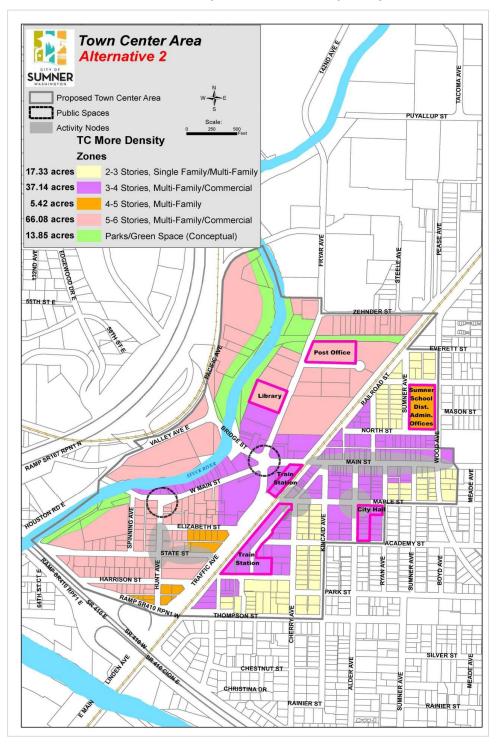


Source: City of Sumner, 2018.

Alternative 2 would adopt a new Town Center Plan like Alternative 1. See Exhibit 2-4. There are less acres of mixed-use and a wider range of densities (8 to 112 units per acre).

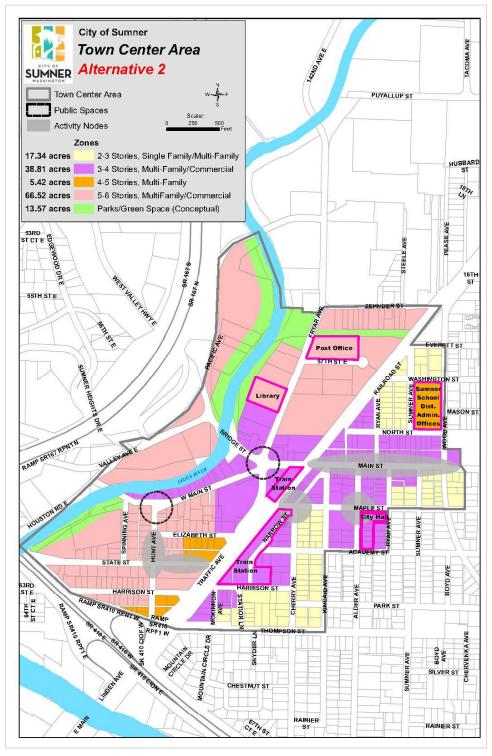
Exhibit 2-4 Alternative 2 Land Use Concept Plan

A. Alternative 2 with Extended Fryar Avenue Boundary - August 2018



Source: City of Sumner, 2018.

B. Alternative 2 with Reduced Fryar Avenue Boundary - August 2018

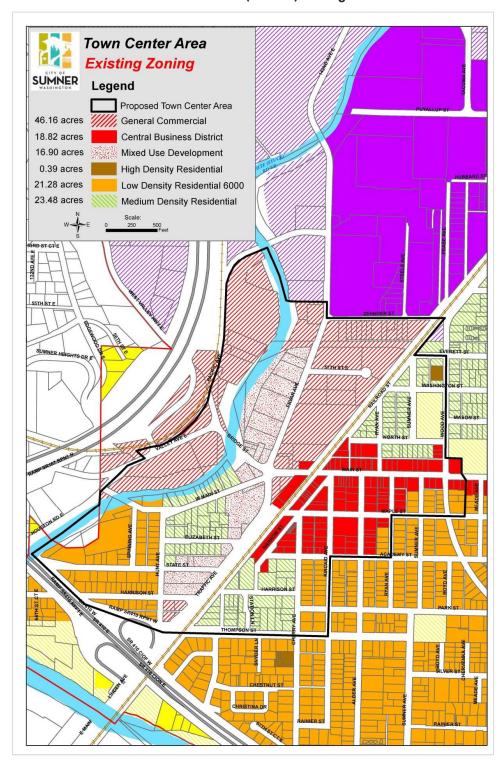


Source: City of Sumner, 2018.

Under Alternative 2, height in commercial/mixed-use zones ranges from 4-6 stories. Height is lower than Action Alternatives at Traffic/Fryar/Main (3-4 stories), and to the southeast (2-3 stories). Alternative 2 has a similar housing capacity range as Alternative 1.

Alternative 3 No Action is a continuation of current plans and regulations. It provides a future baseline for comparison of impacts. See Exhibit 2-5.

Exhibit 2-5 Alternative 3 No Action (Current) Zoning



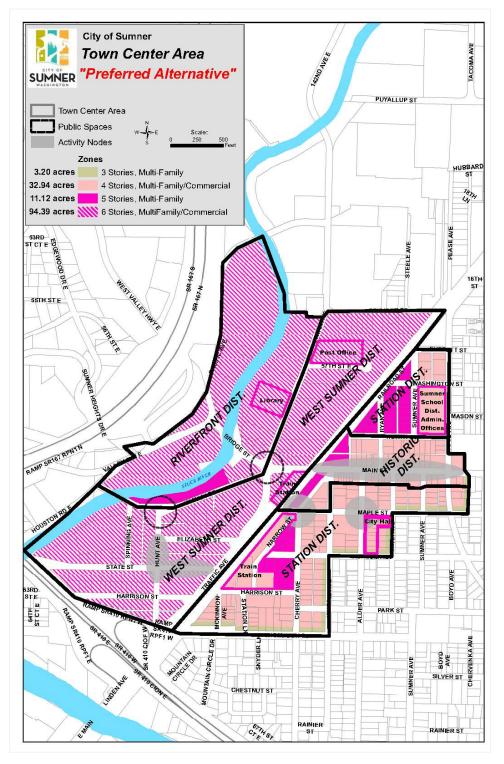
Source: City of Sumner, 2018.

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Proposal and Alternatives

Planning Commission Preferred Alternative: The Planning Commission has selected Alternative 1 as part of its recommendations with the Reduced Fryar Avenue Boundary allowing a M-1 rezone to the north and the balance of the Town Center in a variety of mixed use and residential districts. Heights and density are similar to Alternative 1, but the requirement for a step-down in height along the south and east borders is added to some blocks on the district map. Other clarifications in the Town Center Plan and Form-Based Code include: a) allowing some commercial parking to be surface parking instead of all structured; b) adjusting townhome parking styles; c) reducing minimum lot width dimension to 12-feet for single-unit attached buildings; d) removing attached units as allowed in Old Cannery district; and e) allowing commercial only uses in more districts. See Exhibit 2-6.

Exhibit 2-6 Planning Commission Preferred Alternative Land Use Concept Plan



Note: Similar to the No Action map, depicted zoning does not include the shoreline open space area; however, shoreline regulations will apply in any case and includes buffers of 50-200 feet.

Source: City of Sumner, 2018.

Exhibit 2-7 provides a comparison of current and proposed designations for the Alternatives. Under Alternative 3 No Action Alternative, heights range from 3-4 stories, with the Mixed-Use Development (MUD) and General Commercial (GC) allowing the greatest 4 story height. The GC, and Low and Moderate Density Residential (LDR, MDR) zones are greatest in extent of acres. Most zones have a focus on single uses: GC and commercial uses typically in a suburban pattern, and LDR, MDR, and High Density Residential (HDR) and residential uses of variable densities. The Central Business District (CBD) and MUD zones promote mixed uses more than other zones.

Exhibit 2-7 Comparison of Zones, Acres, and Stories

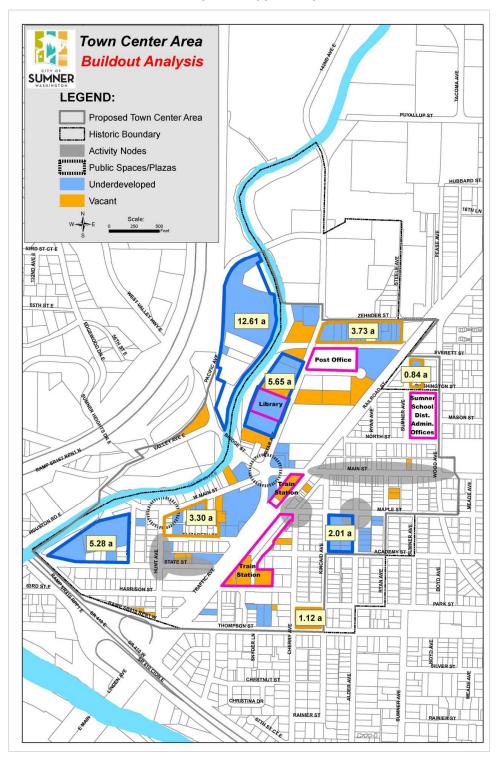
Designation / District	Stories	Alternative 1: Preferred	Alternative 2	Alternative 3: No Action	Planning Commission Preferred
Alternative Zones — Primary Uses					
Single-family/Multi-Family	2-3	-	17.3		-
Multi-Family	3	2.8			3.2
Multi-Family	4-5	11.1	5.4		11.1
Multi-Family/Commercial	3-4	32.9	38.8		32.9
Multi-Family/Commercial	5-6	82.0	67.8		94.4
Parks/Green Space (Conceptual)	NA	14.0	13.6		*
Existing Designations / Zones					
Central Business District (CBD)	3 (35')			18.82	
Mixed-Use Development (MUD)	4 (45')			16.90	
General Commercial (GC)	4 (45')			46.16	
Low Density Residential (LDR)	3 (35')			21.28	
Medium Density Residential (MDR)	3 (35')			23.48	
High Density Residential (HDR)	3 (30')			0.39	
Total Acres		142.9	143.0	127.03	141 <i>.</i> 7

Note: * Similar to the No Action map, depicted zoning for the Planning Commission Preferred Alterative does not include the shoreline open space area; however, shoreline regulations will apply in any case and includes buffers of 50-200 feet. Source: City of Sumner, 2018; BERK, 2018.

Growth and Density

Development would be allowed throughout the subarea, but is more likely on Opportunity Sites, which include parcels that are vacant or underdeveloped or larger properties that could be redeveloped in a different format with mixed uses. See Exhibit 2-8. Some uses could reoccupy redeveloped sites (e.g. ground floor retail with housing or offices above).

Exhibit 2-8 Town Center Study Area Opportunity Sites: Phase I Blue and Phase II Gold Boundaries



Note: Some sites have developed since this data was developed, such as the City Hall parking lots. Source: City of Sumner, 2018.

Nine sites are considered more likely to develop; four are Phase I, earlier sites, and five sites are Phase II, later sites. See Exhibit 2-9. Other vacant and redevelopable sites are illustrated on Exhibit 2-8 too.

Exhibit 2-9 Opportunity Sites Acres and Assumed Densities (Per Acre)

PROPERTY	Acres	Alt 1 & PC Preferred: Density Option A	Alt 1 & PC Preferred Density Option B	Alt 2: Density
Phase 1 Opportunity Sites				
Bendixen	5.6	112	112	112
Library	5.65	112	112	<i>75</i> -112
Spinning Ave	5.28	112	40	112
Red Apple	2	40	112	40
Subtotal	18.53			
Phase II Opportunity Sites				
Zehnder	3.73	112	112	112
Elizabeth	3.3	112	75	112
Washington St	0.84	40	40	10
Cherry	2.26	40	40	10
Kincaid	1.07	40	40	10
Subtotal	11.2			
Grand Total	29.73			

Source: City of Sumner, 2018.

Growth on the Opportunity Sites would add capacity to the city for housing and further support the City's ability to meet its growth target in the Comprehensive Plan. See Exhibit 2-10.

Alternatives 1 and 2 would double the city's capacity for housing. Alternative 3 allows more dwellings than exist today but would only represent less than one-quarter of the city's housing capacity.

Alternative 1 has two density options: A) assumes more density west of the railroad and less east, and B) gradually increases density from west to east. Heights and uses remain the same under each density option, though Option B could be achieved with less height along the White River.

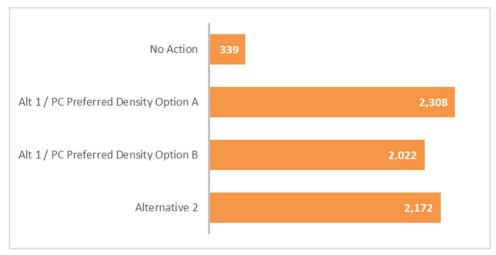
Exhibit 2-10 Growth Capacity and Assumptions - Town Center Subarea Plan Update and Planned Action

	Net Capacity
Alternative Town Center Dwelling Unit Capacity	
Alternative 1: Density Option A / Planning Commission Preferred	2,308
Alternative 1: Density Option B / Planning Commission Preferred	2,022
Alternative 2 Net Acres and Capacity	2,172
No Action per Comprehensive Plan Update 2015	339
Proposed Job Assumptions	
Action Alternatives with Job Reallocations	460
No Action Alternative Jobs: Comprehensive Plan Update 2015	408

Source: City of Sumner, 2018; BERK, 2018.

Housing capacity is the primary distinguishing change among the alternatives; see Exhibit 2-11 below.

Exhibit 2-11 Town Center Housing Capacity Comparison



Source: City of Sumner, 2018; BERK, 2018.

The No Action Alternative contributes a smaller share of capacity citywide compared to the Action Alternatives. Action Alternatives 1 and 2 would create housing capacity that exceeds that of the remainder of the City and UGA. See Exhibit 2-12 and Exhibit 2-13.

Exhibit 2-12 Town Center Contribution to City and UGA Housing Capacity

Alternative	Town Center	City + UGA Remainder	Total
No Action	339	1,504	1,843
Alt 1 / PC Preferred Density Option A	2,308	1,504	3,812
Alt 1 / PC Preferred Density Option B	2,022	1,504	3,526
Alternative 2	2,172	1,504	3,676

Source: City of Sumner, 2018; BERK, 2018.

ALT 1 / PC PREFERRED DENSITY OPTION A

ALT 1 / PC PREFERRED DENSITY OPTION B

ALTERNATIVE 2

Town Center

City + UGA Remainder

Exhibit 2-13 Town Center Housing Capacity as a Share of City and UGA Capacity

Source: City of Sumner, 2018; BERK, 2018.

The City's 2015-2035 net growth target for City and UGA is approximately 1,814 dwelling units. The current City and UGA housing capacity is nearly identical to the target at 1,843 units, with only 18% of the capacity made up of growth in the Town Center. For purposes of the SEIS, to maintain consistency with the City's growth target and prior 2015 Comprehensive Plan and SEIS assumptions, total growth would continue to be 1,843 by 2035. However, the share of growth in the Town Center would increase. Just over half of the capacity of the Action Alternatives would be tested. See Exhibit 2-14.

Exhibit 2-14 Growth Assumptions by Alternative

	Town Center	City + UGA Remainder	Total
Citywide Housing Capacity and Target			
Capacity No Action: 2010-2035	339	1,504	1,843
Proposed SEIS Dwelling Assumptions			
Action Alternatives with Dwelling Reallocations	1,194	649	1,843
Assumed Units as % of Alternative 1 / PC Preferred Capacity	52%-59%		
Assumed Units as % of Alternative Capacity	55%		

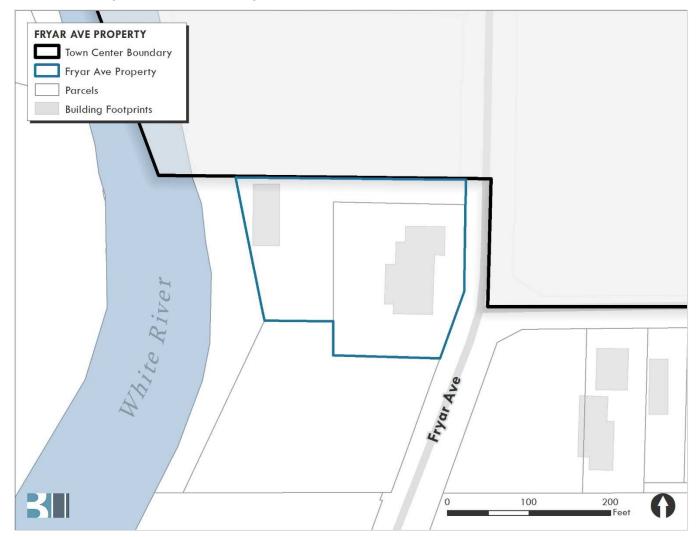
Source: City of Sumner, 2018; BERK, 2018.

Action Alternatives M-1 Sub-Option

At 1504 Fryar Avenue is a one-story office and warehouse development, lying west of the street at Zehnder Avenue; see Exhibit 2-15. Both Action Alternatives consider the potential of 5-6 stories (55-65 feet) of mixed use multi-family/commercial uses on the site, whereas Alternative 3 No Action currently applies GC zoning with a maximum of 4 stories and 45 feet.

The Pierce County Economic Development Board and the property owner are interested in Light Industrial (M-1) zone with a maximum 4-5 stories or 45-55 feet in height. Action Alternatives consider a sub-option of M-1 zoning for the property. Light industrial uses would be allowed as a primary use.

Exhibit 2-15 Fryar Avenue M-1 Sub-Option



Source: Pierce County Interactive Mapping, 2018; BERK, 2018.

Placemaking and Infrastructure Investments

Placemaking refers to the connection between people and places they share – it can mean ensuring public plazas, streetscapes, and other investments are designed creatively and invite the community to gather and engage. Well-designed places improve accessibility, support the local economy, foster social interaction, promote health, define a sense of community, and promote a sense of comfort. (Project for Public Spaces, 2018)



Source: City of Sumner, 2017.

Building on successful places like Heritage Park, the Action Alternatives propose additional placemaking

and infrastructure improvements designed to encourage accessibility and interaction as the area grows and densifies:

- Activity Nodes at Main, Maple, Narrow, and Hunt Streets and Elizabeth Avenue: Activity Nodes are identified for future ground floor businesses that bring activity to the street such as retail, restaurants, coffee shops, microbreweries and performing arts. These spaces are envisioned to offer outdoor seating and amenities that create a lively and interesting streetscape.
- Public Spaces: The Town Center area is planned to contain public gathering areas at key intersections. The design guidelines will also require private open space areas within developments.
- Multimodal Investments: Non-motorized and transit improvements along with road improvements are proposed to facilitate all types of travel. A trolley circulator is proposed to enhance connections to destinations in the Town Center including the Sounder Station.

Network classifications are one of the key implementation tools establishing priorities for the multi-modal transportation system. Based on the street types identified in the Town Center Plan, Exhibit 2-16 Town Center Recommended Travel Context Classifications illustrates the recommended priorities for key corridors within the Town Center. Auto Priority is recommended along Main Street and Traffic Avenue, which serve the highest levels of vehicular traffic within the Town Center.

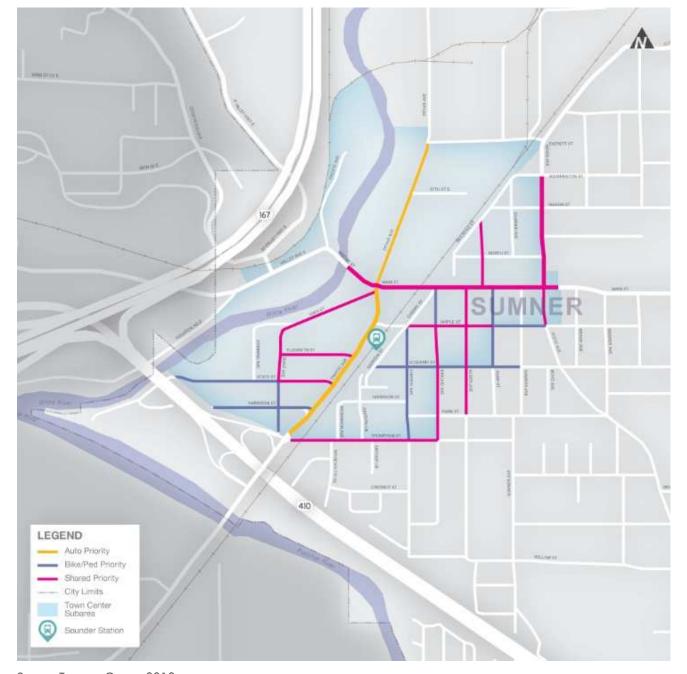


Exhibit 2-16 Town Center Recommended Travel Context Classifications

Source: Transpo Group, 2018.

Form-Based Code

With the Action Alternatives, a form-based code would be adopted that focuses on the buildings and relationship to the street and focuses less on land uses within.

A form-based code is a land development regulation that fosters predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Proposal and Alternatives

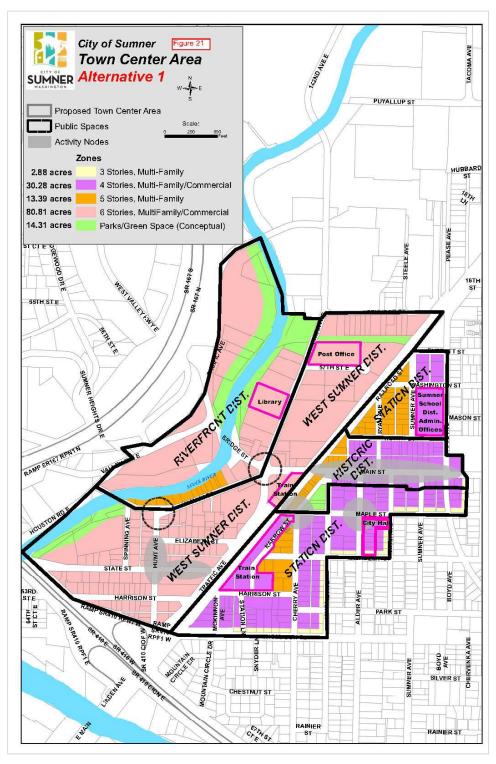
principle for the code. A form-based code is a regulation, not a mere guideline, adopted into city, town, or county law. A form-based code offers a powerful alternative to conventional zoning regulation.

Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in form-based codes are presented in both words and clearly drawn diagrams and other visuals. They are keyed to a regulating plan that designates the appropriate form and scale (and therefore, character) of development, rather than only distinctions in land-use types.

The form-based code would implement the vision and goals of the Town Center Plan Update. It will include a regulating plan that identifies desired building frontages and streetscapes for different portions of the Study Area to achieve the desired character and leverage placemaking investments.

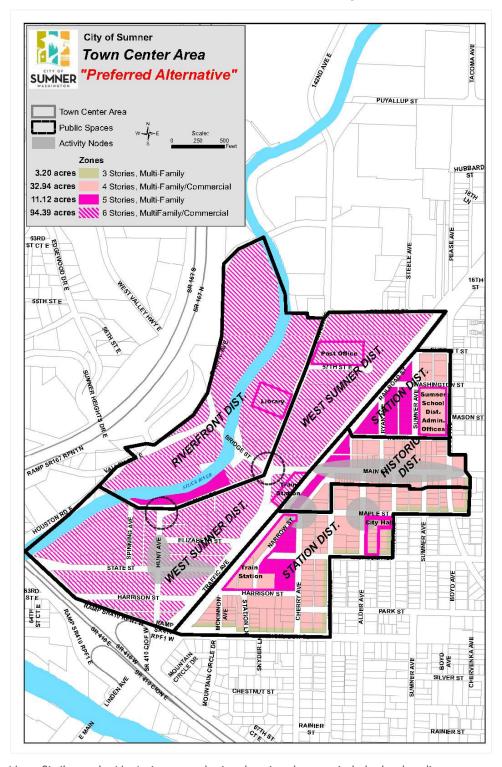
The regulating plan for the proposed form-based code is overlaid on the Alternative 1 map, and the Planning Commission Preferred Alternative. The regulating plan identifies districts, and for each district maximum heights, setbacks, landscaping, and other requirements are proposed.

Exhibit 2-17 Form Based Code District Areas - Alternative 1



Source: City of Sumner, 2018.

Exhibit 2-18 Form Based Code District Areas - Planning Commission Preferred Alternative

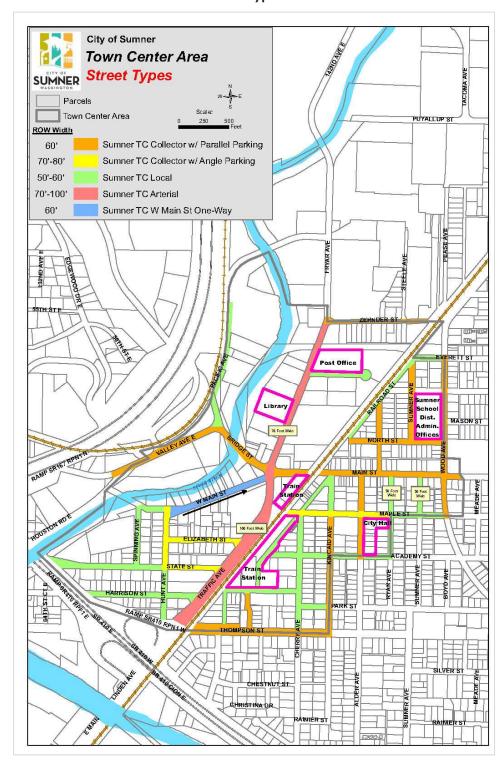


Note: Similar to the No Action map, depicted zoning does not include the shoreline open space area; however, shoreline regulations will apply in any case and includes buffers of 50-200 feet.

Source: City of Sumner, 2018.

The form-based code also addresses the public realm and streetscape. Different treatments are required for each street.

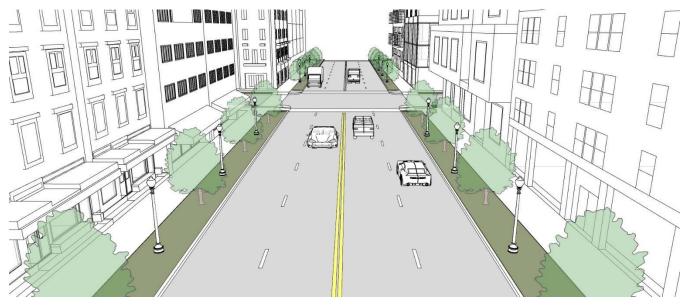
Exhibit 2-19 Form-Based Code Street Types



Source: City of Sumner, 2018.

Cross-sections for arterial, collector, and local streets are shown below. Key features include parking design, wider sidewalks, and greater landscaping. Other streets are addressed in the Draft Plan.

Exhibit 2-20 Town Center Arterial Cross-Section



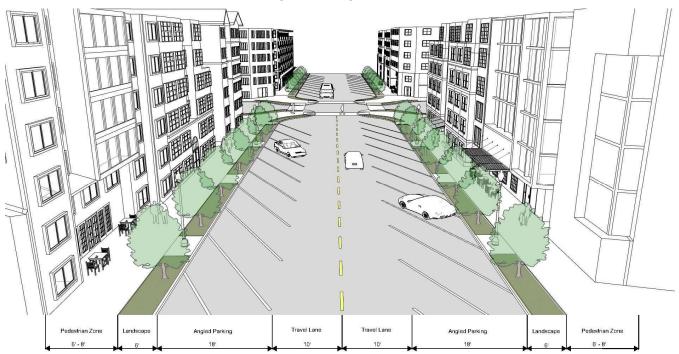
Source: City of Sumner, 2018.

Exhibit 2-21 Town Center Collector with Parallel Parking



Source: City of Sumner, 2018.

Exhibit 2-22 Town Center Collector with Angled Parking



Source: City of Sumner, 2018.

Exhibit 2-23 Town Center Local



Source: City of Sumner, 2018.

Planned Action

A planned action provides more detailed environmental analysis during the early formulation stages of planning proposals rather than at the project permit review stage. Future development proposals consistent with the Downtown Planned Action Ordinance (PAO) do not have to undergo an environmental threshold determination and are not subject to SEPA appeals when consistent with the PAO, including specified mitigation measures. Planned actions still need to meet the City's development regulations and to obtain necessary permits.

The jurisdiction must include a definition of the types of development included but has options to limit the boundaries and to establish a time during which the planned action will be effective.

Review of a planned action is intended to be simpler and more focused than for other projects. When a permit application and environmental checklist are submitted, the City must first verify the following:

- The project meets the description of any project(s) designated as a planned action by ordinance or resolution;
- The probable significant adverse environmental impacts were adequately addressed in the EIS;
 and
- The project includes any conditions or mitigation measures outlined in the ordinance or resolution.

If the project meets the above requirements, the project qualifies as a planned action project and a SEPA threshold determination is not required. However, City actions (i.e., the permit process) are still applicable.

Appendix B contains a draft of the PAO including information on the draft process and the parameters used to determine consistency with EIS assumptions. The PAO would be implemented following ordinance approval as an incentive for future development.

A planned action has the following characteristics:

- Is designated a planned action by ordinance or resolution adopted by a GMA county/city;
- Has had significant environmental impacts addressed in an EIS, though some analysis can be deferred at the project level pursuant to certain criteria specified in the law;
- Has been prepared in conjunction with a comprehensive plan, subarea plan, a fully contained community, a master planned resort, master planned development, a phased project, or in conjunction with subsequent / implementing projects;
- 4. Is located within an urban growth area;
- 5. Is not an essential public facility, as defined in RCW 12.36.70A.200, unless an essential public facility is accessory to or part of a residential, office, school, commercial, recreational, service, or industrial development that is designated a planned action; and
- 6. Is consistent with a comprehensive plan or subarea plan adopted under GMA.

2.3.3 Alternatives Comparison

A summary of the alternatives' features is presented in Exhibit 2-24 below. Action Alternatives amend plans and codes, invest in places and infrastructure, and increase housing capacity and choices.

Exhibit 2-24 Alternative Comparison Matrix

Feature	Alternative 1: Preferred	Alternative 2	Alternative 3: No Action	Planning Commission Preferred
Town Center Plan Update	Χ	Χ		Χ
Form-Based Code	X	X		X
Planned Action Ordinance	Χ	Χ		Χ
Placemaking and Infrastructure Investments	Χ	X		Χ
New Future Land Use Designations/Zones	X	Χ		X
Density Range	40-112	10-112	7-40	40-112
Housing Capacity Town Center	2,022-2,308	2,172	339	2,022-2,308
Housing Assumptions: SEIS	1,194	1,194	339	1,194
Job Assumptions: SEIS	460	460	408	460

Source: City of Sumner, 2018; BERK, 2018.

2.4 SEPA Comment Opportunities

The City provided comment opportunities with a Determination of Significance and Scoping Notice issued May 2018 for a 21-day comment period (see Appendix A). The SEIS was issued with a 30-day comment period during which time written comments were requested. Following the Draft SEIS issuance, the Final SEIS responded to public comments (see Chapter 4).

Public meetings and hearings on the Planned Action Ordinance and other code amendments (e.g. form-based code) received legislative review by the Planning Commission and City Council. Project related meetings and comment periods were advertised on the project webpage: http://sumnerwa.gov/town-center/.

2.5 Benefits and Disadvantages of Delaying the Proposed Action

Delay of the proposed action would continue present trends of a low-rise and historic commercial center with low density housing. Delay of the proposal would reduce potential for changes in density, scale and height, additional traffic trips, and public service demands and costs.

The disadvantages of delaying the proposed action include a lack of housing variety and economic development contrary to City long-range plans. Delaying redevelopment would also delay the improvement of public spaces and streets.

3 Affected Environment, Significant Impacts, and Mitigation Measures

3.1 Land Use

This section addresses consistency of the alternatives with city and regional plans and policies. The Affected Environment reviews Sumner's Comprehensive Plan growth strategy and policies as well as Puget Sound Regional Council's (PSRC's) centers growth strategy. Alternatives are compared to these strategies and policies.

This section also addresses physical land use patterns within and surrounding the Study Area, considering changes in type and intensity of residential, commercial, and mixed uses. Existing land use pattern conditions are based on field reconnaissance, imagery review, and Pierce County and City of Sumner parcel data. Future conditions consider the level of growth and land use change described in Chapter 2 for the Alternatives.

For the purposes of this SEIS, the thresholds of significance are:

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

The features of the Alternatives that can mitigate impacts (e.g. proposed land use code and design standards), other City programs and regulations, and other ways to address significant land use impacts are included.

3.1.1 Affected Environment

Land Use Plans and Policies – Regulatory Environment

Sumner Comprehensive Plan

The Sumner Comprehensive Plan envisions Sumner as a city of excellence, with small-town charm and a functioning, "everyday" downtown per Community Character Goal 2.

Goal 2: The Sumner community should be designed so that housing, jobs, daily needs, and other activities are within easy walking distance of each other.

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Affected Environment, Significant Impacts, and Mitigation Measures | Land Use

The Comprehensive Plan anticipates future land use changes for the Town Center. Community Character Element Goal 3 and Policy 3.1 promote the development of a compact, vibrant, pedestrian-oriented town center:

Goal 3: Reinforce the downtown as the town center and commercial and cultural center of Sumner.

Policy 3.1 Plan for the downtown as Town Center and the community core encouraging a combination of commercial, civic, cultural, recreational, and residential uses.

The Comprehensive Plan presents a growth strategy of infill on properties with services and facilities in Land Use Policy LU-1.2. (City of Sumner, 2017)

Policy LU-1.2 Encourage infill development on vacant properties with existing public services and public utilities, and new development in areas with existing or planned public facilities.

The Comprehensive Plan's housing strategy anticipates new housing and a variety of housing types in the Town Center in Goal 4 and Policy 4.1 of the Housing Element as follows:

Goal 4: Provide for a variety of housing types and densities in the town center in close proximity to the train station.

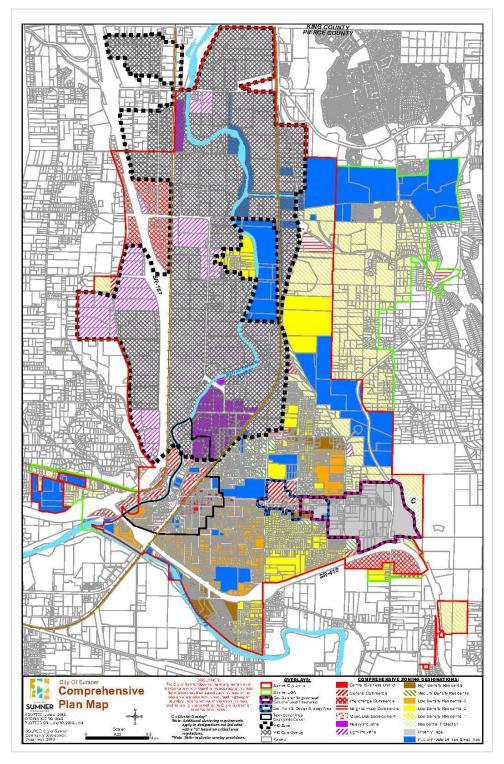
Policy 4.1 Promote the construction of housing stock in the town center by at least 350-500 dwelling units by 2035.

The Sumner Comprehensive Plan designates the Town Center Area as a "Countywide Center," with a future land use that mixes residential, commercial, and service uses. See Exhibit 3-1. The Future Land Use Map applies the Town Center Plan Overlay on top of residential, commercial, and mixed-use base designations. This overlay describes the Town Center land use and character:

The Town Center Plan covers and area within approximately one-half mile radius of the Sumner commuter rail station. This is an area that is targeted for future residential and mixed use development that would take advantage of being near transit and amenities and conveniences in the downtown core. The increased population in the downtown would add to the market for maintaining an "everyday" downtown and further strengthen the economic vitality of Main Street. The Town Center Plan also envisions a mixed of uses along Traffic and Fryar Avenues with an increase in heights and residential densities. The Town Center is also a "center of local importance."²

² The City's Comprehensive Plan Map refers to the Town Center as a Countywide Center. This Town Center Plan Overlay description would need update for consistency.

Exhibit 3-1 Comprehensive Plan Land Use Designations



Source: City of Sumner, 2018.

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Affected Environment, Significant Impacts, and Mitigation Measures | Land Use

Sumner Town Center Plan

The Sumner Town Center Plan (2005) presents the vision and strategies for the Town Center and reinforces the Comprehensive's Plan's vision for Sumner Downtown as a fully functional "everyday" downtown that maintains its classic small-town character. Excerpts of 2005 policies are listed below; amendments to these policies are proposed with the Action Alternatives considered in Section 3.1.2.

Goal TC-1 Make Downtown a vibrant activity area.

Policy TC 1.1 Plan for the downtown as town center and the community core encouraging a combination of commercial, civic, cultural, recreational, and residential uses.

Policy TC 1.3 Promote active, pedestrian-oriented retail, service, and mixed uses. Uses that require outdoor storage, provide offsite services, or have little walk-in trade as primary parts of their businesses should be oriented to secondary locations in Downtown away from Main Street and Alder Avenue.

Policy TC 1.6 Encourage more housing in and near Downtown to strengthen Downtown businesses, take advantage of the commuter train, offer a range of housing in the community, and provide an active, social character.

Goal TC 2 Encourage businesses and activities relevant to everyday lives.

Encourage more mixed commercial/service/housing uses in the Town Center, such as along Traffic and Fryar Avenues. Reduce light industrial zoning in the Town Center in favor of mixed-use zoning.

Goal TC-6 Promote Housing in the Town Center

Policy TC 6.3 Promote the redevelopment of key downtown locations such as the car dealerships and the Red Apple market through partnering with developers, Sound Transit, and other key parties.

Policy TC 6.6 Subject to design review, encourage infill residential development in the Downtown, such as "mixed use buildings" (multifamily units above ground-floor commercial), and "mixed use developments" (combination mixed use buildings and separate residential buildings on the same parcel), in order to allow for an active community core.

Washington State Growth Management Act

Sumner's strategy for growth is consistent with the Growth Management Act (GMA), which restricts urban growth to urban areas to prevent sprawl. This is represented in the following five GMA goals addressing growth, transportation, housing, and economic development, a subset of the 13 GMA goals:

(1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Affected Environment, Significant Impacts, and Mitigation Measures | Land Use

- (2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
- (3) Transportation. Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.
- (4) Housing. Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
- (5) Economic development. Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.

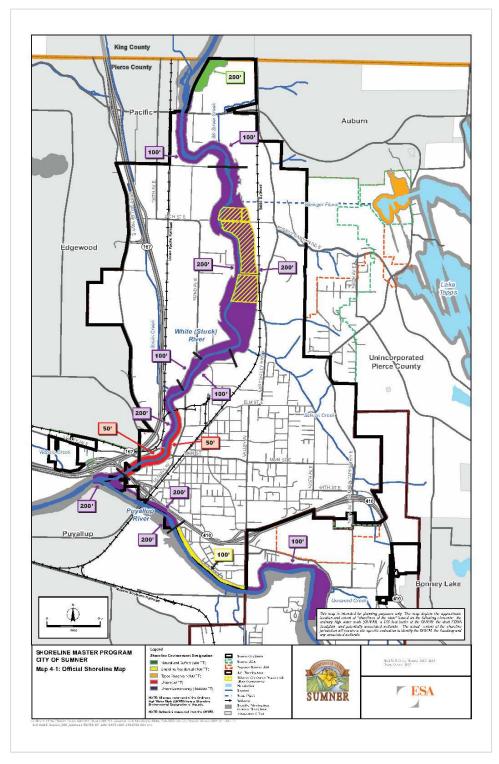
Source: RCW 36.70A.020

Sumner Shoreline Master Program

Sumner adopted a Shoreline Master Program (SMP) in 2014 consistent with the Shoreline Management Act. Within approximately 200 feet of the White and Puyallup Rivers in the city limits, the SMP balances preferred shoreline uses (e.g. water-oriented development, single-family residential, etc.) with shoreline ecological protection and shoreline public access. The SMP applies two shoreline environment designations within the Town Center study area that overlay on other regulations (see Exhibit 3-2):

- Urban Applies both sides of White River to Bridge Street/Union Pacific Railroad (UPRR) Spur Bridge. Considered an area of high intensity land uses that include residential, commercial, and industrial development. Requires a 50-foot riparian management buffer. A maximum 35 feet building height applies. Up to 80% impervious lot coverage is allowed.
- Urban Conservancy Applies west side of White River north of Bridge Street/UPRR Spur Bridge. Intended as an area of mixed land uses that include residential, commercial, and industrial developments, generally located in a floodplain with potential for ecological restoration. Requires a 200-foot riparian management buffer. A maximum 35 feet building height applies. Up to 40% impervious lot coverage is allowed.

Exhibit 3-2 Sumner Shoreline Designation Map



Source: City of Sumner, 2014.

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Affected Environment, Significant Impacts, and Mitigation Measures | Land Use

Puget Sound Regional Council Multi-County Planning Policies and Pierce County Countywide Planning Policies

Both the PSRC's Multi-County Planning Policies (MCPPs) and the Pierce County Countywide Planning Policies (CWPPs) direct cities toward a centers strategy, in which urban growth is concentrated in designated regional and local centers, consistent with Sumner's land use strategy. Regional centers, such as Sumner's Candidate Manufacturing Industrial Center, are designated in the MCPPs, but local centers are also recognized as important to regional growth:

MPP-DP-2: Encourage efficient use of urban land by maximizing the development potential of existing urban lands, such as advancing development that achieves zoned density.

Goal: Subregional centers, such as those designated through countywide processes or identified locally, will also play important roles in accommodating planned growth according to the regional vision. These centers will promote pedestrian connections and support transit-oriented uses.

MPP-DP-11: Support the development of centers within all jurisdictions, including town centers and activity nodes.

In the CWPPs, community and urban design policy CU-1, and urban growth area policies, UGA-2.6, UGA-37 and UGA-38 support the designation of the Town Center Area as a Countywide Center.

- CU-1. The County, and each municipality in the County, will develop high quality, compact communities that:
- 1.1 impart a sense of place;
- 1.2 preserve local character;
- 1.3 provide for mixed uses and choices in housing types; and
- 1.4 encourage walking, bicycling, and transit use
- UGA 2.6. Encourage efficient use of urban land by maximizing the development potential of existing urban lands, such as advancing development that achieves zoned density.
- UGA-37. Countywide Centers are local focal points where people come together for a variety of activities, including business, shopping, living and recreation. These centers may include the core of small to medium-sized cities and may also be located in unincorporated areas. Often Countywide Centers include a strong public presence because they are the location of city hall, main street, and other public spaces. Countywide Centers are also potentially candidates for designation as regional centers.
- UGA-38. Countywide Centers shall be characterized by a compact urban form that includes a moderately dense mix of locally-oriented retail, jobs and housing that promotes walking, transit usage and community activity.

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

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- 38.1 Countywide Centers shall be developed at a higher density than surrounding urban areas to take advantage of connecting centers.
- 38.2 Small-scale forms of intensification such as accessory housing units and development of vacant lots and parking lots help achieve the qualities of centers while preserving neighborhood character.

Existing Zoning

Zoning in the Town Center Plan Area implements the Land Use policies of the Comprehensive Plan. It includes a mix of primarily general commercial and central business district zones, with smaller amounts of residential and mixed-use zoning. In terms of acreage, roughly 36% or 46.16 acres of the Town Center Plan Area is zoned General Commercial. Only 0.31% or 0.39 acres has high density multi-family residential zoning as shown in Exhibit 3-1, though attached dwellings are allowed in the commercial zones. See Exhibit 2-5 in Chapter 2 for current zoning in the Town Center.

- The General Commercial (GC) zone allows a wide variety of businesses and supports a mix of auto sales, large format retail, and office complexes.
- Medium Density Residential (MDR) allows multi-family residential development such as townhouses, duplexes, adult family homes, and retirement homes/apartments, at moderate densities. Single family residential development, public and institutional uses are also allowed.
- Low Density Residential District (LDR-6) allows single family residential development as a primary use but also allows accessory dwelling units, small multiplexes, public and institutional uses as secondary uses.
- Central Business District (CBD) is a commercial district. The CBD zone allows smaller format retail and commercial services that enhances the pedestrian scale and character of development in Sumner's downtown area.
- Mixed-use Development (MUD) is a commercial district that allows a mix of residential and commercial services close to the historic central business district and higher housing density near regional transit centers.
- High Density Residential (HDR) allows the same types of uses that are allowed in the Medium Density Residential zone, but at higher densities.

Exhibit 3-3 shows the maximum development standards for height, coverage, and density under current zoning. These standards give an idea of the intensity of current zoning. Allowed building heights in the Town Center Plan Area are in the range of two to three stories. At 100% coverage maximums in the Central Business District zone of the Town Center Plan Area, lots are allowed to be mostly covered with buildings, parking lots, and other impervious surfaces. Lots in the Mixed-Use Development and General Commercial zones have lower coverage maximums, at 80% and 75% while maximum allowed coverage is much lower, ranging between 35% and 45% in the residential zones. Where residential development is allowed, it is limited to low to moderate intensities ranging from 7-9 to 25 units per acre.

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Exhibit 3-3 Maximum Development Standards for Current Zoning

ZONE	MAXIMUM HEIGHT	MAXIMUM LOT COVERAGE	MAXIMUM DWELLING UNITS PER ACRE	MAXIMUM FLOOR AREA RATIO
GC	*35'	75%	N/A	
MDR	***35'	35%	15	
LDR-6	30'	40%	~7-9	
CBD	**35'	100%	N/A	2.0-3.0
MUD	35'	80%	N/A	2.4-3.2
HDR	***35'	45%	25	

Notes: * Maximum building height in feet in the Town Center Plan area for a structure with at least 50% of the ground floor occupied by underbuilding parking is 45.

Current Land Use Patterns in the Study Area

The Study Area is largely developed with a denser development pattern east of the Burlington Northern Railroad and in West Sumner, with a more suburban pattern along Traffic/Fryar Avenue. See Exhibit 3-4.

Commercial/retail uses cluster along Main Street and Traffic/Fryar Avenue, with smaller storefronts on Main Street and larger single-use commercial, office, and industrial enterprises along Traffic Avenue/Fryar Avenue. Sumner's historic downtown shopping area, civic uses such as Sumner City Hall, and retail storefronts, are found along Main Street. Reflecting Sumner's vision for downtown as an "everyday" destination, the commercial/retail businesses in the area cater to residents' daily needs and include businesses such as banks, laundry/dry cleaning, small restaurants, auto-related uses and hardware/garden firms. Interspersed with these uses are specialty retail establishments such as gift shops and antique shops.

These two clusters of commercial uses along Main Street and Traffic/Fryar Avenue are different in building form and pattern as well as use mix. The older, historic commercial/retail area along Main Street between Wood Avenue and Traffic Avenue is characterized by low-rise development of 1-2 stories in height. Buildings here are arranged in a more fine-grained pattern, with small lots and narrow storefronts forming a continuous street-level edge. Wide sidewalks and streetlight contribute to a walkable, pedestrian-scale commercial/retail corridor. The more recently developed commercial area on the west side of Traffic Avenue is dominated by auto-oriented commercial uses, such as the Sunset Chevrolet dealership at Maple Street and the McLendon Hardware store north of Main Street. Buildings form here have a suburban, auto-oriented character, with large lots, and long, low-slung buildings surrounded by surface parking. Sidewalks, landscaping, lighting, and other elements that enhance

^{**}The maximum building height listed in SMC 18.16.070 for the central business district (CBD) zone may be increased to 49 feet under certain conditions listed in 18.16.075 Height exception in the central business district zone.

^{***} Except that townhouse condominiums and duplexes shall have a maximum building height of 30 feet when the interior side yard setback is less than 10 feet, or the rear yard setback is less than 20 feet.

Source: Sumner Municipal Code, 2018.

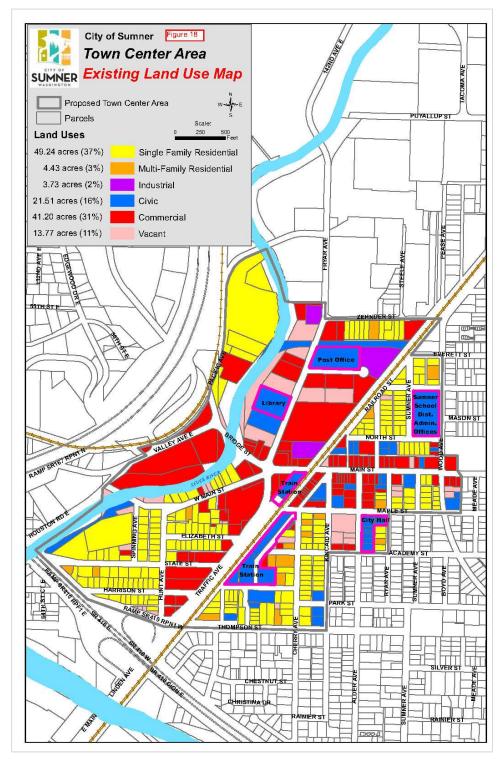
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walkability are largely absent. Residential development within the Plan area is mostly single family and surround the commercial uses east and west of Traffic Avenue and north and south of Main Street.

The Study Area includes Sound Transit's Sounder Sumner Station and is within a quarter-mile walk of the station. Sumner Sounder Station is well-used with thirteen daily roundtrips and several feeder bus routes connecting the city to the rest of the region.

At the time of writing, the Study Area includes the half-acre Heritage Park at the corner of Main Street, Kincaid Avenue and Cherry Avenue. Mid-block between Kincaid Avenue and Alder Avenue, a smaller "alley park," connects Main Street to parking areas behind shops.

Exhibit 3-4 Current Land Use Map



Source: Pierce County Assessor, 2018; City of Sumner, 2018.

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In terms of acreage, the largest proportion of the land area in the Study Area is devoted to single-family residential development, although commercial and civic acreage is substantial. Single-family residential uses occupy 49 acres or 37% of the Study Area while commercial uses occupy 41 acres or 31% of the Study Area. The amount of land devoted to multi-family uses is relatively small with nearly 5 acres or 3% of the Study Area devoted to it. Roughly 14 acres or 10 % of the Study Area is vacant. See Exhibit 3-4 for the distribution of uses and Exhibit 3-5 for acreage by use.

Exhibit 3-5 Existing Land Use

EXISTING LAND USE	ACRES	PERCENT
Industrial	3.7	3%
Multi-Family Residential	4.4	3%
Vacant	13.8	10%
Civic	21.5	16%
Commercial	41.2	31%
Single Family Residential	49.2	37%
Total	133.9	100%

Note: Numbers and percentages are rounded. Acres reported are net and include parcel/property area. If considering roads and river area, the total Town Center Plan Area equals 210 gross acres approximately. Source: City of Sumner GIS, August 2018.

Current Plans and Land Use Patterns Abutting the Study Area

Land uses abutting the Study Area, include:

- North of the Plan Area is Sumner's historic industrial area. This area currently contains a mix of lower intensity, single-purpose industrial uses. Industrial uses in this area include aerospace businesses and the site of the historic Fleischmann's Yeast Plant.
- East of the Study Area are low and medium-density residential neighborhoods with mostly single-family development. The northeastern corner of the Plan Area, along Everett Street and North Street, includes some larger multi-family buildings, and the Sumner School District Administrative building. Development along the western edge of Everett Street and Wood Avenue are adjacent to lower-density single-family neighborhoods across the street. South of this, the edge of the Town Center Plan Area along Meade Avenue abuts lower-density residential areas while Maple Street and Academy Street separate the Plan Area from lower-density residential neighborhoods. Similarly, the southeastern corner of the Plan Area, between Academy Street and Thompson Street, is adjacent to single-family residential neighborhoods across Thompson Street and Kincaid Avenue.
- West of the Study Area lies SR 167, which forms a strong physical boundary. Here in older, lower density sites and facilities along the BNSF mainline, are a range of industrial activities related to construction-related businesses, food and beverage processing and wholesale businesses, as well as wood and paper product manufacturing businesses.

3.1.2 Impacts

Impacts Common to All Alternatives

Short-Term

All Alternatives include some amount of redevelopment and to a lesser extent development of remaining vacant land. As this infill development occurs within the Study Area, there is the potential for localized land use compatibility impacts to occur where newer development is of greater height and intensity than existing development. These compatibility impacts, if they occur, are temporary and will be resolved over time. The extent of these conflicts varies by alternative and can be reduced by the application of existing or new development and design standards.

Long-Term

Land Use Plans and Policies

See each alternative for land use plan analysis. See also the SEPA Checklist in in Appendix A which addresses pending updates of water and sewer system plans.

In terms of state, regional, and local goals and policies, each alternative would allow a more urban development pattern around a transit center avoiding sprawl, promoting housing and economic opportunities, and supporting multimodal transportation choices. As a Countywide Center, the Sumner Town Center represents a mixed-use focal point providing a place for living, shopping, working, and recreation. While all alternatives meet the state, regional, and local goals and policies, Alternatives 1 and 2 further reinforce this multifaceted infill opportunity.

Each alternative contributes to a citywide capacity that allows the City to achieve its 2035 growth targets. Alternatives 1 and 2 would double the City's housing capacity in the City limits on the Phase I and II Opportunity Sites. See Exhibit 3-6.

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Exhibit 3-6 Housing Capacity and Target by Alternative

SCENARIO	TOWN CENTER CAPACITY	SHARE OF CITYWIDE CAPACITY
Alternative 1 / PC Preferred Capacity: Density Option A	2,308	125%
Alternative 1 / PC Preferred Capacity: Density Option B	2,022	110%
Alternative 2 Capacity	2,172	118%
Alternative 3 No Action Capacity: 2010-2035	339	18%
Citywide Capacity No Action: 2010-2035		1,843
Citywide Growth Target 2035		1,814

Source: BERK, 2018.

Since much of the Study Area is designated for commercial uses and is developed, the capacity for new jobs is relatively small; additionally, the City's primary employment center is in the industrial valley to the north. Though mixed uses are designated for more blocks beyond the Fryar/Traffic Avenue and Main Street corridors under Alternatives 1 and 2, ground floor commercial is not anticipated on all sites since the likely market for commercial uses would dissipate the further the properties are from the Sounder Station and the commercial corridors. Live-work may be appropriate in these blocks. Still, Alternatives 1 and 2 would slightly increase the share of commercial jobs. See Exhibit 3-7.

Exhibit 3-7 Job Capacity and Target by Alternative

SCENARIO	TOWN CENTER CAPACITY	SHARE OF CITYWIDE CAPACITY
Alternative 1 / PC Preferred Capacity	460	4%
Alternative 2 Capacity	460	4%
Alternative 3 No Action Capacity: 2010-2035	408	3%
Citywide Capacity No Action: 2010-2035		12,894
Citywide Growth Target 2035		12,871

Source: BERK, 2018.

Growth Pattern

While ultimately the entire Town Center Plan Area is expected to redevelop, only a portion of development will take place within the 2035 planning horizon. Exhibit 2-8 in Chapter 2 shows parcels likely to redevelop under all alternatives based on the City's land capacity analysis that considers improvement to land value, consideration of market factors and critical areas, and other aspects.

However, increased heights under Action Alternatives will create further capacity to meet city growth targets. This capacity will be within a five-minute walk of transit, and in a more compact, walkable environment. The No Action Alternative is based on the adopted Comprehensive Plan target and does not increase capacity in the Town Center Plan Area.

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Land Use Within the Town Center Area

New growth is expected to occur under all the alternatives, although the amount of growth and composition of the mix of land uses will vary by alternative. Exhibit 2-14 shows the projected growth in population and employment associated with each alternative. Beyond 2035, it is anticipated that more extensive changes could occur to existing building forms, while in the near term to 2035, growth would be more focused on opportunity sites located as illustrated on Exhibit 2-8.

Activity levels would increase across the Town Center Plan Area with new businesses, residents, and employees. Exhibit 3-8 shows the acres and building heights associated with each alternative. Alternative 1 adds the broadest range of housing options to the Town Center Plan Area, with multifamily housing in both exclusively residential and mixed-use formats. No new single-family housing is anticipated under Alternative 1, in contrast with Alternative 2 and the No Action Alternative. Multifamily housing is anticipated to be the primary use for 90% of the acreage under Alternative 1 compared to a range of 77-90% of acreage under Alternative 2.

Alternative 1 includes more development with heights in the 5-6 stories range than Alternative 2 or the No Action Alternative. This reflects the higher heights planned around the Sumner Sounder Station under Alternative 1 and the lower heights in this location (along Traffic Avenue, Fryar Avenue and Main Street) for Alternative 2 and the No Action Alternative. Alternative 1 and Alternative 2 includes the addition of park/green space to the Town Center Plan Area, while no such addition is expected under the No Action Alternative. The Planning Commission Preferred Alternative has a larger acreage at 6 stories than Alternative 1 since the map does not illustrate the area that would essentially be open space in shoreline jurisdiction; the shoreline jurisdiction addresses buffers of 50-200 feet in the Town Center. Currently, the shoreline jurisdiction does not allow greater than 3 stories unless the City were to amend it as discussed below.

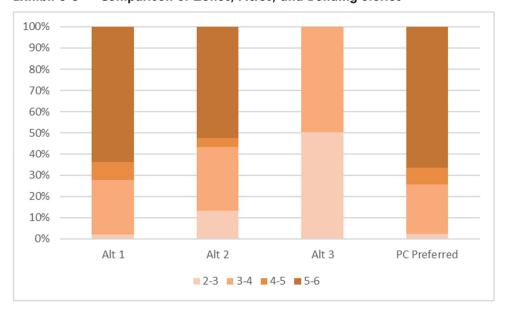


Exhibit 3-8 Comparison of Zones, Acres, and Building Stories

Source: City of Sumner, 2018; BERK, 2018.

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Alternative 1: Preferred Conceptual Zoning Districts

Land Use Plans and Policies

The Comprehensive Plan acknowledges the Town Center Area as a Countywide Center, and Alternative 1 is consistent with policy direction in the Land Use Element that prioritize centers as areas that will receive most of Sumner's growth.

Under Alternative 1 housing units and jobs capacity would increase and could attract growth expected by the 2035 target sooner than other locations in the City or Urban Growth Area depending on attractiveness of amenities and market forces. Within the Land Use Element of the Comprehensive Plan, the land use map and accompanying designation descriptions as presented in the section titled "Land Use Designations" and Figure 3 titled "Comprehensive Plan Land Use Map" will need to be updated to reflect the new conceptual zoning designations. New designations include multifamily/commercial zones (3-4 stories high), multi-family zone (4-5 stories high), and multifamily/commercial zone (5-6 stories high).

The current Town Center Plan would be replaced by an updated plan. Policies would be consistent with the overall Comprehensive Plan's focus on compact community design that puts housing, jobs, daily activities within easy walking distance of each other, and high capacity transit. Policies in the updated plan are also consistent with Comprehensive Plan goals and policies that support a broader range of housing options, and an active community core with mixed-use development of multifamily and commercial uses. Some Comprehensive Plan policy adjustments would be needed addressing the refreshed vision, incentives, parking, multimodal strategies, and change in densities and building heights.

To match the proposed heights and districts proposed in the Town Center Plan and Form-Based Code, some Comprehensive Plan policies would need amendment, including, but not limited to:

- 3.17 Prohibit franchise architecture in the Central Business District and the General Commercial zone within the Town Center.
- 3.21 Development along Traffic Avenue should be limited to a maximum height of 45 feet provided there is underbuilding parking.
- 3.22 The height in the Central Business District should remain at 35 feet to protect and preserve the small town character and scale of Main Street and reduce conflicts with adjacent residential uses.

Proposed heights in Shoreline jurisdiction would exceed 35 feet and be allowable within 200 feet of shoreline jurisdiction under one of the following circumstances: by shoreline variance which requires City and State approval or if a SMP amendment is prepared demonstrating a need and appropriate design standards (e.g. bulk limits and spacing) that allow for shoreline visual access.

Land Use Patterns within Town Center Area

The focus of Alternatives 1 is on adding housing opportunities in proximity to the Sound Transit Sounder Station. Given this focus, Alternative 1 presents the broadest variety of housing options between Alternative 2 and the No Action Alternative (Alternative 3). It is estimated that phased growth under Alternative 1 will add up to 1,194 new housing units and 460 new jobs to the Town Center Plan Area

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compared to only 339 new dwelling units and 408 new jobs under the No Action Alternative. Building heights are likely to increase from a range of about 2-4 stories overall (approximately 30-45') under existing conditions and the No Action Alternative to a range of 4-6 stories, with lower heights (3-4 stories) to the east and relatively greater heights (5-6 stories) to the west of the railroad, to accommodate additional growth and development.

The increase in housing units under Alternative 1 is likely to bring additional activity into the Town Center Plan Area. Residential development would create demand for additional retail and restaurant space. Under Alternative 1, mixed-use development is much more likely than under the No Action Alternative or existing conditions. Residential development is more likely to include ground floor retail uses, particularly in the western portion of the Study Area, near Sumner Station around Hunt Avenue and State Street and along West Main Street and Fryar Avenue, where the greatest intensity is planned. Aside from auto-oriented commercial uses along Traffic Avenue, the western portion of the Study Area consists of mostly single-family residences, and Alternative 1 would introduce multi-family and commercial development. East of Traffic Avenue, increases in allowed height and density would potentially prompt the development of more multi-family, commercial, or mixed-use development in an area characterized mostly by single-family homes and low-rise, small scale commercial buildings. Compared to Alternative 2 and Alternative 3, Alternative 1 places greater residential density around the Sounder Sumner Station and supports a transit-oriented development node around the station.

Land Use Patterns Abutting the Study Area

Compatibility conflicts could occur due to changes in the mix of land use and changes related to the increased intensity and height of new development. Development just outside the Town Center Plan Area boundary along the eastern edge is primarily low and medium density residential development that may be impacted. Building height increases and mixed-use development on the eastern side of the Town Center Plan Area, could place future mixed-use residential buildings approximately 35-45 feet tall in this area. However, building heights would be limited to 3 stories in the transition zone along Thompson Street, Kincaid Avenue, Academy Street, Ryan Avenue, Maple Street, and Meade Avenue. This would ensure future building heights are limited to 3 stories (35 feet) across the street from medium and low density residential development, similar to the height limits of 35 feet (MDR) and 30 feet (LDR) under current zoning. Alternative 1 could place future mixed-use buildings in this area but given the smaller lot sizes and the desirability of residential uses in this area, mixed-use buildings are more likely to be formats compatible with residential development such as live-work units. Alternative 1 could place future mixed-use residential buildings approximately 35-45 feet tall, in the northeastern corner of the Plan Area, along Everett Street and Wood Avenue. These future buildings are not likely to be larger in scale than allowed under existing zoning, such as the Sumner School District Administrative Building, and the 'Winsome Grace' wedding venue (1313 Washington Street). Development across the street on Everett Street is currently industrial, which is less likely to be impacted by mixed-use development in the adjacent Plan Area.

Within the Town Center Plan Area there is also the potential for temporary land use conflicts, particularly in early redevelopment phases where new areas of greater height and intensity abut areas of existing

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development. However, careful attention in the creation of design standards could limit potential for land use compatibility conflicts both within the Study Area and in adjacent areas.

M-1 Sub-Option

At 1504 Fryar Avenue is a one-story office and warehouse development, lying west of the street at Zehnder Avenue. The property is currently for sale. Alternative 1 considers the potential of 5-6 stories (55-65 feet) of mixed-use multi-family/commercial uses on this site. The Pierce County Economic Development Board and the property owner are interested in Light Industrial (M-1) zone with a maximum 4-5 stories or 45-55 feet in height. Alternative 1 considers a sub-option of M-1 zoning for the property. Light industrial uses would be allowed as a primary use.

Rezoning the site to M-1 Light Manufacturing instead of mixed-use zoning would result in a different set of allowed land uses. While the mixed-use zone allows multi-family and commercial development, the M-1 zone would allow more intensive land uses, such as materials processing, wrecking and salvage yards, and outdoor storage facilities that would result in more industrial character that would be less compatible with the design goals and policies of the Town Center than current zoning. However, industrial development on this site would not be out of character with the current use of the property or commercial-industrial mix of uses on surrounding properties While light industrial activity may be more intense than mixed-use multi-family/commercial uses, the small size of the parcels will likely limit the type and size of industrial activity. In addition, existing design standards for M-1 zoning will ensure a pleasant streetscape and reduce visual impact, through guidelines around site design and parking, building design, and landscape design.

Alternative 2: Conceptual Zoning Districts

Land Use Plans and Policies

Alternative 2 is similar to Alternative 1 in its consistency with Town Center as a mixed use focal point, and the need to amend the future land use map and policies to address new land use designations. Alternative 2 is consistent with the Comprehensive Plan policies that designate the Town Center Area as a Countywide Center. Under Alternative 2 housing units and jobs are reallocated to the Town Center from other areas in the Sumner city limits and Urban Growth Area. The Land Use Element of the Comprehensive Plan, the land use map and accompanying designation descriptions as presented in the section titled "Land Use Designations" and Figure 3 titled "Comprehensive Plan Land Use Map" will need to be updated to reflect the new conceptual zoning designations. New designations under Alternative 2 include single family/multifamily (2-3 stories high), multifamily/commercial (3-4 stories high), multifamily (4-5 stories high), and multifamily/commercial (5-6 stories high).

The current Town Center Plan would be replaced by an updated plan. Plan and text amendments would be similar to those of Alternative 1.

Shoreline Master Program height amendments or variances would also apply to Alternative 2.

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Land Use Patterns Within the Study Area

Alternative 2 presents a different range of dwelling types than Alternative 1 or the No Action Alternative. Similar to Alternative 1, it is anticipated that 1,194 new housing units and 460 jobs will be added to the Study Area by 2035. Although the mix of land use is the same as Alternative 1, it is distributed a little differently in Alternative 2, as shown in Exhibit 2-4.

Alternative 2 would have residential development (single family and multi-family) with lower heights in the eastern (along Maple Street), northeastern (along Everett Street and Wood Avenue) and southeastern (along Kincaid Avenue and Thompson Street) boundaries of the Town Center Plan Area. Except for School District Administrative office site, heights under Alternative 2 range from approximately 25-35 feet in these areas, lower than the approximately 35-45 feet under Alternative 1 and the maximum allowed height of 35 feet under the No Action Alternative. Alternative 2 would increase the intensity of development on the School District Administrative office site to a greater degree than Alternative 1, increasing heights to approximately 50 feet, rather than approximately 45 feet under Alternative 1. Future buildings under Alternative 2 in the eastern edge of the Study Area would also be single-use residential, without commercial uses, similar to existing conditions and the No Action Alternative. Mixed-use buildings in this location are more likely under Alternative 1.

Land Use Patterns Abutting the Study Area

Compatibility conflicts could occur due to changes in the mix of land use and changes related to the increased intensity and height of new development. Building height increases on the northeastern and southeastern corners of the Study Area, along Everett Street and Wood Avenue, and along Kincaid Avenue and Thompson Street, could place future residential buildings of 35-45 feet on the boundary of the Town Center Plan Area. Existing residential development along this eastern edge is medium and low density residential and development under Alternative 2 may impact it.

Within the Town Center Plan Area there is also some potential for temporary land use conflicts under Alternative 2, particularly in early redevelopment phases, where new areas of greater height and intensity abut areas of existing development. However, careful attention in the creation of development regulations, and design standards could limit potential land use compatibility conflicts both within the Town Center Plan Area and in adjacent areas.

M-1 Sub-Option

Similar to Alternative 1, Alternative 2 contemplates mixed-use multi-family/commercial uses at 1504 Fryar Avenue site. Alternative 2 also considers a sub-option of M-1 zoning for the property. Light industrial uses would be allowed as a primary use.

Similar to Alternative 1, rezoning the site to M-1 Light Manufacturing instead of mixed-use zoning would result in a different set of allowed land uses. However, industrial development on this site would not be out of character with the current use of the property or commercial-industrial mix of uses on surrounding properties While light industrial activity may be more intense than mixed-use multi-family/commercial uses, the small size of the parcels will likely limit the type and size of industrial activity. In addition,

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existing design standards for M-1 zoning will ensure a pleasant streetscape and reduce visual impact, through guidelines around site design and parking, building design, and landscape design.

Alternative 3: No Action Alternative

Land Use Plans and Policies

The No Action Alternative would not amend current plans or within the Town Center Area.

The No Action Alternative would not amend the SMP; building heights would be limited to 35 feet within shoreline jurisdiction, which is like current LDR zoning in West Sumner and one story lower than GC zoning north of Bridge Street.

Land Use Patterns within the Town Center Area

The No Action Alternative is the least intensive land use alternative. It applies future growth to existing conditions using the policies and zoning that are in place today. As a result, future land use under the No Action Alternative is consistent with Sumner's current Comprehensive Plan, Future Land Use Map (Exhibit 3-1), zoning (Exhibit 2-5) and development regulations (Exhibit 3-3).

Under the No Action Alternative, the Town Center Plan Area would add 339 new dwelling units and 408 new jobs applying current heights and densities. As the area grows, the mix of land uses under the No Action Alternative will remain similar to the existing condition. There is likely to be some redevelopment on opportunity sites, but less dense mixed-use is anticipated. Proposed amenities and investments in transportation, parks, and gathering areas would not occur to the same degree, and private investment in housing and jobs could be less.

Building forms would also remain like the forms that exist today with a potential for one or two stories greater. Redevelopment of some areas may result in larger buildings where new construction maximizes development on parcels that are currently underutilized according to existing zoning, e.g. the former Red Apple site. With a mix of land uses and building form like existing conditions, there are unlikely to be issues with land use incompatibility within the Town Center Plan Area.

Land Use Patterns Abutting the Study Area

With heights of up to a maximum of 35 feet abutting the area adjacent to the east and the application of current Land Use Code standards that address landscaping and other site design requirements, there are unlikely to be compatibility impacts.

M-1 Sub Option

Under Alternative 3, GC zoning would remain the same on the Fryar Avenue parcels. Light industrial uses are possible with a conditional use permit.

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Planning Commission Preferred Alternative

Land Use Plans and Policies

The Planning Commission Preferred Alternative has a similar result in terms of policy consistency and development capacity as Alternative 1.

Proposed heights in Shoreline jurisdiction would exceed 35 feet and be allowable within 200 feet of shoreline jurisdiction under one of the following circumstances: by shoreline variance which requires City and State approval or if a SMP amendment is prepared demonstrating a need and appropriate design standards (e.g. bulk limits and spacing) that allow for shoreline visual access.

The Planning Commission Preferred Alternative assumes that the City will pursue a SMP amendment during the periodic review. Aesthetic analysis in Section 3.2 compares the 3-story to 6-story heights and illustrates the setbacks/buffers required in any case.

Land Use Patterns within Town Center Area

The evaluation of Alternative 1 Land Use Patterns above applies to the Planning Commission Preferred Alternative.

Land Use Patterns Abutting the Study Area

The analysis of Alternative 1 Land Use Patterns Abutting the Study Area applies to the Planning Commission Preferred Alternative, except that there would be a greater number of blocks where building heights would be limited to 3 stories in the transition zone along Thompson Street, Kincaid Avenue, Academy Street, Ryan Avenue, Maple Street, and Meade Avenue. This would ensure future building heights are limited to 3 stories (35 feet) across the street from medium and low density residential development, similar to the height limits of 35 feet (MDR) and 30 feet (LDR) under current zoning.

M-1 Sub-Option

The Planning Commission Preferred Alternative rezones the northwest parcels (known as the Sessler site) to M-1 Light Manufacturing instead of mixed-use zoning. As described for Alternatives 1 and 2, industrial development on this site would not be out of character with the current use of the property or commercial-industrial mix of uses on surrounding properties Existing design standards for M-1 zoning will ensure a pleasant streetscape and reduce visual impact, through guidelines around site design and parking, building design, and landscape design.

3.1.3 Mitigation Measures

Incorporated Plan Features

The Sumner Comprehensive Plan designates the Town Center Plan Area as a Countywide Center. The Comprehensive Plan, including the adopted Town Center Plan, includes policies and plans for improvements to support the development of land use under the No Action Alternative.

Increases in land use intensity under Alternatives 1 and 2 could be partially mitigated through the development of streetscape improvements and non-motorized transportation connections that support new development and add public open space. The integration of public open space into the Study Area helps to soften potential impacts of more intensive land use. Open space is an amenity that can be used for recreation, community gathering, access to nature, a visual break, and a variety of environmental benefits.

The updated Town Center Plan associated with Alternatives 1 and 2 includes transition zone standards along the eastern and southern edge stepping down heights where the center abuts Low Density Residential zones. These "transition areas" will be at reduced height (maximum 3 stories) to create more compatible transition between traditionally single-family residential zones and areas with increased height.

A "form-based code" for the Town Center will regulate the form and mass of proposed buildings, building placement and height, diversity, distribution, and intensity of land uses and mobility options. The code will ensure that the scale and character of development is aligned with Sumner's community vision, and compatible with historic Main Street, adjacent low-density residential areas, and other parts of the city.

Regulations and Commitments

Sumner's City Code contains regulations that help to ensure land use compatibility. A summary of these regulations, which would mitigate impacts associated with the alternatives, is presented below.

Shoreline Master Program. The City applies SMP goals, policies, and regulations to lands approximately within 200 feet of the White and Puyallup Rivers. Land uses, impervious area, building height, and vegetation management conditions apply.

Zoning Regulations. Per the City of Sumner's Zoning Code development is subject to setback, buffer, and landscaping requirements to minimize impacts on adjacent land uses, particularly between commercial/industrial and residential development. Design review is required for all new multi-family, commercial, and industrial developments; the review must consider the context of the site and potential for incompatibility. Certain land uses are subject to conditional use review, which includes a more detailed review of land use compatibility. These regulations would be in place under the No Action Alternative.

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Design Standards. Currently there are no design standards specific to the Study Area. However, there are existing design standards that are applied to certain parts of the Study Area including:

- Central Business District design guidelines. The intent of these design guidelines is to maintain and improve the downtown area's character as a pedestrian-oriented, historic business district. Design guidelines address site design and parking, building character and massing, building details and materials, and streetscape and landscaping.
- Industrial guidelines. These guidelines are intended to address the unique site conditions presented in industrial developments. Guidelines around parking and site design and parking, building design, and landscape design, balance the needs of industrial businesses and needs of a pleasant pedestrian environment, including the screening of equipment, off-street parking, outdoor storage, large expanses of undifferentiated wall surface, and refuse/utility facilities.

Historic Properties. Chapter 18.39 of the Sumner Municipal Code establishes procedures for listing properties on the Sumner Historic Register and the consultation steps required before alteration of listed properties.

This suite of standards works to promote land use compatibility in the areas in which they are applied. These rules would be in place under the No Action Alternative.

Other Proposed Mitigation Measures

Land Use Plan Consistency

The proposal includes adoption of a Town Center Subarea Plan Update that would update Future Land Use Map designations and Zoning districts, as well as provide refreshed policies and strategies. Updates to the Comprehensive Plan would ensure policy consistency with Action Alternatives 1 and 2.

Shoreline Master Program Consistency

The City may seek a SMP amendment, potentially together with its periodic update currently underway, to allow for heights greater than 35 feet in the Town Center, subject to design review to ensure adequate visual access. This would be particularly addressing the West Sumner area south of Bridge Street where the SMP Urban buffer is 50 feet and there is an additional 150 feet of shoreline management area. Building heights would affect the future density in the Opportunity Sites along the River in West Sumner. An SMP amendment would require approval by the Washington Department of Ecology as well as the City. Otherwise, shoreline height variances would be required on a case-by-case basis to achieve the maximum height of the Action Alternatives along the White River.

Design Standards

Alternatives 1 and 2 would require the development of new zoning and development regulations for the Town Center Plan Area. New zoning regulations will address permitted uses, dimensional requirements, an FAR amenity incentive system, the conversion of non-conforming uses and properties, parking and circulation, landscaping, and the development of streets and sidewalks. These regulations will need to be

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crafted with the intent of creating land use compatibility within and adjacent to the Town Center Plan Area.

• Alternatives 1 and 2 will include the adoption of design standards specific to the Town Center Plan Area. It is anticipated that design regulations developed to implement Alternatives 1 or 2 would include standards related to: building design, pedestrian experience and streetscapes, public spaces, mixed-use building features, site planning, parking, lighting, screening, and signage.

3.1.4 Significant Unavoidable Adverse Impacts

The Planning Commission Preferred Alternative and Alternatives 1 and 2 are generally consistent with the policy direction of the Comprehensive Plan. The Comprehensive Plan policies and map would need to be updated under Action Alternatives to ensure full policy consistency. These Comprehensive Plan consistency amendments would occur simultaneous with the Town Center Plan Update, and no significant unavoidable adverse impacts are anticipated.

Under all alternatives, additional growth and development will occur in the Town Center Plan Area, leading to increases in height and bulk of buildings and increased land use intensity. This transition is consistent with an urban area designated as a Countywide Center in the Comprehensive Plan.

Future growth is likely to create temporary or localized land use compatibility issues as development occurs. New construction will result in changes of use and the characteristics of parcels of land, including potential demolition and displacement. The potential impacts related to these changes may differ in intensity and location in each of the alternatives. With existing and new development regulations, zoning requirements, and design guidelines, transitions between areas of different intensity can be mitigated. The change in activity levels due to increase density and employment growth would be significant and avoidable, though less than adverse by meeting City level of service policies.

3.2 Aesthetics

This section addresses potential changes to visual character in the study area, including building height, bulk, and scale, as well as negative effects on scenic views and shading conditions. Existing conditions are based on field reconnaissance and imagery review. For the purposes of this SEIS, the thresholds of significance are:

- Changes in building heights, land uses, or development intensities that substantially change the
 aesthetic character of the Study Area or would result in development that is significantly out of scale
 with existing conditions;
- Changes to development patterns that would negatively affect existing scenic views (such as views of the White River, the Cascade foothills, or Mount Rainier); or
- Changes to development patterns that would increase building-related shading effects to the degree that it would negatively impact residential development or public spaces.

The features of the Alternatives that can mitigate impacts (e.g. proposed development regulations and design standards), other City programs and regulations, and other ways to address significant land use impacts are described in Chapter 3.2.3 – Mitigation Measures.

3.2.1 Affected Environment

Development Character and Building Height

The Town Center Study Area encompasses Sumner's historic downtown, which the adopted Town Center Plan describes as a "fully functional, 'everyday' downtown," highlighting the importance of the area as a focal point in the Sumner community. The plan envisions the town center as a vibrant neighborhood that combines commercial opportunities, a variety of housing options, and public gathering spaces. In keeping with this role as a community hub, the aesthetic character and quality of development in the town center is particularly important.

The overall development pattern in the town center is characterized by low-intensity commercial and residential development at heights of 1-2 stories. Commercial development is generally clustered in three locations within the study area:

- The area along Main Street between Wood Avenue and Traffic Avenue is characterized by low-rise commercial development of 1-2 stories in height with a mix of historic and contemporary architectural designs. Building designs in this area are oriented toward a streetscape featuring sidewalks with street lights, landscaping, and human-scaled storefronts. This area roughly coincides with Sumner's historic downtown area and serves as a community hub for southwest Sumner.
- The west side of Traffic Avenue contains mainly auto-oriented commercial uses, such as the Sunset
 Chevrolet dealership at Maple Street and the McLendon Hardware store north of Main Street. These

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sites feature larger lots and building footprints than the historic downtown area along Main Street and are characterized by more surface parking and fewer pedestrian amenities (sidewalks, landscaping, etc.).

The Old Cannery site is separated from the rest of the town center by the White River and heavy vegetation along the riverbank. However, its location places it near a primary entrance to the town center; traffic accessing Main Street from SR 167 passes the site via Valley Avenue E. The Old Cannery is an industrial building dating from the turn of the twentieth century and currently operates as a furniture warehouse store. The site presents a much different visual character than the rest of the town center with large areas of surface parking and minimal pedestrian amenities.

Residential development in the Study Area consists primarily of one- or two-story single-family detached homes, most of which were built more than 25 years ago, though a small amount of infill development has occurred in the time since. Lot sizes and street patterns vary within the Study Area, with generally smaller lots and street blocks east of Traffic Avenue and larger lots and a more dispersed street pattern west of Traffic Avenue. Residential streets in the Study Area generally exhibit an open, low-density character with plentiful landscaping and greenspace, though pedestrian infrastructure, such as sidewalks and street lights, is not always consistently provided, particularly in the portion of the Study Area west of Traffic Avenue and south of Main Street.

Other prominent, character-defining features of the Study Area include the Traffic Avenue corridor and the White River. The Traffic Avenue corridor is anchored by Sumner Station in the south and Heritage Park at the north; this area provides a public gathering space with plentiful pedestrian connections to surrounding areas and serves as Sumner's primary transit hub, offering access to bus and commuter rail transportation. The White River runs along the western edge of the Study Area and separates the Old Cannery site from the rest of the Town Center. The river is characterized by thick, mature riparian vegetation along both sides, which screens the western portion of the Town Center from SR 167 and contributes to a wooded, natural character in this area, providing a significant aesthetic resource.

Selected photos illustrate commercial and residential uses in Exhibit 3-9 and Exhibit 3-10.

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Exhibit 3-9 Aesthetic Character – Main Street Corridor





Source: City of Sumner, 2018.

Exhibit 3-10 Historic Single-Family Housing in the Town Center



Source: City of Sumner, 2018.

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Views

Sumner is in the Puyallup River valley, and the Sumner Town Center study area is located adjacent to the confluence of the Puyallup and White Rivers. The local topography is relatively flat, and significant views are primarily territorial in nature, looking outward to the Cascade foothills in the east and Mount Rainier to the southeast. Mount Rainier is the more significant view, though it is not visible from all locations within the Study Area due to the presence of existing buildings and trees.

Shading Conditions

Sufficient access to light and air is an important consideration in urban design due to its effect on the experience of area residents and pedestrians. Excessive shading effects can occur where a substantial difference occurs in building heights, where tall buildings are insufficiently set back from sidewalks and other public spaces, and where architectural designs do not include sufficient variation in building massing Due to the relatively low building heights in the study area, existing development in the town center generally produces negligible shading effects on residential uses and public spaces.

Relevant Plans, Policies, and Regulations

The City of Sumner has enacted a series of policies and regulations to preserve and enhance the community's aesthetic character and promote good urban design. This section describes such plans, policies, and regulations as they pertain to the Sumner Town Center.

Sumner Comprehensive Plan - Community Character Element

The Community Character Element of the Sumner Comprehensive Plan is focused on promoting quality design and preserving Sumner's small-town atmosphere. Growth should occur in a manner that is compatible with this small-town aesthetic while being consistent with regional strategy of the larger Puget Sound region. Relevant goals and policies from the Community Character Element include:

- Goal 1: Maintain and enrich Sumner's quality of life encompassed in its friendly, small town atmosphere.
 - 3) 1.1 Encourage development which enhances the human, pedestrian scale, creating a sense of community and place.
 - 1.2 Endeavor to maintain a complete community, consistent and compatible in character and design, containing housing, shops, work places, schools, parks, civic facilities, and community services essential to the daily life of residents.
 - 1.3 In concert with the Sumner citizens and business community, maintain design guidelines and a design code, as appropriate, which address streetscape, landscape, and building design. Materials and methods of construction should be specific to the region, exhibit continuity of history and culture, and compatibility with the climate, protect historic and archaeological resources, and promote the community's character and identity.

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- 1.4 Implement and maintain a Zoning Code which implements the comprehensive plan and community vision.
- Goal 2: The Sumner community should be designed so that housing, jobs, daily needs, and other activities
 are within easy walking distance of each other.
 - 2.4 Through street standards promote pedestrian and bicycle friendly streets with trees and other amenities that enhance the streetscape.
 - 2.5 Encourage a mix of residential-scale civic, commercial, and service uses in neighborhood centers.
 Small community parks or greens shall be established where appropriate.
 - 2.6 In recognition of the need for a variety of housing, allow through the Comprehensive Plan and Zoning Code a mix of residential uses as appropriate to the neighborhood character.
- Goal 3: Reinforce the downtown as the town center and commercial and cultural center of Sumner.
 - 3.1 Plan for the downtown as Town Center and the community core encouraging a combination of commercial, civic, cultural, recreational, and residential uses.
 - 3.2 In cooperation with Pierce Transit and the Sound Transit, establish the Downtown as the intracommunity transit hub and Town Center.
 - 3.5 Subject to design review, encourage infill residential development in the Downtown, such as "mixed use buildings" (multifamily units above ground-floor commercial), and "mixed use developments" (combination mixed use buildings and separate residential buildings on the same parcel), in order to allow for an active community core.
 - 3.9 Encourage more housing in and near Downtown to strengthen Downtown businesses, take advantage of the commuter train, offer a range of housing in the community, and provide an active, social character.
 - 3.17 Prohibit franchise architecture in the Central Business District and the General Commercial zone within the Town Center.
 - 3.19 Create incentives that would expand setbacks from Traffic Avenue for residential properties to provide pedestrian amenities such as landscaping, plazas and fountains and to buffer these areas from the street.
 - 3.20 Update Design and Development Guidelines to ensure that the design standards for multi-family and mixed use development are specific enough to create high quality designs that are compatible with the historic architectural context, and scale of the downtown.
 - 3.21 Development along Traffic Avenue should be limited to a maximum height of 45 feet provided there is underbuilding parking.
 - 3.22 The height in the Central Business District should remain at 35 feet to protect and preserve the small town character and scale of Main Street and reduce conflicts with adjacent residential uses.

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- Goal 4: Establish a community entry statement into and out of Sumner.
 - 33.1 Through street standards, design guidelines, and land use regulations, promote all entrances to the City, including Traffic Avenue and Valley Avenue, 160th Street as gateways to the community. The character of the Avenues shall be a boulevard with median or other treatments. Gateway design standards for community entrances shall be applied.
 - 3) 4.2 Require pedestrian and bicycle oriented amenities and facilities at existing civic and community uses.
- Goal 5: Provide for open space and recreation and protect sensitive areas from degradation.
 - 3.2 Promote the preservation of the natural terrain, drainage, and vegetation of the community.
 - 3.6 Encourage tree planting in the Town Center along sidewalks and in public open spaces.
 - 5.7 Expand Heritage Park to a full block.
 - 5.8 Acquire and improve small parcels of land for developing parks and open spaces in the Town Center.
- Goal 6: Promote a compatible and varied mix of land uses.
 - 3) 6.1 Promote a compact development pattern that exhibits variety in building types and scale. Historic and vernacular architectural styles should be respected. Both sides of the streetscape should complement each other.
 - 3) 6.2 Where appropriate, utilize subarea planning to ensure that newly annexed and developed areas promote a walkable, transit friendly neighborhood with a varied mix of land uses and are compatible with surrounding areas.

Sumner Town Center Plan

The Sumner Town Center Plan (2005) includes policies intended to enhance the character and design of downtown, including, but not limited to:

- Policy TC 1.5 Through street and design standards, promote pedestrian-scale streetscape improvements.
- Policy TC 3.1 Ensure Downtown's historic character is retained as new businesses and buildings are established, such as through design standards, landmark ordinances, or other means.
- Policy TC 5.2 Ensure Downtown is clean, safe, and convenient.
- Policy TC 5.3 Through street and design standards, promote pedestrian-scale streetscape improvements.
- Policy TC 5.4 Enhance "wayfinding" to and throughout Downtown. Have signs on the State routes, at gateways into Downtown, landmarks, public spaces, public parking and other areas.
- Policy TC 5.7 Maintain a high quality and attractive appearance. Work with Sumner Promotion to seasonally decorate Downtown with decorations, hanging baskets, lights, etc.

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- Policy TC 5.8 Prohibit franchise architecture in the Central Business District and the General Commercial zone within the Town Center.
- Policy TC 5.9 Discourage, and in some cases prohibit, drive-thru businesses in the Town Center to encourage pedestrian oriented design and uses.
- Policy TC 5.10 Create incentives that would expand setbacks from Traffic Avenue for residential properties to provide pedestrian amenities such as landscaping, plazas and fountains and to buffer these areas from the street.

Sumner Design and Development Guidelines

New development in Sumner that meets certain thresholds established in Chapter 18.40.020 of the Sumner Municipal Code must undergo design review before construction permits are issued. The City's design guidelines provide design standards for Commercial, Single-Family, Multi-family, and Industrial construction projects, as well as a set of standards specific to the Central Business District. These standards establish requirements related to site design and parking; landscaping, streetscapes, and signage; pedestrian access; and building design.

3.2.2 Impacts

Impacts Common to All Alternatives

Under all three alternatives, the Town Center study area would experience increased development density and intensity and increased building heights over time, which could result in aesthetic impacts related to character, height, and scale, depending on the location within the Study Area. Because a large portion of the properties in the Study Area are not developed to the full height and/or density allowed by current zoning, some aesthetic impacts are anticipated even under the No Action Alternative.

Impacts specific to each alternative are discussed in the following sections.

Alternative 1: Preferred Conceptual Zoning Districts

As described in Chapter 2, the focus of Alternative 1 is the addition of new housing opportunities in the area around the Sounder transit station through increases in allowed building heights and development density in the Study Area. Alternative 1 would also include adoption of a form-based code for the Town Center and application of design standards to new development.

Development Character and Building Height

Alternative 1 would increase building heights throughout the Study Area, but the greatest increases over current regulations would occur in the areas west of Traffic Avenue. As shown in Exhibit 2-3, Alternative 1 would rezone most of this area for Multi-family and Commercial development at heights up to 6 stories. In the General Commercial and Mixed-Use Development zones north of Main Street, this would represent

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a height increase of approximately 20 feet, while height limits in the Low- and Medium-Density Residential zones in the southwest corner of the study area could increase by up to 30 feet. Building heights within the White River shoreline buffer established by the City's Shoreline Master Program would be limited to 35 feet.

Areas east of Traffic Avenue would experience more moderate height increases under Alternative 1. This portion of the Town Center is zoned for heights of 30-35 feet. As shown in Exhibit 2-3, Alternative 1 would increase height limits to approximately 45-50 feet. Heights would be greatest along Traffic Avenue and adjacent to the Sounder transit station (4-5 stories), transitioning down to 3-4 stories in the areas south and east. Alternative 1 would also establish a 3-story transition area within 100 feet of the southeast boundary of the Town Center.

These height increases have the potential to alter the character of development in the affected areas, particularly the portion of the Study Area west of Traffic Avenue. As described in Affected Environment, existing buildings in most of the Study Area are one or two stories in height, and development under Alternative 1 would introduce buildings that would be substantially taller and at a larger scale than existing development:

- East of Traffic Avenue, height limit increases would be minor compared to existing regulations, but the increase in allowed height and density would potentially prompt the development of more multifamily, commercial, or mixed-use development in an area characterized mostly by single-family homes and low-rise, small scale commercial buildings. Redevelopment in the Main Street corridor has the potential to negatively affect the historic character of this pedestrian-oriented area. Due to the low-intensity nature of current development in this area, transitional impact would also potentially occur as individual properties redeveloped at different times, resulting in the temporary location of newer, higher-intensity development adjacent to older, lower-intensity development. Redevelopment at greater height and density in this portion of the Study Area could also adversely affect low-intensity residential development adjacent to the Town Center boundary. However, the included 3-story transition zone would reduce this impact by smoothing the transition between higher and lower-density development along the edge of the Town Center boundary. Three stories are slightly taller than most of the single-family homes in this area, so some minor localized conflicts of height, bulk, and scale could occur as the Study Area redevelops. Such conflicts could potentially be addressed through the application of design standards, as described in Chapter 3.2.3 Mitigation Measures.
- West Sumner, west of Traffic Avenue and south of W Main Street would experience the most pronounced height increases under Alternative 1. Aside from auto-oriented commercial uses along Traffic Avenue, this portion of the Study Area consists of mostly single-family residences, and Alternative 1 would increase height limits by up to 30 feet and introduce multi-family and commercial development. As described above, this would represent a substantial shift in visual character as existing single-family homes are replaced with buildings up to 6 stories in height, though increased development density could provide pedestrian improvements that are currently missing along some of the streets in this area and increase pedestrian linkages to the center of the Study Area.

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The area east of Traffic Avenue and north of W Main Street would experience more moderate impacts under Alternative 1 than the two areas described above. Most of this area has an existing height limit of 35 feet, and while height increases of up to 20 feet would result in a noticeable change in building scale, the larger lot pattern in this area would moderate the effects of additional building height. In addition, existing buildings in this area are predominantly commercial or industrial, and redevelopment of multi-family or commercial buildings would be more consistent with existing building character in this location than in other portions of the Study Area.

See models of the maximum building envelopes, height, and bulk under Alternative 1 in Exhibit 3-11 to Exhibit 3-21.

3-4 Stories, Multifamily/Commercial
4-5 Stories, Multifamily/Commercial
Green Space

Green Space

Exhibit 3-11 Estimated Maximum Building Envelope - Alternative 1

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-12 Street View - Main Street at Traffic Avenue Looking East (Alternative 1)



Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-of-way.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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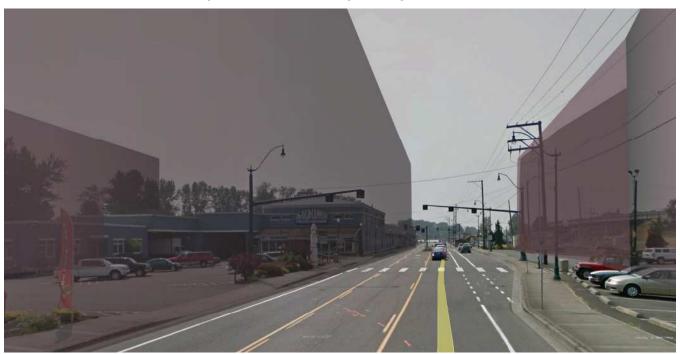
Exhibit 3-13 Isometric View - Main Street at Traffic Avenue Looking East (Alternative 1)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-14 Street View - Valley Avenue Near Cannery Looking Southwest (Alternative 1)

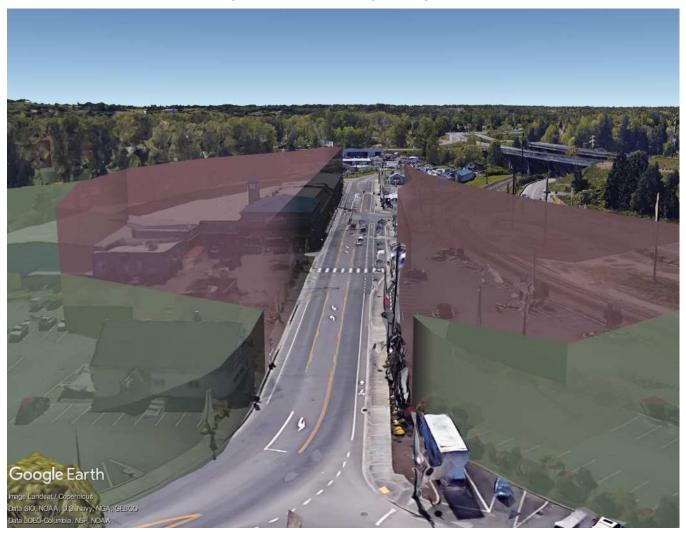


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-15 Isometric View - Valley Avenue Near Cannery Looking Southwest (Alternative 1)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-16 Street View - Fryar Avenue and Zehnder Street Looking Southwest (Alternative 1)



Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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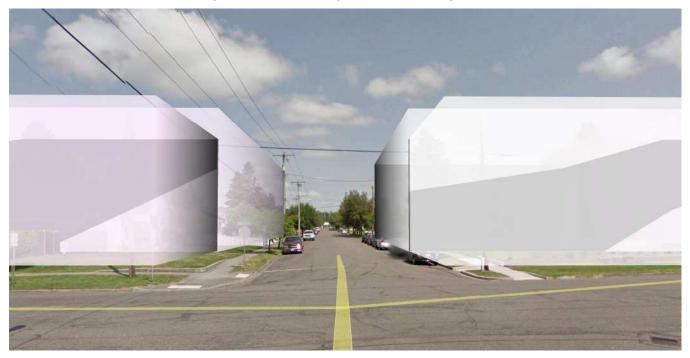
Exhibit 3-17 Isometric View - Fryar Avenue and Zehnder Street Looking Southwest (Alternative 1)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-18 Street View - Cherry Avenue and Thompson Street Looking North (Alternative 1)



Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-19 Isometric View - Cherry Avenue and Thompson Street Looking North (Alternative 1)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-20 Street View - Hunt Avenue and Elizabeth Street Looking South (Alternative 1)



Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-21 Isometric View - Hunt Avenue and Elizabeth Street Looking South (Alternative 1)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

Views

As described in Affected Environment, views in the Study Area consist primarily of territorial views of Mount Rainier and the surrounding Cascade foothills. Increased building heights in the Study Area could result in localized obstruction of these territorial views, though these views are currently unavailable in much of the Study Area because of existing buildings and vegetation. The greatest potential for view obstruction is in the western portion of the Study Area along the White River, where height increases up to 65 feet would occur along the line of sight from the river to Mount Rainier. In other portions of the Study Area, availability of territorial views from public spaces would generally decrease due to increased building height and mass on surrounding properties, increasing the potential for view obstruction from public space and rights-of-way. The City does not protect specific view corridors, and development of taller buildings in the Town Center could potentially create new, private views from upper floors of buildings that are not currently available at lower heights.

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Shading

Shading effects can occur when building height increases without appropriate setbacks or other design solutions to preserve access to light and air. Most street rights-of-way in the Study Area are wide enough that the creation of an "urban canyon" effect is unlikely, but shading effects may occur as individual properties in the Study Area redevelop at greater building heights and scales. This effect would be more pronounced in areas with narrower streets and alleys or where buildings are set closer to the sidewalk, such as the Main Street corridor and in portions of the study area where streets are planned for narrower rights-of-way, as shown in Exhibit 2-19. In these areas, such as the southwest and southeastern portions of the study area, additional mitigation, such as upper-level setbacks, may be necessary to minimize shading effects.

As described under Development Character and Building Height, large portions of the Study Area that would be rezoned to allow multi-family and commercial buildings up to 65 feet are currently occupied by single-family homes. Construction of new, larger buildings in these single-family areas would result in temporary conflicts of scale. One aspect of this is adverse shading effects on lower-intensity properties adjacent to taller buildings. The area west of Traffic Avenue and south of W Main Street would the most susceptible to such impacts.

Major public spaces in the Town Center such as Heritage Park could also potentially be affected by shading from taller buildings. Under Alternative 1, building heights west of the park would be increased to approximately 50 feet, and building heights to the east and south would be increased to approximately 45 feet. The park is surrounded by right-of-way on all sides, so while some additional shading may occur in the early morning and late evening hours, when shadows are longest, this effect is unlikely to be significant. The City could consider application of upper-level setbacks or reduced building height limits in proximity to public open space to further minimize shading effects.

Alternative 2: Conceptual Zoning Districts

Like Alternative 1, Alternative 2 would create new housing opportunities near the Sounder transit station by increasing building heights and densities in the Town Center. Alternative 2 offers a slightly different range of housing options and development typologies than Alternative 1, resulting in a less intense development pattern overall and slightly reduced building heights relative to Alternative 1.

Development Character and Building Height

Changes in building height and development intensity under Alternative 2 would be similar in nature to Alternative 1 but reduced in magnitude and geographic scope. As shown in Exhibit 2-4, height limit increases under Alternative 2 would be similar to Alternative 1 in some portions of the Study Area and reduced in others. For example, height increases west of Traffic Avenue would be similar to Alternative 1 in most locations, except for the commercial properties around the intersection of Main Street and Traffic Avenue, where heights would remain the current limits (approximately 35 feet), and along the southern portion of Traffic Avenue, where height limits would be slightly increased to approximately 50 feet instead of 65 feet.

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East of Traffic Avenue, height increases would be more moderate than Alternative 1. Height limits in the areas adjacent to Traffic Avenue and in the historic Main Street corridor would increase from 35 feet to approximately 45 feet, and areas along the southern and eastern boundaries of the study area would be maintained as a mix of single-family and multi-family residential uses at heights of 2-3 stories.

Alternative 2 would, however, increase height limits on the school district office site to a greater degree than Alternative 1, increasing heights to approximately 50 feet, rather than approximately 45 feet under Alternative 1.

Exhibit 3-22 to Exhibit 3-32 show maximum building envelopes, height, and bulk under Alternative 2.

2-3 Stories, Single Family/Multifamily
3-4 Stories, Multifamily/Commercial
4-5 Stories, Multifamily/Commercial
Green Space

Exhibit 3-22 Estimated Maximum Building Envelope - Alternative 2

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-23 Street View - Main Street at Traffic Avenue Looking East (Alternative 2)



Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-24 Isometric View - Main Street at Traffic Avenue Looking East (Alternative 2)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-25 Street View - Valley Avenue Near Cannery Looking Southwest (Alternative 2)

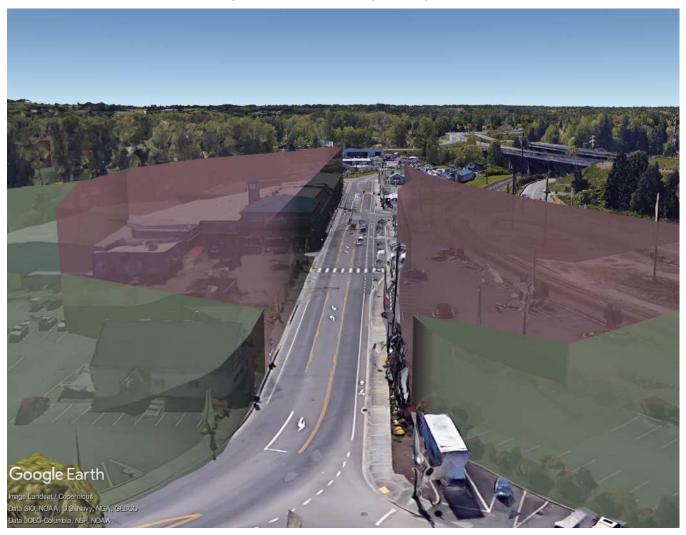


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-26 Isometric View - Valley Avenue Near Cannery Looking Southwest (Alternative 2)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-27 Street View - Fryar Avenue and Zehnder Street Looking Southwest (Alternative 2)

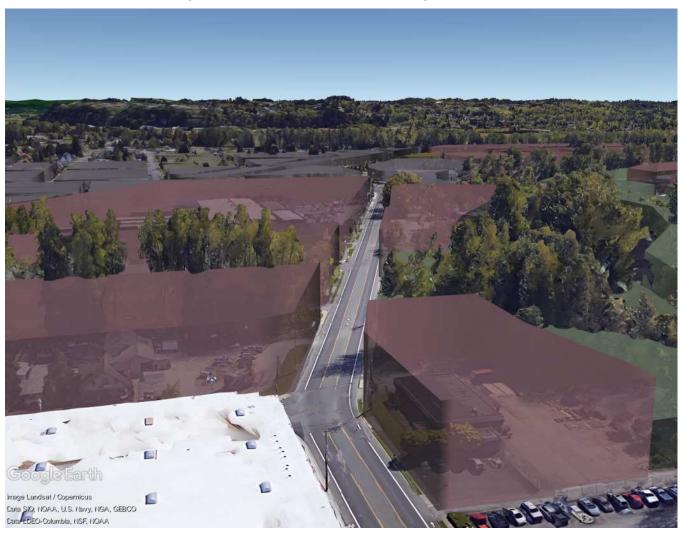


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-28 Street View - Fryar Avenue and Zehnder Street Looking Southwest (Alternative 2)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-29 Street View - Cherry Avenue and Thompson Street Looking North (Alternative 2)

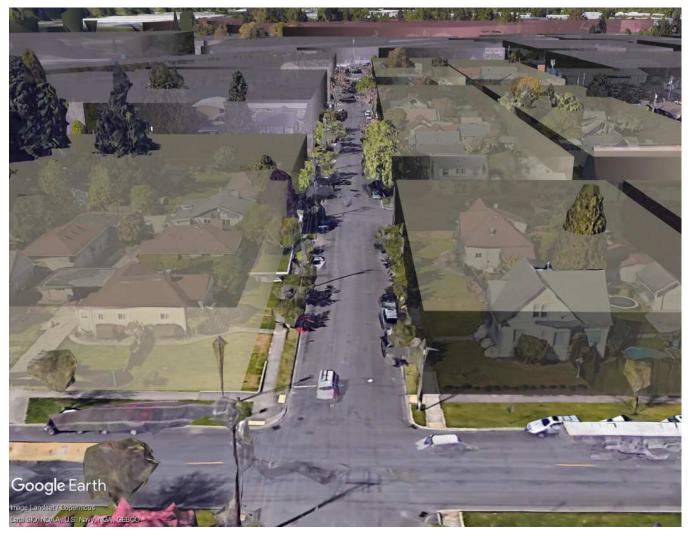


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-of-way.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-30 Street View - Cherry Avenue and Thompson Street Looking North (Alternative 2)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-31 Street View - Hunt Avenue and Elizabeth Street Looking South (Alternative 2)

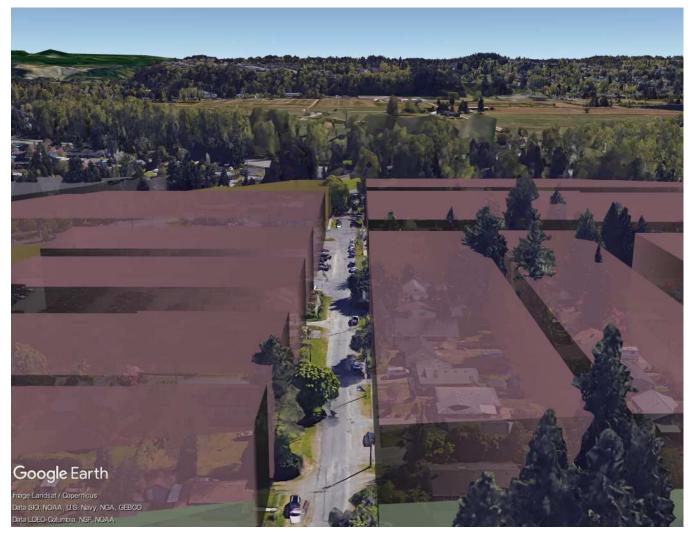


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-32 Street View - Hunt Avenue and Elizabeth Street Looking South (Alternative 2)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

Views

Impacts to views under Alternative 2 are similar to Alternative 1. Increased building heights in the Study Area could result in localized obstruction of territorial views, though views of Mount Rainier and the Cascades are currently unavailable in much of the Study Area because of existing buildings and vegetation. As with Alternative 1, the greatest potential for view obstruction is in the western portion of the Study Area along the White River, where height increases up to 65 feet would occur along the line of sight from the river to Mount Rainier. Alternative 2 would reduce the potential for localized view obstructions in the eastern portion of the study area compared to Alternative 1 due to lower height limits in this location.

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Shading

Similar to Alternative 1, Alternative 2 would rezone large portions of the Study Area to allow multifamily and commercial buildings up to 65 feet, as well as smaller height increases throughout the Study Area. Construction of new, larger buildings in areas occupied by lower-intensity development would result in temporary conflicts of scale, which could result in adverse shading effects. Similar to Alternative 1, the area west of Traffic Avenue and south of W Main Street would be the most susceptible to such impacts. Due to the lower height limits east of Traffic Avenue, this area would be less susceptible to adverse shading effects than other portions of the Study Area, and overall potential for shading impacts would be reduced under Alternative 2 compared to Alternative 1.

Similar to Alternative 1, some minor shading could occur at Heritage Park in the early morning and late evening hours due to taller building heights on adjacent properties. However, height limits in this area would be lower under Alternative 2 than under Alternative 1; therefore, the potential for shading on the park under Alternative 2 would be reduced compared to Alternative 1.

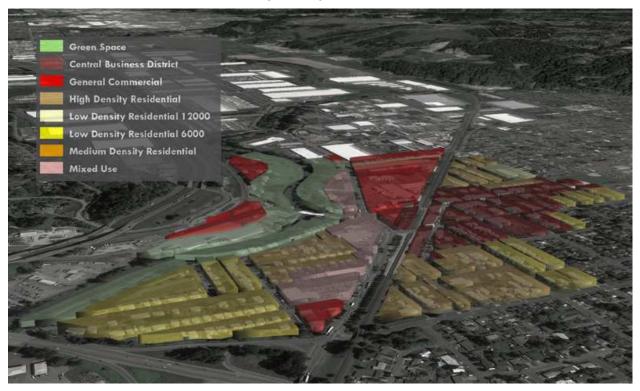
Alternative 3: No Action Alternative Zoning Districts

Alternative 3: No Action would make no changes to existing zoning in the Town Center study area. Current requirements for land use, maximum density, and maximum building height would remain in place. As described in Chapter 2, while additional development would be allowed in the Study Area under Alternative 3, large amounts of growth would not be anticipated; rather, future development is expected to occur primarily on or near the identified Opportunity Sites. Redevelopment of these properties to the density and height limits allowed by the current zoning code could result in localized compatibility impacts to adjacent properties occupied by less intense development.

See Exhibit 3-33 to Exhibit 3-43 for illustrations of maximum building envelopes, height, and bulk under Alternative 3.

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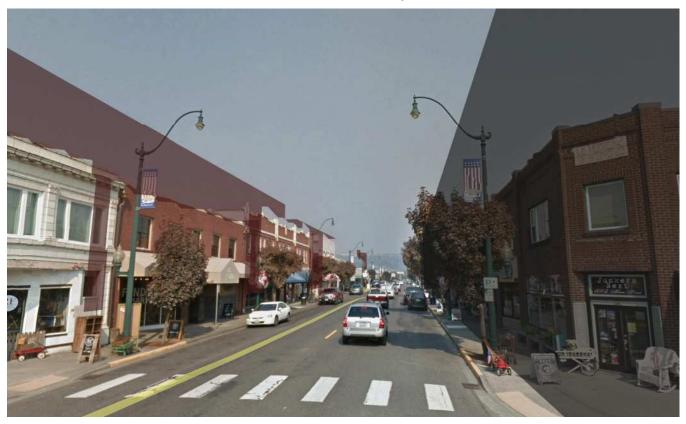
Exhibit 3-33 Estimated Maximum Building Envelope - Alternative 3 No Action



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-34 Street View - Main Street at Traffic Avenue Looking East (Alternative 3)



Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-of-way.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-35 Isometric View - Main Street at Traffic Avenue Looking East (Alternative 3)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-36 Street View - Valley Avenue Near Cannery Looking Southwest (Alternative 3)

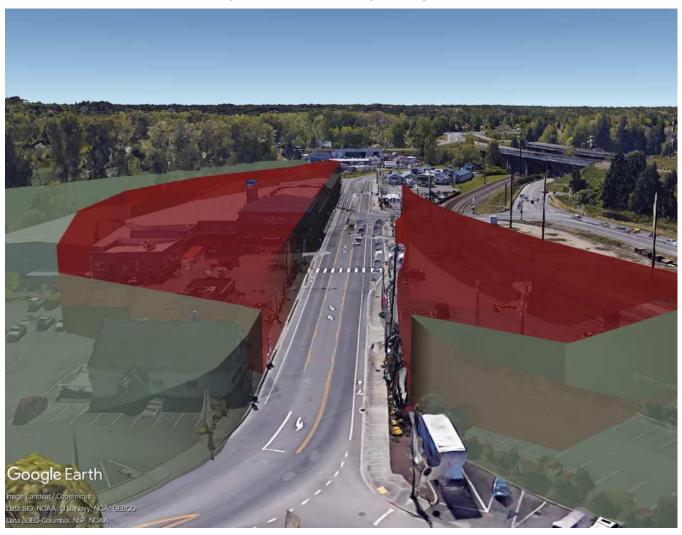


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-of-way.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-37 Isometric View - Valley Avenue Near Cannery Looking Southwest (Alternative 3)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-38 Street View - Fryar Avenue and Zehnder Street Looking Southwest (Alternative 3)

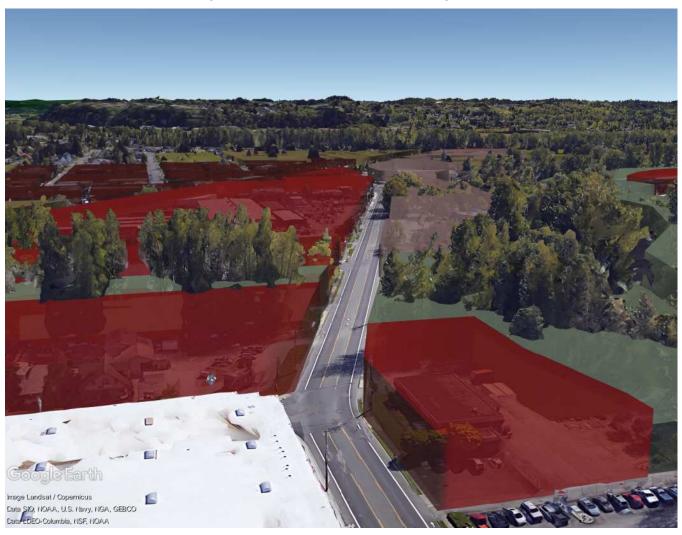


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-of-way.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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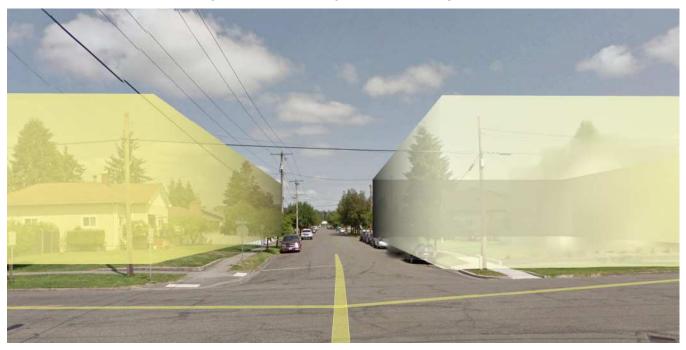
Exhibit 3-39 Isometric View - Fryar Avenue and Zehnder Street Looking Southwest (Alternative 3)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-40 Street View - Cherry Avenue and Thompson Street Looking North (Alternative 3)



Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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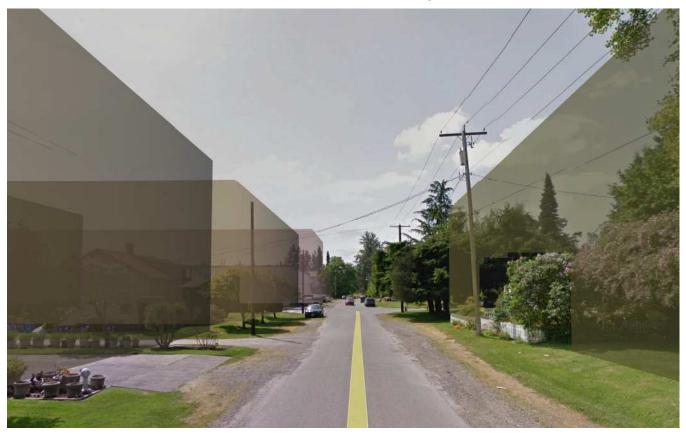
Exhibit 3-41 Isometric View - Cherry Avenue and Thompson Street Looking North (Alternative 3)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-42 Street View - Hunt Avenue and Elizabeth Street Looking South (Alternative 3)

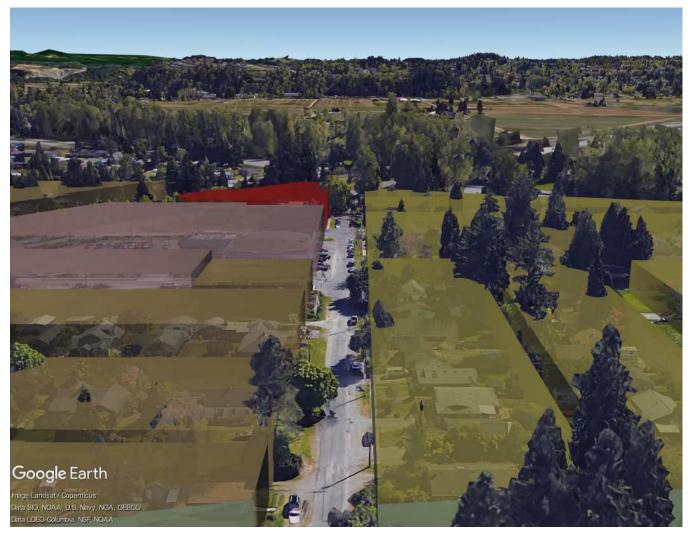


Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

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Exhibit 3-43 Isometric View - Hunt Avenue and Elizabeth Street Looking South (Alternative 3)



Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

M-1 Sub-Option

The Sessler Property is located at 1504 Fryar Avenue, on the northern edge of the Town Center study area. The property is currently zoned General Commercial with a corresponding maximum height of 45 feet on properties in the Town Center that meet underground parking requirements. The property owner has requested that the City rezone the site from General Commercial to M-1 Light Manufacturing, which has a maximum building height of 35 feet.

Comparison to Alternatives 1 and 2

Under Alternatives 1 and 2, the property would be zoned for a mix of multi-family and commercial development at heights up to approximately 65 feet, which is 30 feet higher than would be allowed under M-1 zoning. A comparison of maximum building envelopes between these two alternatives is shown

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in Exhibit 3-44. Because the M-1 zoning would have a lower maximum building height, impacts associated with height, bulk, views, and shading would be reduced compared to Alternatives 1 and 2.

5-6 Stories, Multifamily/Commercial
M-1 Light Manufacturing

Exhibit 3-44 Street View - Sessler Property Zoning (M-1 vs Alternatives 1 and 2)

Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-ofway.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

In addition to reduced maximum building heights, rezoning the site to M-1 Light Manufacturing instead of the 5-6 story Multi-family/Commercial zoning proposed under Alternatives 1 and 2 would result in a different set of allowed land uses and a different visual character. Rather than a mix of multi-family residential and commercial development, future development on the site would be industrial in character. Such development would be less compatible with the pedestrian-oriented development planned for adjacent properties in the Town Center than a mix of multi-family and commercial development. However, industrial development on this site would not be out of character with the current use of the property or commercial-industrial mix of uses on surrounding properties not included in the Town Center.

Comparison to Alternative 3 - No Action

Under the No Action Alternative, the property would remain zoned for General Commercial, which allows for a wide range of commercial development at heights up to 35 feet. In the Town Center, the maximum height for General Commercial properties that meet structured parking criteria is 45 feet. The proposed

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M-1 zoning would allow building heights up to 35 feet, which would result in Aesthetic impacts associated with height, bulk, views, and shading that would be similar to Alternative 3, or slightly reduced. A comparison of maximum building envelopes between these two alternatives is shown in Exhibit 3-45.

General Commercial
M-1 Light Manufacturing

Exhibit 3-45 Street View - Sessler Property Zoning (M-1 vs Alternative 3)

Note: Zoning envelope locations are approximate due to variations in Google imagery georeferencing. Development under the updated Town Center Plan would not expand building footprints into existing sidewalks areas or other public rights-of-way.

Source: City of Sumner, 2018; Google Earth, 2018; BERK, 2018.

Rezoning the site to M-1 Light Manufacturing instead of maintaining the existing General Commercial zoning would result in a different set of allowed land uses with a different visual character. While the General Commercial zone allows a wide range of commercial development, the M-1 zone would allow more intensive land uses, such as materials processing, wrecking and salvage yards, and outdoor storage facilities that would result in more industrial character that would be less compatible with the design goals and policies of the Town Center than current zoning. However, industrial development on this site would not be out of character with the current use of the property or commercial-industrial mix of uses on surrounding properties not included in the Town Center.

Planning Commission Preferred Alternative

The Planning Commission Preferred Alternative would have similar effects as Alternative 1 in terms of:

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- Development Character and Building Height
- Views
- Shading

Additionally, the Planning Commission Preferred Alternative would allow for the M-1 rezone described above.

The Planning Commission Preferred Alternative would implement a greater length of area subject to the 3-story stepback along the east and south compared to Alternative 1, which should reduce incompatibilities where extended.

The Planning Commission Preferred Alternative does not map open space. However, the City would retain Heritage Park as a recreation facility. Also, the SMP would apply where heights are limited to 35 feet in shoreline jurisdiction unless there's an amendment of maximum heights. Also, the extent of 35 feet height is conservatively presented in Exhibit 3-11 (Alternative 1) and Exhibit 3-22 (Alternative 2) since buffers of 50 feet would apply in many shoreline reaches with up to 200 feet on the west side of the river north of the bridge.

For comparison purposes, a close up of the White River corridor under Alternative 1 is compared to the Planning Commission Preferred Alternative. Exhibit 3-46 illustrates a 35-foot height in the entire shoreline jurisdiction and does not illustrate buffers.

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Exhibit 3-46. Alternative 1 with Open Space Modeled at 35 Feet Building Height (South along Fryar Ave.)

Source: City of Sumner, BERK, 2018.

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Exhibit illustrates the effect of current SMP buffers and height in combination with Alternative 1 district heights. Buildings would be setback behind the buffer and heights would be 35 feet until outside of shoreline jurisdiction where they would extend up to 6 stories. The Planning Commission Preferred Alternative would have a similar view if the SMP heights are not amended to match zoning district heights.

Exhibit 3-47. Alternative 1 with Open Space Modeled at 35 Feet Building Height with a Buffer (South along Fryar Ave.)



Source: City of Sumner, BERK, 2018.

The Planning Commission Preferred Alternative includes potential amendment of the SMP heights in the Town Center as part of the City's periodic review of the SMP pending in 2019. Otherwise the City could allow individual increases of height consistent with zoning through a shoreline variance.

If the City demonstrates that greater height would not obstruct views of substantial numbers of residences and that there are overriding considerations of the public interest per RCW 90.58.320, the City may allow for greater height than 35 feet. That would need review and approval by the Washington State Department of Ecology as well as City approval.

Exhibit 3-48 illustrates 5-6 stories in shoreline jurisdiction except no buildings inside where buffers are required. In order to assure proper buffer conditions and public access that is not shaded, the City could consider requiring an upper story stepback above the second or third story or require a shade/shadow analysis at the permit stage to determine appropriate conditions.

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Exhibit 3-48. Planning Commission Preferred Alternative with 6 Story-Building Height and with a Buffer (South along Fryar Ave.)



Source: City of Sumner, BERK, 2018.

3.2.3 Mitigation Measures

Incorporated Plan Features

The Town Center Plan update will include the adoption of a form-based code for the Town Center. This code will contain development regulation and design standards intended to preserve and enhance the livability and urban design appeal of the Town Center. The code will address many aspects of urban design and building form, including the following:

- Street-level building setbacks and pedestrian access;
- Building massing, roof forms, roof stepbacks, and façade treatments;
- Site design, including parking and landscaping standards; and
- Transitions between areas of higher and lower development intensity.

The following exhibits show development prototype models created by the City to illustrate the effect of implementing the form-based code.

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Exhibit 3-49 Prototype Proposed Façade Treatments and Streetscape Improvements



Source: City of Sumner, 2018.

Exhibit 3-50 Prototype Proposed Housing Types and Building Forms associated with Alternative 1



Source: City of Sumner, 2018.

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Exhibit 3-51 Prototype Block Pattern and Parking/Landscaping



Source: City of Sumner, 2018.

Exhibit 3-52 Prototype Town Center Townhome Development



Source: City of Sumner, 2018.

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Exhibit 3-53 Prototype Streetscape - State Street



Source: City of Sumner, 2018.

Exhibit 3-54 Prototype Streetscape – West Main Street



Source: City of Sumner, 2018.

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Source: City of Sumner, 2018.

As shown in the preceding exhibits, the form-based code would provide for streetscape improvements and building forms to minimize potential height, bulk, and scale impacts and ensure development occurs in a manner that is accessible to pedestrians and promotes human-scaled urban design at street-level. Site design and landscaping standards would concentrate parking lots on the interiors of blocks, making sidewalks and street edges more inviting for pedestrians.

Regulations and Commitments

- Chapter 18.40 of the Sumner Municipal Code establishes procedures and thresholds for design review of new development, including single-family, multi-family, and commercial development. Smaller development projects can be processed using administrative design review, while larger developments are required to undergo design review by the City's design commission. In both cases, design review is governed by the guidelines and principles established in the City of Sumner Design and Development Guidelines.
- Chapter 18.39 of the Sumner Municipal Code establishes procedures for listing properties on the Sumner Historic Register and the consultation steps required before alteration of listed properties.

Other Proposed Mitigation Measures

As part of the design review process, the City could require new projects meeting the following criteria to prepare a shading study that evaluates potential impacts of the project on adjacent lowerintensity uses and public spaces. If shading impacts are identified, the City could impose permit

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conditions and mitigation measures to address such impacts, such as upper-story setbacks or modifications to roof forms that minimize shading effects.

- Meets the criteria for design commission review, and
- Is 2-3 stories higher than adjacent development (or taller than 35 feet if located within the Shoreline Management Area); and meets one or more of the following conditions.
 - Adjacent to property zoned Low-Density Residential, or
 - Adjacent to a public park, or
 - Adjacent to an activity node, or public space designated or required in the Town Center Plan,
 or
 - Within shoreline management area.
- In the Main Street corridor, the City could use the design review process to ensure the design of new development is consistent with the historic character and architectural style present in this area.
- In the portion of the Town Center adjacent to the White River, the City could require preservation and/or enhancement of riparian vegetation and encourage development to incorporate pedestrian access to the White River Trail, where possible.

3.2.4 Significant Unavoidable Adverse Impacts

Under all Alternatives, future growth is expected to occur in the Town Center, and in Sumner in general, as regional population growth continues. Over time, redevelopment will occur, even under the No Action Alternative, as older structures are replaced, and property owners increase development to take full advantage of the development capacity allowed by zoning.

The overall character, significance, or magnitude of visual impacts on the analysis area depends largely on the quality of the architectural and urban design features incorporated into the development, the degree to which the overall scale and form of the development incorporates features of the local setting, and the values and preferences of those viewing the change. With proposed mitigation, particularly through implementation of design guidelines addressing height and bulk development would meet the City's vision and standards for the Town Center, a place targeted for additional development. However, views will change under either Action Alternative compared to current conditions.

3.3 Fire Protection

This section of the SEIS reviews existing levels of service, estimated needs and demand for service, and projected levels of service under each alternative for fire protection and emergency medical services (EMS).

For the purposes of this SEIS, a significant impact is identified if the alternative would:

- Conflict with adopted levels of service for fire and emergency medical services, or
- Increase demand for special emergency services beyond operational capabilities of service providers.

The analysis is based on existing functional plans, contacts with service providers, and population-based estimates of demand.

3.3.1 Affected Environment

Existing Service

Fire protection and EMS in the City of Sumner, including the Town Center study area, is provided by East Pierce Fire & Rescue (East Pierce), a combination fire district serving a population of nearly 90,000 living in and around Bonney Lake, Sumner, Lake Tapps, the Ridge Communities, South Prairie, Edgewood, and Milton. The district covers approximately 153 square miles and includes eleven stations – six staffed stations, three volunteer stations, one facility on Lake Tapps for the marine rescue unit, and one logistics station (see Exhibit 3-56).³ (East Pierce Fire & Rescue, 2018)

East Pierce participates in a system of mutual and automatic aid agreements with adjoining jurisdictions. Mutual aid agreements are activated when initial resources are inadequate; for example, when all available East Pierce units are already on calls during a major fire, units from neighboring or private fire departments may respond into the district for mutual aid.⁴ Additional resources can be summoned by using the Pierce County Comprehensive Emergency Management Plan (CEMP). When mutual aid and local resources are exhausted or nearly exhausted, the provisions for regional and state fire mobilization apply. For extraordinarily high risk/high loss incidents, East Pierce participates in the Washington State Fire Services Resource Mobilization Plan using task force and strike team resources from across the region, as well as military and other governmental agency resources. (East Pierce Fire & Rescue, 2017) (Pierce County, 2018) (Washington State Fire Marshal's Office, 2018)

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³ East Pierce does not respond to emergency calls from the logistics station.

⁴ In cases of mutual aid, residents may have to pay for ambulance transport, depending upon which agency provided the service. Mutual aid ambulances transported 97 district residents in 2016, less than 2% of the year's EMS patient transports.

The nearest hospital to the study area is MultiCare Good Samaritan Hospital, located approximately 4.5 miles southwest in Puyallup.

2015 East Pierce Fire and Rescue Run Cards (one color per station) esent. This is not a survey. Orthophotos and other data may not align. The County assumes no llability for variations ascertained by actual st L.I. DATA IS EXPRESSLY PROVIDED 'AS IS' AND 'WITH ALL EAULTS'. The County makes no warranty of fitness for a particular pur

Exhibit 3-56 East Pierce Fire & Rescue District Map

Source: https://www.eastpiercefire.org/page.php?id=195

Personnel

East Pierce is a combination fire department utilizing both career and volunteer firefighters to handle a wide variety of emergencies. Career firefighters and paramedics are automatically dispatched to calls by a regional 911 dispatch center, South Sound 911, that sends the appropriate fire and EMS units from

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the fire stations closest to the emergency call.⁵ If unstaffed volunteer stations are located closer to an incident, volunteers will also be dispatched to the scene along with career crews. (East Pierce Fire & Rescue, 2017) Each of the staffed stations houses crews 24-hours a day, seven days a week. The volunteer stations are not staffed on a regular basis, but fire engines, ambulances, and equipment are ready in case of an emergency and used by the volunteers as needed.

The district employs approximately 150 staff, including one fire chief, four assistant fire chiefs, five battalion chiefs, one assistant fire marshal, 110 career officers and firefighters, 12 volunteers, one public educator, and 10 administrative support staff. (East Pierce Fire & Rescue, 2018) All career firefighters are trained as emergency medical technicians (EMTs) or paramedics, and each staffed station always includes at least one firefighter trained as a paramedic. Volunteers are trained as EMTs. Firefighters work in three shifts, each headed by a shift battalion chief who manages the day-to-day operations of the shift from the District's headquarter station in Bonney Lake. Districtwide, East Pierce is typically staffed by 22 firefighters daily. In recognition of risks within the district's boundaries, East Pierce also maintains four teams of personnel with specialized training in special operations disciplines – the district has trained select firefighters to serve as members of a Wildland Team, a Water Rescue Team, a Hazardous Materials Team, and a Technical Rescue Team. (East Pierce Fire & Rescue, 2017)

Capital Facilities and Equipment

Operations are organized by Service Districts, which are built around station locations and generally describe the areas of principal responsibility for each facility. The Town Center study area is principally served by staffed Station 113 located at 800 Harrison Street in the study area (see Exhibit 3-57), the newest station in the district at 26 years old. (Needles, For the First Time, East Pierce Fire Seeks to Place Bond on November Ballot, 2018) Station 113 is staffed daily by five firefighters and houses a ladder truck/or engine (staffed by three fire fighters) and medic unit (staffed by two firefighters). Districtwide, East Pierce maintains 60 emergency response and support vehicles – includes 13 fire engines, 1 ladder truck, 1 tender, 12 medic/BLS Aid units, 3 brush trucks, 1 rescue and 29 support vehicles. (East Pierce Fire & Rescue, 2017) (East Pierce Fire & Rescue, 2018)

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⁵ South Sound 911 is an interlocal dispatch agency created by local governments and funded by a supportive vote of citizens in November 2011.

THE STEE STATION 114

STATION 115

STATION 114

STATION 114

STATION 114

STATION 115

STATION 1

Exhibit 3-57 Fire Stations Near the Town Center Study Area

Source: City of Sumner, 2017; East Pierce Fire & Rescue, 2018; BERK, 2018.

According to Fire Chief Bud Backer, the district's fleet of emergency vehicles will need replacement. Six fire engines are nearing the age to be downgraded to reserve status and will each cost approximately \$750,000 to replace. The district's ladder truck is currently 19 years old, and at 20 years old will no longer be fully recognized by the insurance industry as a reliable unit. The cost of a new ladder truck is over \$1,000,000. (East Pierce Fire & Rescue, 2017) The current ladder truck has an elevated height (ground to tip of ladder) of 110 feet. The new ladder will have a similar elevated height. The building height that a ladder truck is "equipped to handle" is dependent on how close to the building the turntable of the ladder can get to the building.

In 2016, the district's four medic units were on calls at least 21% of the time, with the medic unit at Station 113 on calls 26.6% of the time. Industry best practice is to add resources when medic units in a given area are on calls 20% or more of the time. The 2017 voter-approved lid lifts, described in more detail under Funding Sources, will allow East Pierce to hire nine new firefighters for a fifth medic unit. If call volume continues to grow, however, a sixth medic unit and associated personnel will likely be required to meet service needs (East Pierce Fire & Rescue, 2017)

Call History

Firefighters responded to 11,039 fire and EMS-related calls districtwide in 2017 a 32% increase over 2012. Most calls each year are for emergency medical services. A breakdown of call load by type is provided in Exhibit 3-58.

Exhibit 3-58 Five-year Call History for Service Districtwide by Call Type, 2012-2017

CALL TYPE	20121	2013 ¹	2014	2015	2016	2017
Emergency Medical Calls ²	5 , 877	6,312	6,892	7,085	<i>7,</i> 702	8,231
Good Intent	731	637	755	952	928	953
Service Calls	873	793	849	839	750	808
False Alarms	335	388	428	421	475	509
Hazardous Conditions	207	137	178	170	130	191
Brush Fires	51	39	47	128	65	106
Other Fires	94	121	112	82	83	112
Structure Fires	56	40	47	76	78	65
Vehicle Fires	46	44	34	61	42	46
Severe Weather ³	24	3	_	12	2	10
Other Calls	13	5	_	9	7	8
TOTAL CALLS	8,307	8,519	9,348	9,835	10,259	11,039

¹ Call categories reported as % of total in annual reports.

Source: East Pierce Fire & Rescue Annual Reports, 2012-2016.

Station 113 responded to 2,444 incidents in 2016, the highest of all staffed and volunteer stations. Overall, East Pierce's call load continues to increase as development occurs (see Exhibit 3-59). (East Pierce Fire & Rescue, 2017)

² EMS calls include motor vehicle crashes.

³ Call categories were not included in the 2013 or 2014 annual reports.

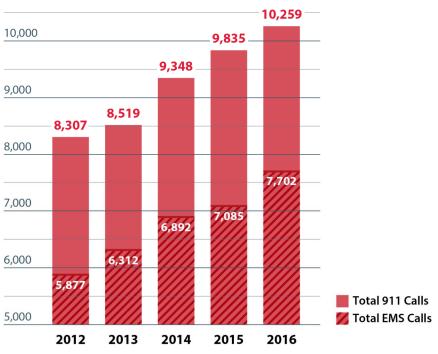


Exhibit 3-59 Five-year Total 911 and Total EMS Call History, 2012-2016

Note: EMS calls are included in the total 911 calls. Source: East Pierce Fire & Rescue, 2017; BERK, 2018.

Building Inspections and Plan Reviews

The Fire Prevention Division of East Pierce provided 593 inspections and conducted 287 plan reviews in the City of Sumner in 2016. Inspections were primarily related to new construction activity, existing occupancy inspections, confidence testing, follow-up, and business license renewal. Reviews included permits for special events, pre-application, conferences, plat reviews, SEPA reviews, site plan reviews, building plan review, and plan reviews for fire alarms and fire sprinklers. Five fire safety professionals, with oversight provided by the fire marshal, currently staff the Fire Prevention Division. As the regional economy continues to improve, development activity has increased – with the number of personnel currently allocated, the division struggles to complete on-going inspections while keeping pace with plan review and inspection demands of new development.

Outreach

East Pierce offers community outreach programs that are designed to teach children and adults how to recognize and avoid unintentional injuries, especially around water. These programs include presentation on water safety, child passenger safety, emergency preparedness (flooding, lahar, power outages, earthquakes, winter weather, etc.), residential risks from wildfires, senior falls, and fire prevention, burns, winter and holiday safety, bike and pedestrian safety, and impaired and distracted driving. Career and volunteer firefighters also participate in community events such as the National Night Out, Sumner Festival, Daffodil Festival, Bonney Lake Days, Edgewood Community Picnic, Milton Days, parades, Touch-A-Truck, and staff the annual East Pierce Fire Open House. In 2016, the district's outreach achieved the following:

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- 51 graduates of the SafeSitter Program
- 137 citizens trained in the use of a fire extinguisher
- 38 car seat inspections
- 778 citizens attended CPR and First Aid classes
- 15 citizens attended "hands-only" CPR classes
- 881 junior high and high school students were taught CPR
- 17 station tours
- 34 off-site school/day care visits
- 267 life jackets sold and fitted
- 421 helmets sold and fitted (31 multi-sport and 390 bike specific) (East Pierce Fire & Rescue, 2017)
 (East Pierce Fire & Rescue, 2018)

Levels-of-Service (LOS)

Response Time Standards

East Pierce and their partner cities, including Sumner, have adopted response time standards to effectively mitigate emergencies. The East Pierce standard is for first-due responding units to arrive at fire and emergency medical incidents in urban areas served by staffed fire stations within five minutes for 90% of all calls, and to provide a minimum acceptable (effective) response force within 10 minutes 90% of the time. The City of Sumner adopted these standards in Policy 1.3 of the Comprehensive Plan's Capital Facilities and Public Services Element (City of Sumner, 2017, p. 105).

Historically, the district has had difficulty meeting these standards; in 2016, crews arrived at incidents within 7 minutes and 10 seconds for 90% of calls, 2 minutes and 10 seconds below the standard. Response times have generally increased since 2011 due to the rising call volume and reliance on "second in" units responding to calls when the closest unit was already on a call (see Exhibit 3-60). (East Pierce Fire & Rescue, 2017)

Exhibit 3-60 Average Response Time in Minutes, 2012-2016

	DISTR	ICTWIDE	STATION 113			
YEAR	Dispatch to Arrival	Minutes Below Standard	Dispatch to Arrival	Minutes Below Standard		
2012	6:26	1:26	6:30	1:30		
2013	6:21	1:21	6:21	1:21		
2014	6:36	1:36	6:39	1:39		
2015	6:43	1:43	6:58	1:58		
2016	<i>7</i> :10	2:10	<i>7</i> :1 <i>7</i>	2:17		
2017	Not available	Not available	7:39	2:39		

Source: East Pierce Fire & Rescue, 2017; East Pierce Fire & Rescue, 2018.

Personnel

National and regional standards for staffing fire engines are between three to four firefighters per engine. Washington State law also requires at least three firefighters on scene to allow two to enter a building for a rescue (WAC 296-305-05002). Five of East Pierce's six fire engines are currently staffed by only two firefighters. However, the 2017 Staffing for Adequate Fire & Emergency Response (SAFER) Grant, described in more detail under Funding Sources, will allow East Pierce to hire nine entry-level firefighters and turn crews of two firefighters on each engine into crews of three. (East Pierce Fire & Rescue, 2017) Not all firefighters have been hired yet per lid lifts, but those hired from the SAFER Grant are currently being trained. (East Pierce Fire & Rescue, 2018)

Neither the City of Sumner or East Pierce have adopted a population-based LOS standard for fire department staffing. However, based on current employment of 110 career firefighters and the districtwide 2016 estimated population of 88,200, current staffing levels equate to approximately 1.2 career firefighters per 1,000 residents districtwide.

Fire Flow and Fire Suppression Storage

Exhibit 3-61 includes the minimum utility-based fire flows with required duration, as identified in the City's 2009 Water System Plan; the City adopted these standards in Policy 1.6 of the Comprehensive Plan's Capital Facilities and Public Services Element (City of Sumner, 2017, p. 106). Minimum system pressure should not be less than 20 psi during the fire flows in Exhibit 3-61.

Exhibit 3-61 Utility-based Based Minimum Fire Flows by Land Use Class

LAND-USE CLASS	MINIMUM RATE (GPM) ¹	MINIMUM DURATION (Hours)	MINIMUM FIRE SUPPRESSION STORAGE VOLUME ² (Min. Rate x Min. Duration)
Medium- & Low-Density Residential	1,000	2	0.12 Million Gallons
High-Density Residential & Commercial	1,500	2	0.18 Million Gallons
Industrial	3,500	3	0.63 Million Gallons
Existing High Fire Flow Buildings ³	4,500	4	1.08 Million Gallons

¹ GPM = gallons per minute

Fire flow requirements in the City are based on the governing local ordinance and guidance by the East Pierce Fire Marshal (see Exhibit 3-61). The 2001 Pierce County Coordinated Water System Plan requires 1,500 gallons per minute (gpm) for high-density residential and commercial areas (Pierce County, 2001). Industrial areas require 3,500 gpm based on the Fire Marshal's recommendations for fire-resistant

² The magnitude of fire suppression storage is the product of the maximum flow *rate* and *duration* established by the local fire protection authority or County Fire Marshal. (Washington State Department of Health, 2009, p. 83)

³ Includes the Wattles Building, the Methodist Church, Pasquier Panel, and McConkey & Company. Source: City of Sumner, 2010, pp. 2-3.

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construction.⁶ In addition, the Fire Marshal recommends 4,500 gpm for several high fire flow buildings in Sumner that were not constructed using fire-resistive construction, including the Wattles Building, the Methodist Church, Pasquier Panel, and McConkey & Company. Of these, the Sumner United Methodist Church at 901 Wood Avenue is within the eastern edge of the Town Center study area. (City of Sumner, 2010, pp. 2-3, 7-2)

Exhibit 3-61 also includes the minimum fire suppression storage (FSS) volume by land use class. Per the Washington State Department of Health's 2009 Water System Design Manual and the City of Sumner's 2009 Water System Plan:

"The local fire protection authority or county fire marshal determines a fire flow requirement for water systems. This fire suppression storage (FSS) level depends on the maximum flow rate and duration. Water systems must build and maintain facilities, including storage reservoirs, capable of meeting fire flow requirements while maintaining 20 psi pressure throughout the distribution system (WAC 246-290-221(5)) The minimum FSS volume for water systems served by single or multiple supply sources is the product of the required flow rate (expressed in gpm) multiplied by the flow duration (expressed in minutes)." (Washington State Department of Health, 2009, p. 104)

Fire Hydrants

The City of Sumner's water system contains approximately 920 hydrants – 56 are within the Town Center study area, including one private hydrant at the north end of the study area (see Exhibit 3-62). East Pierce conducts flow tests periodically to assure proper hydrant operation. A separate hydrant should be opened for each 2,000 gpm of required flow (City of Sumner, 2010, pp. 4-27, 10-15)

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⁶ The REI complex (located outside the Town Center study area) which utilized fire-resistive construction, such as automatic fire suppression sprinklers, early warning detection, Type III-n noncombustible construction, and major setbacks from adjacent property lines, requires 3,750 gpm.

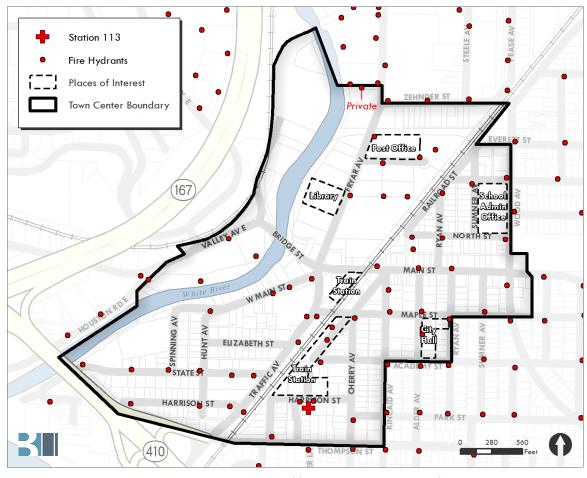


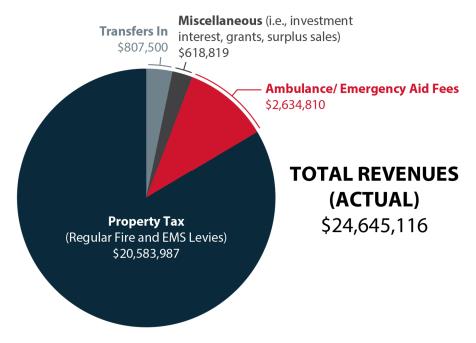
Exhibit 3-62 City of Sumner Fire Hydrants

Source: City of Sumner GIS Department, 2018 (https://sumnerwa.connectgis.com/Map.aspx); BERK, 2018.

Funding Sources

East Pierce's revenues are primarily made up of property taxes, through the Fire Protection and EMS Levies, and EMS transport fees; in 2016, the Fire and EMS Levies accounted for 86.5% of total revenues and EMS transport fees accounted for 10.9% (see Exhibit 3-63). (East Pierce Fire & Rescue, 2017, p. 28)

Exhibit 3-63 Total Revenues (Actual), 2016



Source: East Pierce Fire & Rescue, 2017, p. 28; BERK, 2018.

Voters approved a max collection rate of \$1.50 per \$1,000 of assessed property value (AV) through the Fire Protection Levy and \$0.50 per \$1,000 AV through the EMS Levy. Washington State law limits most local governmental entities to a 1% annual increase in property tax growth, often preventing the district from collecting the full voter-approved tax rate. If there is a large increase in property values, East Pierce is limited to the 1% increase, unless voters reset (or lift) the levy lid. District residents approved two "lid lifts" in 2017 to set the maximum allowable rate for each levy and maintain those rates for a four-year period. The 2017 lid lifts will allow East Pierce to hire nine new firefighters for a fifth medic unit. (East Pierce Fire & Rescue, 2017) (Needles, East Pierce Fire and Rescue Proposes Levy Lid Lifts to Maintain Services, 2017) (Needles, 'A Historic Moment': East Pierce Fire to Hire 18 Firefighters Thanks to Grant, Voters, 2017)

On August 4, 2017, the Federal Emergency Management Agency (FEMA) also awarded East Pierce a \$1,699,898 Staffing for Adequate Fire & Emergency Response (SAFER) Grant. The SAFER Grant will allow East Pierce to hire nine entry-level firefighters and turn crews of two firefighters on each engine into crews of three. (FEMA, 2018) (East Pierce Fire & Rescue, 2017)

East Pierce will remain understaffed despite the 2017 lid lifts and SAFER Grant as the eighteen new firefighters will address approximately two-thirds of existing personnel deficiencies. Not all firefighters have been hired yet per the lid lifts; those hired from the SAFER Grant are currently being trained. Not all engines will be at a staffing level of three. Three of five engines will have three firefighters.

3.3.2 Impacts

Impacts Common to All Alternatives

Impacts to fire protection and emergency medical services primarily result from increased demand generated by population or employment growth. The projected population and employment growth associated with each alternative are presented in Exhibit 2-10.

Response Time Standards, Equipment, and Personnel

Under all alternatives, growth and development would generate additional potential for fires or medical emergencies, which would place additional demands on East Pierce staff and further challenge the district to meet its response time target. The district would attempt, at a minimum, to maintain response times consistent with or better than current performance levels as the demand for service increases. Over time, additional staffing and equipment could be required to improve performance levels districtwide to adopted LOS standards.

Development under all alternatives is expected to occur incrementally in the study area as individual development projects are constructed, and the associated impacts are expected to occur incrementally as well. This would allow time for East Pierce and the City of Sumner to address future needs for fire and emergency medical services in the study area through planned personnel, apparatus, and facility improvements. In addition, property values in the study area would likely increase as growth and development occur. Increased property tax revenues from the Fire Protection and EMS Levies could offset some of the additional costs for improvements needed to meet additional service needs.

Changes in population demographics may impact the amount of additional staffing and equipment needed to support increased service demands, particularly concerning calls related to emergency medical services (calls from the eight senior housing facilities throughout the district, for example, increased 42% from 2014 to 2016). As shown in Exhibit 3-58, emergency medical services typically generate the greatest percentage of calls for East Pierce. Monitoring and regularly reviewing the demographic trends of future growth in the study area would allow the City and East Pierce to determine if/when additional personnel, equipment, or facilities are needed to accommodate any demographic shifts.

Future traffic growth under all alternatives may also impact the response time of emergency vehicles as East Pierce is dependent upon the capability of the local street networks to handle traffic flow. Changes to the street network are designed to meet City transportation levels of service and would assist fire and emergency response vehicles. East Pierce's Fire Prevention Division reviews proposed street improvements on a project-by-project basis to identify potential negative impacts on response times and ensure street improvements are consistent with the City's Fire Code (SMC 15.24).

A sixth medic unit and associated personnel will soon be required to meet service needs districtwide if, as is expected, call volume continues to grow. Additionally, the district's fleet of emergency vehicles will need to be replaced, including six fire engines and the ladder truck. (East Pierce Fire & Rescue, 2017) The district is currently preparing to include a Capital Facilities bond issue on the 2018 November ballot

for replacing and remodeling its fire stations and upgrading equipment. If approved, emergency vehicles would be upgraded during the first phase of projects. (East Pierce Fire & Rescue, 2018) (Needles, For the First Time, East Pierce Fire Seeks to Place Bond on November Ballot, 2018)

- Phase 1 priority projects: replacement of four fire stations (111, 112, 114, and 118), construction of a new fire station (117), and upgrading emergency vehicles; 6-8-year timeline.
- Phase 2: remodel or replace remaining fire stations and allow time to decide if a new training facility included. Station 113 is included in Phase 2.

Personnel currently allocated to the East Pierce Fire Prevention Division is insufficient to handle the existing volume of building inspections and plan reviews – under all alternatives, any increase in construction activity in the study area would further strain the Division. Construction activities could also result in an increased demand for fire and emergency medical services because of construction-related accidents. Based on East Pierce review, planned personnel and equipment are anticipated to be sufficient in most cases to handle increased service needed to serve construction sites and ultimately occupied buildings. (East Pierce Fire & Rescue, 2018)

Fire Flow, Fire Suppression Storage, and Fire Hydrants

Currently, with the existing buildings, there are no fire flow or water pressure issues in the study area. Increased density and construction of taller buildings may impact the fire flow requirements. (East Pierce Fire & Rescue, 2018) Additional fire hydrants may be required in accordance with SMC 15.24, SMC 15.28, and the International Fire Code if fire flow needs increase.

Building Heights

All alternatives would result in greater building heights than current conditions, potentially requiring the use of a ladder truck to respond to fires in the study area. Building heights would be greatest under the Action Alternatives, with a maximum of up to six stories in 66-82 acres of the study area; new development in the study area would be between 3-6 stories under the Planning Commission Preferred Alternative and Alternative 1 and between 2-6 stories under Alternative 2. Building heights would be lowest under the No Action Alternative, with a maximum height of 45 feet (4 stories) in the Mixed-Use Development and General Commercial zones.

The City's current aerial ladder truck housed at Station 113 in the Town Center study area is capable of servicing buildings up to 110 feet in height. However, as discussed above, the district's ladder truck needs to be replaced in the immediate future to be fully recognized by the insurance industry as a reliable unit, but will reach similar heights, more than the maximum approximate 65-foot height proposed under all Action Alternatives.

Fire Prevention and Suppression

Under all alternatives, any new development three or more stories tall would include increased fire prevention and suppression technology. Per SMC 15.24.080, automatic sprinkler systems are required in all new multifamily and commercial buildings with a gross floor area greater than 5,000 square feet, with an occupant load of 100 or more, 35 feet or more in height, or three or more stories tall. Approved

manual and automatic fire alarm systems are also required for new structures exceeding 5,000 square feet of gross floor area, and multifamily residential or multi-story buildings are required to have an addressable fire alarm system capable of monitoring and sending notification to an approved central station. Fire related safety features of new construction would slow the spread of fire and provide more

Alternative 1: Preferred Conceptual Zoning Districts

time for firefighters to extinguish a fire before it spreads to adjacent properties.

Alternative 1 is expected to result in 1,194 new dwelling units and 460 new jobs in the study area by 2035, compared to 339 new dwelling units and 408 new jobs under the No Action Alternative.

Personnel

Under the Alternative 1, an additional 1.5 firefighters would be needed to maintain the district's current de facto ratio of approximately 1.25 career firefighters per 1,000 residents districtwide.

Fire Flow, Fire Suppression Storage, and Fire Hydrants

Currently, with the existing buildings, there are no fire flow or water pressure issues in the study area. Increased density and construction of taller buildings may impact the fire flow requirements. (East Pierce Fire & Rescue, 2018) Taller, mixed-use buildings may have special International Fire Code and Building Code requirements for automatic sprinkler systems and possibly improved water supply systems, such as additional fire hydrants, larger pipes, or additional water storage tanks capable of delivering required fire flows. (City of Sumner, 2010, pp. 5-8) (Washington State Department of Health, 2009)

Building Heights

The current and proposed ladder truck height will reach over 100 feet, more than sufficient for the maximum 65-foot height.

Fire Prevention and Suppression

Under Alternative 1, all new development in the Town Center study area (aside from the conceptual parks/green space) would be mixed-use or multifamily and between 3-6 stories – all new development would thus include automatic sprinkler systems and an addressable, unit-specific fire alarm system, as described under Impacts Common to All Alternatives (SMC 15.24.080).

M-1 Sub-Option

If M-1 zoning allowing light industrial uses were applied in the north end of the study area along Fryar Avenue, it would allow a use different from mixed uses applied in Alternative 1. It would be a zone that fits with the property to the north and northeast where business and industrial parks are allowed. Relevant to fire protection services, a performance standard in the M-1 Zone include:

 All users of hazardous materials shall notify the city fire chief and public works director of the type and quantity of such materials generally on the premises. No hazardous waste materials shall be disposed of on any M-1 or M-2 zoned property.

East Pierce provides inspections of new construction and code enforcement in conjunction with the City of Sumner to ensure applicable fire codes are following and would do so whether the zoning was mixed-use residential/commercial or M-1 with light industrial uses.

Alternative 2: Conceptual Zoning Districts

Population and employment growth under Alternative 2 is projected to be identical to Alternative 1, resulting in similar demand for fire and emergency and medical service. Heights would also range up to 6 stories. Impacts of Alternative 1 apply also to Alternative 2.

Alternative 3: No Action Alternative Zoning Districts

Personnel

Under the No Action Alternative, an additional 0.5 firefighters would be needed to maintain the district's current de facto ratio of approximately 1.25 career firefighters per 1,000 residents districtwide.

Fire Flow, Fire Suppression Storage, and Fire Hydrants

See discussion under Alternative 1. Impacts would be similar but potentially less due to less expected growth.

Building Heights

Like other alternatives, the current and proposed ladder truck will have more than sufficient reach for anticipated heights (4 stories and 45 feet maximum).

Fire Prevention and Suppression

The No Action Alternative includes approximately 45 acres that could develop at densities and heights not required to include automatic sprinkler systems (such as single-family dwellings, townhomes, duplexes, or cottage housing in one of the three residential zones). Any new mixed-use, multifamily, or commercial development between 3-4 stories, 35 feet or more in height, greater than 5,000 square feet, or with an occupant load of 100 or more would include the increased fire prevention and suppression technology described under Impacts Common to All Alternatives.

M-1 Sub-Option

Under No Action, there would be no change from GC to M-1 zoning, though light industrial uses are allowed by a conditional use permit. If allowed, the impacts would be similar to Alternative 1.

Planning Commission Preferred Alternative

The Planning Commission Preferred Alternative has similar growth and maximum height levels as Alternative 1. Therefore, the impacts and conclusions would be the same.

3.3.3 Mitigation Measures

Incorporated Plan Features

None.

Regulations and Commitments

- Ongoing capital facilities improvement, budgeting, and operational planning by East Pierce and the City of Sumner are anticipated to address incremental increased and other changes in demand for fire services, including need for additional personnel, additional apparatus, and facility improvements. East Pierce is currently updating their Capital Facilities Plan.
- Policies 1.3 and 1.6 of the Sumner Comprehensive Plan's Capital Facilities and Public Services Element adopt level-of-service standards related to fire flow and response times, respectively. (City of Sumner, 2017, pp. 105-106).
- The City of Sumner's **2009 Water System Plan** establishes minimum fire flow rates and duration (as adopted in the Comprehensive Plan), and minimum fire suppression storage volumes by land use category, as well as water main sizing requirements and hydrant requirements. Per the Plan, the developer is responsible for making up any deficiency between land-use-based and building-based fire flow requirements additional facilities and capacity for flow may be provided by the utility at the developer's expense to meet site requirements. (City of Sumner, 2010, pp. 2-3)
- All future development will be required to comply with the provisions of Chapter 15 Building and Construction. Specifically:
 - SMC 15.24 Fire Code, which is comprised of the International Fire Code with Sumner amendments. Fire department access requirements, permitting procedures, and requirements for fire prevention and suppression technology will be provided as required by the code.
 - SMC 15.28 Fire Flow and Hydrants, which codifies fire flow and hydrant requirements as established in the City's 2009 Water System Plan. Adequate fire flow to serve potential development will be provided as required by the code.

Funding

- SMC 13.24.360 Water Utility Service, requires each commercial, industrial, multi-family, and institutional building with 5,000 square feet or more of floor area to pay a monthly standby fire protection fee of \$0.79 assessed per each 1,000 square feet of floor area (calculated to the nearest 1,000).
- Per the Fire Protection and EMS Levies, East Pierce Fire & Rescue collects up to \$1.50 per \$1,000 of assessed property value (AV) through the Fire Protection Levy and \$0.50 per \$1,000 AV through the EMS Levy. These rates are subject to Washington State's 1% limitation. District

residents approved two "lid lifts" in 2017 to set the maximum allowable rate for each levy and maintain those rates for a four-year period. The 2017 lid lifts will allow East Pierce to hire nine new firefighters for a fifth medic unit.

- FEMA awarded East Pierce a \$1,699,898 SAFER Grant on August 4, 2017, allowing East Pierce to hire nine entry-level firefighters and turn crews of two firefighters on each engine into crews of three.
- The **East Pierce Fire & Rescue Fire Prevention Division** reviews proposed street improvements on a project-by-project basis to identify potential negative impacts on response times and ensure street improvements are consistent with the City's Fire Code.
- The City and East Pierce will continue to work with mutual aid partners for backup response to emergency incidents.

Other Proposed Mitigation Measures

- Future development would generate tax revenue that may support additional capital and operating expenses for East Pierce.
- East Pierce is preparing to include a **Capital Facilities bond** issue on the 2018 November ballot for replacing and remodeling its fire stations and upgrading equipment. The bond is estimated at \$80 million for 20 years. If approved, that means an approximate increase of \$0.25 per \$1,000 AV for district residents, or about \$100 per year for a house costing \$400,000. The Capital Facilities bond is split into two phases:
 - Phase 1, considered priority projects, would cover the replacement of four fire stations (stations 111, 112, 114, and 118), the construction of a new fire station (Station 117), and upgrading emergency vehicles. Phase 1 projects are expected to be completed in a timeline of 6-8 years.
 - Phase 2 would remodel or replace the remaining fire stations, including Station 113 in the Town Center, and allow East Pierce time to decide if a new training facility would be included. Station 113 in the study area would undergo a remodel after funds are collected for Phase 2. (East Pierce Fire & Rescue, 2018) (Needles, For the First Time, East Pierce Fire Seeks to Place Bond on November Ballot, 2018)
- Fire-resistant construction, sprinklers, and other **fire protection measures** may be used to reduce site-specific fire flow requirements. (City of Sumner, 2010, pp. 2-3)
- In addition to the existing LOS Standards for response time and fire flow, the City and/or East Pierce could consider adopting a population-based standard for fire and EMS to help identify project-specific demand.

3.3.4 Significant Unavoidable Adverse Impacts

Future population and employment growth in the study area will continue to increase demand for fire and emergency medical services on both a local and regional level. With implementation of identified mitigation measures, however, no significant unavoidable adverse impacts to fire and emergency medical services are anticipated.

3.4 Transportation

This section provides a summary analysis of the current conditions and potential impacts of future development allowed under the Sumner Town Center Plan Update. Impacts are determined based on consistency with the City's adopted level of service standards. Transportation analysis completed for the Town Center is presented in the *Draft Sumner Town Center Subarea Plan Update Transportation Study*, September 2018 provided in Appendix C.

3.4.1 Affected Environment

The Town Center Affected Environment is consistent with the Sumner Comprehensive Plan Update Final SEIS, issued August 6, 2015. Further details are also provided in the Transportation Study for the Town Center found in Appendix C.

The Town Center is served by SR 167 and SR 410 with an interchange at Traffic Avenue. Key arterials serving the Town Center are Traffic Avenue/Fryar Avenue and Main Street, which both have the highest weekday PM peak hour volumes with the Town Center. All study intersections would operate at LOS D or better and no safety issues have been identified.

Sidewalks are provided along key arterials and collectors within the Town Center as well as along local streets. Bicycle facilities are limited with only Fryar Avenue having bike lanes within the Town Center. Sound Transit provides bus service in the Town Center. Most routes provide transit service to the Sumner Sounder Train Station facility located on the east side of Traffic Avenue at Maple Street. Sound Transit's Sounder line offers commuter rail service between Lakewood and downtown Seattle with stops in Tacoma, Puyallup, Sumner, Auburn, Kent, and Tukwila. Sound Transit's Sounder service shares the Burlington Northern Santa Fe (BNSF) tracks.

3.4.2 Impacts

Impacts Common to All Alternatives

Transportation impacts of the Action Alternatives (Alternatives 1A, 1B, and 2) are based on a comparison to the No Action Alternative. The Planning Commission Preferred Alternative has identical growth capacity to Alternative 1A and 1B and results for Alternative 1 apply to it.

Key street system improvements near the Town Center include SR 410/Traffic Avenue interchange upgrade and signal adjustments to the Main Street and Wood Avenue intersection for all Alternatives as included in the City's Transportation Improvement Program (TIP) and Transportation Element, 2015. The Alternatives are consistent with the City's adopted Comprehensive Plan policies and Transportation Element such that sidewalks would be located along streets providing access to the downtown areas, schools, parks, shopping areas, office buildings, and the transit station and routes. The Town Center street right-of-way is currently limited; therefore, bicycle facilities will generally be designated routes per the

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City's Transportation Element, 2015 and Parks and Trails Plan, 2018. In addition, where possible, as site frontage is improved bicycle lanes and shared streets may be developed.

Parking pressures in the Town Center would likely increase with the Action Alternatives. The Town Center Plan includes policies to both increase parking supply and improve access to alternative modes to help reduce vehicle ownership. The Plan also includes continuing to study parking so that short-, mid- and long-term parking strategies can be adjusted and refined to meet the parking needs.

Alternative 1: Preferred Conceptual Zoning Districts - Density Option A

Future 2035 traffic forecasts were based on the same method and assumptions as the Sumner Comprehensive Plan 2015. Alternative 1A travel forecasts were developed by updating the Sumner Comprehensive Plan 2015 travel demand model within the Town Center area for additional density. Based on the land use, the future 2035 weekday PM peak hour traffic volumes for Alternative 1A was forecasted at the study intersections and along roadways within the Town Center. The greatest differences in traffic volumes between the No Action and Alternative 1A are anticipated along the Traffic Avenue and Main Street. Alternative 1A weekday PM peak hour traffic volumes along these corridors are anticipated to be up to 65% higher than the No Action Alternative. The overall trip generation for Alternative 1A is 3,778 weekday PM peak hour trips. This trip generation is less than Alternative 1B and 2. Impacts of all the Action Alternatives are similar and since Alternative 1B has the highest trip generation the reminder of this study focuses on the disclosure of impacts through the evaluation of Alternative 1B.

Alternative 1: Preferred Conceptual Zoning Districts – Density Option B

Based on the land use plan and trip rates in the travel demand model, Exhibit 3-64 summaries the weekday PM peak hour trip generation for each Action Alternative As described previously and shown below, the trip generation for Alternative 1B would be about 20 trips more than the other Action Alternatives.

Exhibit 3-64 Action Alternative Estimated Weekday PM Peak Hour Town Center Trip Generation

ALTERNATIVE	INBOUND	OUTBOUND	TOTAL
Alternative 1: Density Option A	2,004	1,775	3,778
Alternative 1: Density Option B	2,009	1,789	3,799
Alternative 2	2,004	1 <i>,</i> 776	3,779

Note: Trip generation based on the City of Sumner travel demand model and land use plan for each Alternative. Source: Transpo Group, 2018.

The greatest differences in traffic volumes between the No Action and Alternative 1B are anticipated along the Traffic Avenue and Main Street. Alternative 1B weekday PM peak hour traffic volumes along these corridors are anticipated to be up to 68 percent higher than the No Action Alternative. Alternative

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1B is anticipated to increase weekday PM peak hour traffic volumes at the SR 410 interchanges with Traffic Avenue by between 53 and 63 percent.

Some inquiries have been made about rezoning parcels on the west side of Fryar Avenue near Zehnder Street to allow for manufacturing/industrial uses. The current Town Center land use alternatives assume retail/offices uses, which have higher daily trip generation rates compared to the industrial uses. If the properties were rezoned, then it is likely that trip generation would decrease compared to what has been evaluated.

Intersection levels of service were calculated for the weekday PM peak hour Alternative 1B conditions and are compared to the No Action Alternative in Exhibit 3-65.

Exhibit 3-65 Existing and Future (2035) Weekday PM Peak Hour Intersection Levels of Service Summary

	Traffic	Existing		No Action Alternative		Alternative 1 Density Option B				
INTERSECTION	Control ¹	LOS ²	DELAY ³	WM ⁴	LOS ²	DELAY ³	WM ⁴	LOS	DELAY	WM
Traffic Avenue/Bridge Street/Main Street	Signal	С	27	-	F	>80	-	F	>80	-
Alder Avenue/Main Street	AWSC	В	12	-	F	44	-	F	>50	-
Wood Avenue/Main Street	Signal	В	13	-	D	52	-	F	>80	-
Traffic Avenue/Maple Street	PSC	В	10	WB	В	12	WB	D	30	WB
Traffic Avenue/SR 410 WB Ramps/ Thompson Street ⁵	Signal	В	14	-	E	75	-	F	>80	-
Traffic Avenue/SR 410 EB Ramps ⁵	Signal	D	42	-	D	47	-	F	>80	-
Fryar Avenue/Zehnder Avenue	Signal ⁶	С	21	WB	С	22		F	>80	-

- 1. PSC = Partial Stop Control, AWSC = All-way Stop Control, TWSC = Two-way Stop Control.
- 2. Level of service, based on 2000 Highway Capacity Manual methodology.
- 3. Average delay in seconds per vehicle
- 4. Worst movement (WM) reported for unsignalized intersections, where NB = northbound, SB = southbound, NBL= northbound left-turn, and WB = westbound. For all-way stop control, NA (not applicable) is shown.
- 5. Delays at this intersection may be than longer than reported. Traffic queues are observed to block adjacent intersections.
- 6. Intersection was evaluated as a signal under future (2035) conditions, consistent with findings in the 2015 Sumner Transportation Plan.

Source: Highway Capacity Manual, TRB, 2000; Transpo Group, 2010.

As shown in Exhibit 3-65, intersection delays are anticipated to increase at the study intersections with Alternative 1B compared to the No Action Alternative. The Traffic Avenue/Bridge Street/ Main Street, Alder Avenue/Main Street, and Wood Avenue/Main Street and Fryar Avenue/Zehnder intersections would operate at LOS F during the weekday PM peak hour for the Alternative 1B conditions. The City has a LOS F standard at the Traffic Avenue/Bridge Street/ Main Street and Alder Avenue/Main Street intersections. The Traffic Avenue/SR 410 WB Ramps/Thompson Street and Traffic Avenue/SR 410 EB Ramps intersections are anticipated to also operate at LOS F under the Alternative 1B conditions during

the weekday PM peak hour. The evaluation includes improvements already contemplated in the City's TIP and Transportation Element.

The Town Center Plan includes W Main Street as one-way eastbound, which would help reduce traffic volumes to and from this approach of the congested Traffic Avenue/Bridge Street/ Main Street intersection. Vehicles heading westbound would access development along Elizabeth, State and Harrison Streets reducing the concentration of traffic volumes along Traffic Avenue at any one intersection.

Alternative 2: Conceptual Zoning Districts

The transportation impacts of Alternative 2 would be consistent with those identified for Alternatives 1A and 1B. Mitigation measures are described below.

Alternative 3: No Action Alternative Zoning Districts

The No Action Alternative would have less transportation impacts compared to Alternatives 1 and 2. All study intersections would operate within the City and WSDOT identified LOS standards. The projects and policies proposed in the City's TIP and 2015 Comprehensive Plan would mitigate impacts of the No Action Alternative.

Planning Commission Preferred Alternative

The Planning Commission Preferred Alternative has identical growth capacity to Alternative 1A and 1B and results for Alternative 1 apply to it.

3.4.3 Mitigation Measures

Incorporated Plan Features

The Town Center Plan identifies street designs to create neighborhoods and thoroughfares that enhance the community. The street types identify whether mobility or access are priorities and align with the form-based code approach of the Plan. Arterial, collectors and local streets are identified within the Town Center Plan with the key arterial being Traffic Avenue and other primary routes such as Main Street, Bridge Street, and Thompson Street identified as collectors with parking. W Main Street is identified as a one-way street eastbound with connections to Sumner Link Trail.

Beyond the existing and planned transit, the Town Center includes consideration of a wheeled trolley. Transit service is currently limited in the Town Center and consistent with the Plan, the feasibility of a wheeled trolley system should continue to be explored. A trolley system would provide connectivity between West Sumner (west of Traffic Avenue) and the WinCo and Fred Meyer area as well as to the Sounder Station. The purpose of the trolley would be to reduce dependence on auto and transport residents and visitors between the key areas of the Town Center. Improving transit provides capacity for moving more people in the transportation system compared to personal vehicles.

The Town Center has a gridded network but there are sidewalks missing in some locations. As development occurs, required frontage improvements would help complete the network. Frontage improvements should consider the appropriate pedestrian and bicycle facilities based on the street and travel classifications. A trail is proposed along Thompson Street and a connection should be considered to the Sounder Station to improve last mile travel.

Regulations and Commitments

- Traffic Impact Fee All new development requiring a building permit is required to pay a transportation impact fee based on the number of new weekday P.M. peak hour equivalent car trips generated by the development.
 - With adoption of the Town Center Plan, the City should revisit the traffic impact fee to determine if the appropriate transportation improvements in the Town Center are included and if adjustments should be made to the fees for the Town Center based on the land uses changes.
- Concurrency Transportation improvements or strategies shall be constructed to ensure that an adequate transportation system is in place to serve increased travel demands. Concurrency is defined as having a financial commitment in place to resolve the deficiency within six years. Concurrency is implemented as part of the City's development review process under SEPA. The City will not approve new developments unless the LOS standards are met; therefore, additional projects would likely need to be incorporated into the TIP as part of the Town Center plan to meet concurrency and/or concurrency policies may need to be revisited.
- Commute Trip Reduction (CTR) The City of Sumner has adopted a CTR program. The CTR program establishes goals consistent with State legislation. The individual demand management strategies that are typical elements of the CTR and Transportation Demand Management (TDM) programs are tailored to employment and residential developments. A 5 to 10 percent reduction in overall vehicular traffic in the study area would reduce delays at the study intersection and improve overall LOS.

Other Proposed Mitigation Measures

Network classifications are one of the key implementation tools establishing priorities for the transportation system. It is unreasonable and uneconomical to build each street to accommodate every function and user and so priorities must be set. While the City already has functional and truck route classifications for the corridors within the Town Center, it is recommended that Travel Context Classifications be identified along key facilities. The Travel Context Classification is another tool for identifying whether auto, bikes, or pedestrians are the priority for each street.

Based on the street types identified in the Town Center Plan, Exhibit 3-66 illustrates the recommended priorities for key corridors within the Town Center. Auto Priority is recommended along Main Street and Traffic Avenue, which serve the highest levels of vehicular traffic within the Town Center.

LEGEND Auto Priority Bike/Ped Priority Shared Priority City Limits Town Center Subarea Sounder Station

Exhibit 3-66 Town Center Recommended Travel Context Classifications

Source: Transpo Group, 2018.

Other mitigation measures include:

LOS Policy – Increasing capacity at intersections and along the roadway system may improve LOS for vehicles; however, it could create impacts for other modes. The City may desire to revisit LOS policies to have a more multimodal LOS that gives priority to other modes and considers connectivity of the pedestrian and bicycle network and/or minimizing barriers for non-auto modes. The LOS policy could be changed for just the Town Center or the City as a whole.

• Intelligent Transportation Systems (ITS) - ITS improvements such as adaptive signal control systems would improve traffic operations at intersections within the Town Center. Implementation of such strategies could result in an overall improvement of 10 to 15 percent.

Capacity Improvements -

- Traffic Avenue/Bridge Street/Main Street Converting W Main Street to one-way eastbound would help reduce some of the traffic demands at this intersection. This intersection is significantly over capacity consistent with the City's LOS F standard at this location. Various mitigation options were reviewed at this intersection including adding capacity and providing a roundabout. The inclusion of an additional eastbound left-turn lane, southbound right turn-lane, and conversion of the northbound right-lane into a through-right lane could reduce the overall intersection delay but the LOS would continue to be LOS F. Additionally, a roundabout was considered, which would still result in LOS F operations during the peak hours due to the high traffic volumes (unless triple lanes were provided.
- Alder Avenue/Main Street This intersection also has an LOS F standard; however, consideration could be given to installing a traffic signal. Signal warrants would be met for both the future 2035 No Action and Action Alternatives conditions. A traffic signal would reduce the overall delay at this location. The Town Center Plan includes parking along both Alder Avenue and Main Street and the current standard is LOS F. The City could consider a westbound left-turn lane with permitted/protected phasing and northbound right-turn lane with a permissive/overlap phasing to provide LOS D operations during the weekday PM peak hour. Given the desire to improve walking and biking and to reduce vehicle use within the Town Center, priorities will need to be determined for each mode.
- Wood Avenue/Main Street Provision of northbound and southbound left-turn lanes would improve intersection operations at this intersection to LOS D during the weekday PM peak hour under future 2035 conditions with Alternative 1B (or Planning Commission Preferred Alternative Density Option B). In addition, consideration should be given to ensuring all sidewalk facilities are ADA compliant.
- Traffic Avenue/SR 410 WB Ramps/Thompson Street Provision of two additional southbound right-turn lanes with a permissive/overlap phasing would improve intersection operations to LOS D during the weekday PM peak hour under future 2035 conditions with Alternatives 1B. Additionally, based on operations, it is anticipated that the second southbound through lane may not be needed and could instead be utilized as one of the southbound right-turn lanes.
- Traffic Avenue/SR 410 EB Ramps Provision of an additional northbound left-turn lane and eastbound right-turn lane (for four total eastbound lanes) as well as permissive/overlap phasing for the eastbound right-turn would improve intersection operations to LOS E during the weekday PM peak hour under future 2035 conditions with Alternatives 1B.

Fryar Avenue/Zehnder Avenue – Providing northbound and westbound right-turn lanes as well as an additional left turn (for a total of two) would decrease the delay; however, the intersection would continue to operate at LOS F during the weekday PM peak hour. Adding northbound and southbound through lanes (for a total of two through lanes in each direction) would improve operations to LOS D.

3.4.4 Significant Unavoidable Adverse Impacts

Development of the Alternatives would result in increases in all travel modes – vehicles, transit, pedestrians, and bicycles. It is anticipated that with the proposed mitigation there would continue to be congestion along the Traffic Avenue corridor and specifically at the SR 410 interchange and LOS standards may not be met. This is considered a significant and unavoidable adverse impact that would likely occur with the Action Alternatives. As described previously, the City may consider changing LOS Policies to promote multimodal LOS consistent with the proposed form-based code approach in the Town Center Plan.

4 Comments and Responses

This chapter of the Final Supplemental Environmental Impact Statement (Final SEIS) describes the opportunities for commenting on the Sumner Town Center Plan Subarea Plan Update and Planned Action Draft SEIS, followed by the specific comments that were submitted and responses to those specific comments.

4.1 Comment Opportunities

During the Draft SEIS comment period, written comments were received from the individuals and business organizations listed below. The issues raised in each comment letter are numbered on each letter and are followed by correspondingly numbered responses. See Exhibit 4-1.

Exhibit 4-1 Action Alternative Estimated Weekday PM Peak Hour Town Center Trip Generation

LETTER NO.	LAST	FIRST	BUSINESS	DATE RECEIVED
1			Union Pacific Railroad	10/3/18
2	Allen	Michelle		10/12/18
3	Bicknell	Luke		9/30/18
4	Bryan	Mindy		9/28/18
5	Frost	Tracey		
6	Peterson	Joleen		10/12/18
7	Radcliff	Dave	The Old Cannery Furniture Warehouse	10/11/18
8	Radcliff	Dave		10/12/18
9	Starcher	David		9/14/18
10	Tully	Joan		9/28/18

Source: City of Sumner, 2018.

A public hearing was held during the October 4, 2018 Planning Commission Meeting at Sumner City Hall to provide Sumner residents, business owners, and the public an opportunity to provide oral comments on the Draft SEIS. The Town Center Plan, Zoning Code Amendments, and Planned Action Ordinance were summarized for those in attendance. Five oral comments were offered at the hearing.

No written comments on the Draft SEIS were received from tribes or public agencies.

Comments that state preferences on alternatives or other matters are acknowledged with a response that the comment is noted and forwarded to City decision makers. Comments that address methods, analysis results, mitigation, or other matters are provided a response.

4.2 Response to Comments

Letter #1
Union Pacific Railroad

Comment 1

Comment noted. Please see the analyses of land use and transportation and mitigation measures in this SEIS (Sections 3.1 and 3.4) and the expanded SEPA Checklist in Appendix A.

The Union Pacific railroad spur bounds the west edge of the Riverfront District in the Town Center Plan Study Area. The Riverfront District is intended to accommodate a mix of multi-family and commercial activity in a manner that addresses and maintain views to the White River. Future development in this area should be focused on the river vista and connection and thus generally orient activity away from the railroad spur.

Comment 2

Comment noted. The increase in housing units under the Planning Commission Preferred Alternative is likely to bring additional activity into the Town Center Study Area. The Sumner Police department will continue to enforce various regulations of the City, including the criminal code in SMC Chapter 9 and portions of RCW Title 9A adopted by reference (including RCW 91.52 regarding burglary and trespass).

Pedestrians and cyclists will be encouraged to use designated pedestrian rail crossing with appropriate signage and paths. Please see the analysis of transportation and mitigation measures in this SEIS (Section 3.4), and the analysis of transportation impacts associated with increased housing and vehicle trips within the Plan area in Appendix C. Building setbacks are described in the Planning Commission Preferred Town Center Code.

Comment 3

Please see the analysis of transportation and mitigation measures in this SEIS (Section 3.4), and the analysis of transportation impacts associated with increased housing and vehicle trips within the Plan area in Appendix C.

Comment 4

Comment noted. The expanded SEPA Checklist in Appendix A includes a discussion of noise impacts in the Study Area and proposed mitigation measures.

The commercial and multifamily uses allowed under the Town Center Plan and form-based code are not anticipated to cause vibration. Industrial uses in commercial and industrial zones that abut the Town Center are required to avoid vibration consistent with the City's zoning code. Structures located next to

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Comments and Responses

the rail line would design developments to account for the existing rail uses and meet the International Building Code and State Energy Code that should reduce the potential for vibration impacts.

Comment 5

Comment noted. The expanded SEPA Checklist in Appendix A includes a discussion of water impacts in the Study Area and proposed mitigation measures. Any redevelopment in the Study Area will be subject to the City's Stormwater Management Regulations, SMC Chapter 13.48, addressing construction runoff as well as post-development runoff.

Comment 6

Comment noted. Any redevelopment in the Study Area and associated construction impacts will be subject to the City's Building and Construction Code in SMC Chapter 15. Chapter 33 of the 2015 International Building Code, adopted in SMC Chapter 15.12.010, includes regulations for safeguards during construction.

Comment 7

Notice of future hearings and other matters related to the Town Center Study Area are posted online at https://sumnerwa.gov/town-center/. Interested individuals or organizations may sign-up for e-mail updates on the website.

Letter #2
Michelle Allen

Comment 1

Please see the analysis of aesthetics and mitigation measures in this SEIS (Section 3.2).

The comment generally provides opinions on height limits for the old Red Apple lot – an approximately two-acre site bounded by Kincaid Avenue to the west, Maple Street to the north, Alder Avenue to the east, and Academy Street to the south. The lot is currently zoned Central Business District (CBD), which allows building heights up to three stories, or 35 feet. The Proposed Alternatives would allow between 3-4 stories of multi-family/commercial development. Alternative 1 establishes a 3-story transition area within 100 feet of the southeast boundary of the Town Center, including the southern edge of the site bordering Academy Street.

The old Red Apple lot is one of nine "Opportunity Sites" within the subarea that are considered more likely to develop – these Opportunity Sites include parcels that are vacant or underdeveloped or larger properties that could be redeveloped in a different format with mixed uses. Growth on the Opportunity Sites would add capacity to the city for housing and further support the City's ability to meet its growth target in the Comprehensive Plan.

Because a large portion of the properties in the Study Area are not developed to the full height and/or density allowed by current zoning, some aesthetic impacts are anticipated even under the No Action

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Comments and Responses

Alternative. While large amounts of growth are not anticipated under the No Action Alternative, future development is expected to occur primarily on or near the identified Opportunity Sites. Redevelopment of these properties to the density and height limits allowed by the current zoning code could result in localized compatibility impacts to adjacent properties occupied by less intense development.

The Town Center Plan update will include the adoption of a form-based code for the Town Center. This code will contain development regulation and design standards intended to preserve and enhance the livability and urban design appeal of the Town Center. The code will address many aspects of urban design and building form, including transitions between areas of higher and lower development intensity, to minimize potential height, bulk, and scale impacts.

Letter #3 Luke Bicknell

Comment 1

The Sumner Town Center Plan is an aspiration vision for Sumner's 197-acre Town Center; properties rezoned in the Town Center Subarea Planning Area are not guaranteed to redevelop. Zoning describes what can be built within a given zone, in terms of height of buildings, floor space (as a ratio of lot area), uses of the property, and other constraints. Current owners of a property must either agree to sell their property to another interested party or redevelop the property themselves. Any future development reviewed under the Planned Action Ordinance will still be subject to all applicable permits, development specifications, and design standards.

The Town Center Plan is a subarea plan that supports the Sumner Comprehensive Plan. As such, the vision and strategies presented in the Town Center Plan are part of the City's road map for the next 20 years of growth and development.

Letter #4 Mindy Byran

Comment 1

See Response to Letter #3, Comment 1 above.

Letter #5
Tracey Frost

Comment 1

Comment noted. Please see the analyses of land use and aesthetics and mitigation measures in this SEIS (Sections 3.1 and 3.2).

Comment 2

Comment noted. Please see the analysis of fire protection and mitigation measures in this SEIS (Section 3.3). The expanded SEPA Checklist in Appendix A includes a discussion of impacts to public services, including police and schools, as well as proposed mitigation measures.

Comment 3

This comment is noted and forwarded to City decision makers. Development typically will not occur unless the developer is able to make a profit when the project is complete. If there is not enough market demand for 6-story buildings and the associated development costs, the project will not be financially feasible.

Comment 4

This comment is noted and forwarded to City decision makers.

Letter #6 Joleen Peterson

Comment 1

Comment noted. The Planning Commission Preferred Alternative clarifies code requirements and guidelines. Under the Recommended Alternative, commercial activity is allowed in the West Sumner District and some stand-alone commercial uses are allowed within the Riverfront District.

Comment 2

The Planning Commission Preferred Alternative sets a minimum width of 12 feet for attached single-unit residential development and allows some surface parking.

Comment 3

The Planning Commission Preferred Alternative allows commercial activity in the West Sumner District and some stand-alone commercial uses within the Riverfront District. According to the recommended Design and Development Guidelines, "commercial activity is recommended to be mixed-use in multi-family residential buildings and hotels" in the Riverfront District.

Moreover, structured parking is not fully required for commercial development within the Riverfront District. According to the Planning Commission Preferred Design and Development Guidelines:

"No on-site surface parking is allowed between buildings and the street. No more than 15% of required parking may be surface parking. Structured parking is required for all residential development. Commercial may have surface parking."

SUMNER TOWN CENTER SUBAREA PLAN UPDATE AND PLANNED ACTION FINAL SEIS

Comments and Responses

Comment 4

See Response to Comment 2 above.

Letter #7
Dave Radcliffe

Comment 1

This comment is noted and forwarded to City decision makers.

Letter #8 Dave Radcliffe

Comment 1

See Response to Letter #6, Comments 3 and 4 above.

Letter #9 David Starcher

Comment 1

Please see the analysis of transportation and mitigation measures in this SEIS (Section 3.4), and the analysis of transportation impacts associated with increased housing and vehicle trips within the Plan area in Appendix C.

The Town Center Plan identifies street designs to create neighborhoods and thoroughfares that both enhance the community and address increased travel demands. The street types identify whether mobility or access are priorities and align with the form-based code approach of the Plan. Arterial, collectors and local streets are identified within the Town Center Plan with the key arterial being Traffic Avenue and other primary routes such as Main Street, Bridge Street, and Thompson Street identified as collectors with parking. W Main Street is identified as a one-way street eastbound with connections to Sumner Link Trail.

Different street types in the Town Center Area are identified in SEIS Exhibit 2-19. Exhibit 2-20 through Exhibit 2-23 include sample cross-sections for arterial, collector, and local streets.

Letter #10 Joan Tully

Comment 1

Comment noted. Please see the Response to Letter #9, Comment 1 above, the analysis of transportation and mitigation measures in the SEIS (Section 3.4), and the analysis of transportation impacts associated with increased housing and vehicle trips within the Plan area in Appendix C.

Public Hearing Comments

Jay Tonnelson

Please see the analysis of transportation and mitigation measures in this SEIS (Section 3.4), and the analysis of transportation impacts associated with increased housing and vehicle trips within the Plan area in Appendix C.

Tracey Frost

Public input from the Future of Sumner Open House on October 5, 2017 at the Sumner Senior Center and the February 15, 2018 Open House at Sumner City Hall was used to define the Alternatives studied in this SEIS.

The tax rate for existing residences only changes as the use of the property changes, not if the zoning of the property changes.

Corty Vandyke

The Subarea Plan boundaries were based on the 2005 Town Center Plan and adjusted based on February 2018 Town Center workshop efforts where alternatives were developed.

David Meshke

This comment is noted and forwarded to City decision makers. See the description of the Planning Commission Preferred Alternative under Section 2.3.2.

Jolene Pedersen-Jones

This comment is noted and forwarded to City decision makers.



October 3, 2018

VIA EMAIL ONLY: ericm@sumnerwa.gov

Eric Mendenhall, Senior Planner City of Sumner Community Development Department 1104 Maple Street #250 Sumner, Wav98390

Re:

Comments to Town Center Subarea Plat Update by Zehnder Street on the north, Wood Avenue on the east, Thompson Street on the south and White/River Valley Avenue E/Union Pacific Railroad on the West (the "Project")

Dear Mr. Mendenhall:

Thank you for allowing Union Pacific Railroad Company ("UP") the opportunity to submit the following comments regarding the above-referenced Project. UP is a Delaware corporation that owns and operates a common carrier railroad network in the western half of the United States, including the State of Washington. UP's rail network is vital to the economic health of Washington and the nation as a whole and its rail service to customers in Washington is crucial to the future success and growth of those customers.

The proposed Project location is adjacent to UP's property and railroad operations. Any land planning decisions should consider that train volumes near the Project area may increase in the future. UP also asks that the City and the applicant keep in mind that this is an active rail corridor and nearby land uses should be compatible with this continuing rail use.

2 Trespassing

3

Approval of this Project will likely increase pedestrian traffic and trespassing onto the railroad right-of-way. UP strongly recommends that the developer and the City evaluate such impacts and set forth appropriate mitigation measures. If the Project is approved, we request that the City require the Project developer to install vandal resistant fencing at least 8 feet or taller (without impairing visibility), pavement markings and "no trespassing" signs designed to prevent individuals from trespassing onto the railroad tracks. All pedestrians and cyclists should be directed to use designated pedestrian rail crossings by utilizing appropriate signage and paths. Buffers and setbacks should also be required adjacent to the right-of-way.

Increased Traffic Impact

Rail crossing safety is critical to the public and to UP. Any increase in traffic from the Project may render inadequate the current safety devices in place on the nearby at-grade crossings. Additionally, an increase of pedestrian and vehicular traffic may conflict with train operations causing trains to proceed more slowly through the City, and/or make more frequent emergency stops, which would make rail

cont.

7

service less effective and efficient. Should this Project be approved, the Project developer and the City should examine any increase in vehicular and pedestrian traffic and the impacts on the nearby at-grade road crossings to see what additional mitigation measures should be included in the Project.

4 Noise and Vibration Impact

UP's 24-hour rail operations generate the noise and vibration one would expect from an active railway. Any increase in pedestrian and vehicular traffic over and around at-grade crossings may result in additional horn use by railroad employees. As a mitigation measure, the developer should disclose to the general public, including residents of the proposed development, the daytime and nighttime noise levels naturally occurring with rail service, including sounding horns at vehicle crossings where required, as well as the pre-existing and predictably-occurring vibration. These disclosures should note that train volume may increase in the future. The Project's development plans should also include appropriate mitigation measures, such as construction of sound barrier walls or landscape buffers, and/or use of sound-proofing materials and techniques.

Drainage and Project Construction

UP requests the City ensure that the drainage plan relating to the Project does not shift storm water drainage toward UP property and infrastructure. Any runoff onto UP's property may cause damage to its facilities resulting in a potential public safety issue. If the Project is approved, we ask that the City require the applicant to mitigate all safety risks and the impacts of the railroad's 24-hour operations during the construction of the Project, including contacting UP to arrange for flaggers for work performed within twenty-five feet (25') of the nearest track.

UP appreciates the developer and the City giving due consideration to the above concerns, as this proposed Project may result in impacts to land use and public safety. Please give notice to UP of all future hearings and other matters with respect to the Project as follows:

Aaron P. Galley – Real Estate Analyst Union Pacific Railroad Company 1400 Douglas Street - STOP 1690 Omaha, NE 68179 (402) 544-8043 apgalley@up.com

Please do not hesitate to contact Aaron P. Galley if you have any questions or concerns.

Sincerely,

Madeline E. Roebke Senior General Counsel

Union Pacific Railroad Company

cc: Aaron P. Galley Aaron M. Hunt From: Allen, Michelle
To: Eric Mendenhall

Subject: Sumner Town Center SEIS

Date: Friday, October 12, 2018 4:37:15 PM

EXTERNAL EMAIL

1

Hi, I would like to share personal feedback on the Town Center proposal. I have been following the process for the last several years, since becoming a Sumner resident in December 2015. I love my home, which is at the corner of Alder and Academy - directly across the street from the Red Apple lot. I have respectfully and passionately expressed my opinion every chance I got. I believe that having a 3-story height allowance on that lot, directly across from established residential homes, is **too high**. My proposal is that you allow just two stories for any building directly across from a home (along Academy and Kincaid, which are the west and south sides of the lot). I am including a picture that was taken from my front porch. I would like you to imagine this being your view, with a 3-story building taking up the entire block across the street. My view of the hill and evening sunsets would be gone. I would hardly be able to see the sky. This porch was my husband's dream, and one of the main things that drew him to this house.

We knew that there would someday be development across the street, but the proposed plan is just too much. The construction impact would be huge. Just having the old bank demolished and a parking lot built (northeast corner of Alder and Academy) was disruptive, as my house shook every day starting at 7 am for a long time. Sumner can't take such an influx of residents to this lot, either. Please do not ruin the town, at the expense of those who currently live here and love the town, for the "future." It is not necessary.

Mainly though, I implore you to reduce the allowed building height directly across the street from the nine houses (including mine) across the street from the Red Apple lot. Both current proposals allow for 3 stories, and I believe 2 stories would be a better fit for the area, and would be more considerate for the neighbors. We matter too!

Sincerely, Michelle Allen 1020 Academy Street 253-750-5925



From: <u>Luke Bicknell</u>
To: <u>Eric Mendenhall</u>

Subject: Sumner Town Center Plan Comment

Date: Sunday, September 30, 2018 1:33:19 PM

EXTERNAL EMAIL

Hi Eric,

We read through the Town Center Plan briefly this morning. We currently live at 625 Elizabeth Street, and this seems like an area that is going to be redeveloped.

For current residents in areas that Sumner hopes to rezone and allow for building of 5-6 story buildings, what is the process for getting these homes? Do the current residents have to agree to sell as a whole in order for a new apartment building to be constructed? What is the estimated timeline for changes to Elizabeth street.

My wife, two children and I enjoy our single family home. It is hard to hear that the future of our home is uncertain.

Thank You-Luke Bicknell

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Cell: (206) 601-2277

From: Mindy Byran
To: Eric Mendenhall
Cc: justin byran

Subject: Sumner Town Hall proposal question

Date: Friday, September 28, 2018 2:03:13 PM

EXTERNAL EMAIL

Hi Eric-

I am a home owner (Sumner 607, LLC) on West Main and was looking through the Town-Center website today. I am not able to attend the meeting at the library next week, as I will be out of town, but by looking at the website and maps, it appears that the city is planning to build multi-story units where my current property is at 607 West Main. Am I reading this correctly that the plan is to demolish existing homes to build complexes? I can't tell from the maps and I couldn't find my answer in the documents. Please advise. If this is correct, how is the city compensating the home owners for the loss of property?

Thanks so much!

Best, Mindy Byran

Sent from Outlook

Commissioners:

Thank you for this opportunity to comment on the currently proposed downtown zoning plans.

I attended the open comment session on 10/4/18 and spoke about tax implications for the residents of the proposed changed zones.

- Sumner is a unique, charming and healthy community. I don't believe such aggressive changes need apply to keep the community quaint and inviting. Wait and see how the new developments at Fred Meyer and near the Windmill (the Enslow family property development) impacts the city and its
- services. Not spoken to in the meeting comments were the impact such developments will have on police, fire and schools with the influx of several hundred families in the next 5 years.
- While I agree that Sumner needs to change with the times and look to the future of the downtown corridor, I disagree with Mr. Mendenhall's comments on builders only building what the market will bear. I believe that any developer or builder will build what's best monetarily for them to get the most bang for their buck. If aggressive zoning changes allow 6 story buildings, then permits will have to be issued for 6 story buildings or the city will face lawsuits.
- 4 Please consider stepping back to one of the other alternative plans, which are much less aggressive to see what happens in the next 10 years. A revisit can always be accomplished at that point.

Thank you Tracey Frost 610 Station Lane October 12, 2018

City of Sumner 1104 Maple Street Sumner, Washington 98390

RE: Sumner Town Center Plan

We are excited to see the Town Center Plan and its implications for increased density around the Sounder Commuter Station. We have carefully reviewed the plan in the context of development and redevelopment opportunities in the affected districts. The following are our comments on the plan.

- The Plan should be consistent and clear on code requirements and guidelines. The plan should clearly decipher between plan and code, and what are suggestions versus requirements. Inconsistencies between and within districts make it difficult to evaluate potential projects as allowed uses and guidelines that apply are unclear. For example, the lot size requirements do not appear to include all allowable uses, making it unclear what types of uses are allowed and what lot size rules apply. For example, commercial development is only listed as allowed in the West Sumner District, even though there is existing commercial in other districts. Additionally, there is no commercial code discussion within the West Sumner District code.
- Development standards should be scaled for small-scale infill sites. The Town Center Plan appears to aim at attracting large, mixed-use, multi-unit developments. The requirements for these sites may make small, infill developments challenging and cost-prohibitive. For example, requiring structured parking with one shared entrance may not work with all development sites. In particular, in the Riverfront District, the properties along the White River have only a primary access road (no secondary) and limited parcel depth. These parcels are candidates for rowhouse-style units, however, structured parking for a few units is not economical and may not physically work with the lot constraints along the river.

In order to meet the plan's goal of encouraging density, lot dimension width and size requirements should be minimized to increase redevelopment options on smaller lots. In the Riverfront District, lot size requirements for rowhouses have a 20' width. While this may be appropriate for two- to three-bedroom units, smaller housing units (studios and one-bedroom units) are highly desirable around mass transit stations.

The plan needs to clearly address commercial development within each District. While the plan focuses on mixed-use developments, stand-alone commercial development is not listed as allowed in any districts other than West Sumner District. This creates uncertainty whether new stand-alone commercial is allowed and whether existing stand-alone commercial uses can expand. Additionally, requiring all commercial developments to be a minimum of two stories is restrictive and cost-prohibitive to many commercial uses such as restaurants and small-scale retail. Structured parking requirements further restrict potential commercial development. Additionally, consideration should be given to shared parking for complementary uses (residential and commercial).

It also appears that the CBD District only allows new commercial in a mixed-use development with residential use above and restricts commercial to retail and restaurant uses below. This may preclude

- office use in the downtown. In addition, developing residential units above commercial space requires structural and fire code elements that may make development cost prohibitive.
 - While we appreciate the long-term vision of the Town Center Plan, large mixed-use, six-story developments will take years to acquire contiguous parcels for redevelopment. We encourage the city to adjust the plan to accommodate immediate redevelopment of smaller infill sites with consideration given to a variety of development sizes and types.

Thank you for the opportunity to comment on the Town Center Plan. We believe increased growth and smart development will benefit Sumner as the city continues to grow.

Sincerely,

Joleen Peterson-Jones

Joleen Peterson

From: <u>Dave Radcliffe</u>
To: <u>Eric Mendenhall</u>

Cc: Ryan Windish; William Pugh

Subject: Town Center Plan

Date: Thursday, October 11, 2018 9:19:01 AM

EXTERNAL EMAIL

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As a retailer in the City of Sumner I am supportive of Town Center plan. The Old Cannery has enjoyed nice growth over last few years. We believe our growth is due to growth in our neighboring communities.?? Bonney Lake, Puyallup, Auburn, Edgewood, Orting and Sumner. We sit surrounded by some of the largest growth in South Puget Sound in years. I believe it is time to plan our growth.

Thank you

2

Dave Radcliffe CEO The Old Cannery Furniture Warehouse ??

??

From: Dave Radcliffe
To: Eric Mendenhall

Subject: FW: Town Center Plan - comment

Date: Friday, October 12, 2018 3:47:40 PM

EXTERNAL EMAIL

Eric,

- After reviewing the Town Center Plan with JMJ TEAM in the context of our new restaurant site, a few items need clarification. Please review my comments on the plan, as follows:
 - Clarify that stand-alone commercial development is allowed within the Riverside District;
 - Clarify that one-story commercial development is allowed as a new use and as expansion of existing uses; and
 - Clarify structured parking is not required when existing surface parking is adequate.

These clarifications are requested to confirm the site can be developed as a new restaurant and in a cost-effective manner. We appreciate staff's hard work on the Town Center Plan and believe that with some clarifications, the plan can be a great roadmap for our city's growth. We are excited to add a new restaurant to enhance the Riverside District.

From: <u>David Starcher</u>
To: <u>Eric Mendenhall</u>

Subject: Town Center Plan - feedback

Date: Friday, September 14, 2018 9:15:14 AM

EXTERNAL EMAIL

Sumner already has a terrible congestion problem every weekday evening and this is going to make it worse; will there be changes in the roadways to alleviate this problem? Main street and nearly all the other streets in this map are two lane roads(one lane in each direction). Other towns which have nice downtown areas that are highly trafficked either have increased the lanes or changed existing streets into one way streets. Please take this concern into consideration when framing your future plans for growth.

David Starcher 808 Thompson St. Sumner, WA 98390 From: Joan Tully
To: Eric Mendenhall
Subject: Town center plan

Date: Friday, September 28, 2018 7:56:02 AM

EXTERNAL EMAIL

There really should be another way in and out of town before the addition of all the new housing, people and parking.

By making Thompson Street four lanes (for only four blocks) will only cause traffic to bottleneck under the railroad trestle. Our streets are already congested with commuters.

I have seen the fire department get stuck behind this traffic. Could barely get out of their driveway. I'm all for progress, and the plan is lovely, but you can't put 10lbs of sand in a 5lbs bag.

I'm not one to complain without trying to come up with a solution, but I imagine if there was one city planners would've thought of it first.

I only found out about the new plan last week. I wish I'd seen it sooner.

Thank you, Joan Tully

10/4/18 PLANNING COMMISSION HEARING



SUMNER PLANNING COMMISSION

Thursday, October 4, 2018 6:00 p.m.

Sumner City Hall 1104 Maple Street

CALL TO ORDER

The meeting was called to order at 6:00p.m. by Vice Chair, Greg Mintz.

FLAG SALUTE

Vice Chair Mintz led those in attendance in the flag salute.

ROLL CALL

Commissioners Present: Bush, Hamilton, Mintz, Ridell, Robbert

Commissioners Absent: Haines, Suznevich- both excused

Staff Present: Director of Community Development Ryan Windish, Senior Planner Eric

Mendenhall

PUBLIC COMMENT

None before the Commission.

NEW BUSISNESS

a. PUBLIC HEARING- Town Center Plan

Vice Chair Mintz opened the Public Hearing regarding the Town Center Plan at 6:02p.m.

Senior Planner Eric Mendenhall spoke to the Commission about the Town Center Plan, Zoning Code Amendments, and the Planned Action Ordinance.

Vice Chair Mintz opened up the floor for Public Comments on the Town Center Plan.

Tonnelson

Jay Tonnelson- 617 McKinnon Ave. Sumner, shared concerns about traffic, inadequate parking, possible property developments, and asked the Planning Commission to consider a delay a decision.

Frost

Tracey Frost- 610 Station Ln. Sumner, asked questions about the public input from the open houses and the financial impact and taxes on properties within the Town Center Plan.

Vandyke

Corty Vandyke- 21308 Snag Island Dr., Lake Tapps and owner of VanDyke Dental Office on 1006 Fryar Ave. in Sumner spoke to the properties being included and not included in the plan.

Meshke

David Meshke- 901 Sumner Ave., Sumner told the Planning Commission he would like it approved with a few corrections to the subarea plans design standards and design guidelines.

Pedersen-Jones Jolene Pedersen-Jones- 805 Wood Ave. and 905 Main St. Sumner spoke in support of the Town Center Plan as a long term plan.

With no other comments, Vice Chair Mintz closed Public Comment.

Staff Response-

Senior Planner Eric Mendenhall spoke to the question regarding the financial impact to residences, and stated the tax rate only changes as the use of the property changes, not if the zoning of the property changes.

Vice Chair Mintz closed the public hearing at 6:27 p.m.

b. Shoreline Master Plan Update-

Senior Planner Eric Mendenhall spoke to the commission regarding the Shoreline Master Plan Update and upcoming dates.

CORRESPONDENCE

None before the Commission.

COMMISSION COMMENTS

No comments.

STAFF COMMENTS

Staff member Mendenhall took roll in preparation for the October 18th Planning Commission Special Meeting.

ADJOURNMENT

With no further business in front of the Commission, Commissioner Robbertt motioned to adjourn, Commissioner Ridell seconded the motion, and the meeting adjourned at 6:39p.m.

Minutes Submitted by: Lana Hoover

5 References

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A. Scoping

NOVEMBER 2018 A-1



Sumner Town Center Subarea Plan Update and Planned Action Determination of Significance and Request for Comments on Scope of Supplemental Environmental Impact Statement

DESCRIPTION OF PROPOSAL

The proposal includes adoption of a Town Center Subarea Plan Update that would alter Future Land Use Map designations and Zoning districts, as well as provide refreshed policies, strategies, and a form based code. A Planned Action designation is under consideration pursuant to RCW 43.21C.440, which would facilitate future development consistent with a Planned Action Ordinance when it meets the City's Town Center Plan provisions and mitigation measures.

PROPONENT

City of Sumner

LOCATION OF PROPOSAL

The Town Center Subarea Planning Area is bounded by Zehnder Street on the north, Wood Avenue on the east, Thompson Street on the south, and the White River/Valley Avenue E/Union Pacific Railroad on the west.

LEAD AGENCY

City of Sumner

EIS REQUIRED

The lead agency has determined this proposal is likely to have a significant adverse impact on the environment. An environmental impact statement (EIS) is required under RCW <u>43.21C.030</u> (2)(c) and will be prepared. An environmental checklist or other materials indicating likely environmental impacts can be reviewed at our offices and the project website: http://sumnerwa.gov/about/future-plans/town-center-plan/.

The Town Center Planned Action Supplemental EIS will supplement the Sumner Comprehensive Plan Update Final Environmental Impact Statement (Final EIS), June 30, 2005 and the Final Environmental Impact Statement prepared for the City of Sumner Comprehensive Plan Update and Amendments, November 2010. The SEIS will also consider other recent SEPA documents for Comprehensive Plan amendments.

The lead agency has identified the following areas for discussion in the EIS: land use, aesthetics, fire protection, and transportation. Three alternatives will be reviewed: No Action and Alternatives 1 and 2 that review alternative land use designations, zoning, height, and growth.

SCOPING

Agencies, affected tribes, and members of the public are invited to comment on the scope of the EIS. You may comment on alternatives, mitigation measures, probable significant adverse impacts, and licenses or other approvals that may be required. The method and deadline for giving us your comments is:

Send written comments by 5 pm. June 11, 2018 to:

Eric Mendenhall, Senior Planner
City of Sumner
Community Development Department
1104 Maple Street, Suite 250
Sumner, WA 98390
Ph: 253.299.5526
ericm@sumnerwa.gov

RESPONSIBLE OFFICIAL

Ryan Windish, AICP
Community Development Director
City of Sumner
1104 Maple Street, Suite 250
Sumner, WA 98390
253.299.5524
ryanw@sumnerwa.gov

_	
Date	Signature

Date of Publication: May 21, 2018



Sumner Town Center Planned Action SEPA Checklist

WAC 197-11-960 Environmental checklist.

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter <u>43.21C</u> RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

For nonproject proposals complete this checklist and the supplemental sheet for nonproject actions (Part D). The lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal.



For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Sumner Town Center Subarea Plan Update and Planned Action

2. Name of applicant:

City of Sumner

3. Address and phone number of applicant and contact person:

Eric Mendenhall, Senior Planner
City of Sumner
Community Development Department
1104 Maple Street, Suite 250
Sumner, WA 98390
Ph: 253.299.5526
ericm@sumnerwa.gov

4. Date checklist prepared:

May 14, 2018, Updated September 10, 2018

5. Agency requesting checklist:

City of Sumner

6. Proposed timing or schedule (including phasing, if applicable):

Adoption fall 2018

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Future development could occur consistent with the implementation of the subarea plan.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Prior EISs have addressed the Town Center uniquely or cumulatively, including:

- City of Sumner Comprehensive Plan Update Final Environmental Impact Statement (Final EIS), June 30, 2005.
- Final EIS for City of Sumner Comprehensive Plan Update 2010, November 24, 2010.

- Fleishmann's Industrial Park, LLC Manufacturing/Industrial Center (MIC) Overlay Expansion Final Supplemental Environmental Impact Statement (Final SEIS) issued February 29, 2012.
- City of Sumner 2013 Comprehensive Plan Annual Amendments Sumner Meadows Docket Final SEIS, issued July 25, 2014.
- Sumner Comprehensive Plan Update, East Sumner Neighborhood Plan Update, Capital Facility and Transportation Plan Update, Development Regulations and Critical Areas Ordinance Update, and East Sumner Neighborhood Planned Action, Final SEIS, issued August 6, 2015.
- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Other legislative actions are not pending related to the Town Center. Private development including building and construction permits may occur consistent with current plans and regulations until the Town Center Subarea Plan and Planned Action is adopted, when development would be consistent with new plans and regulations.

10. List any government approvals or permits that will be needed for your proposal, if known.

Washington Department of Commerce and other state agency review under the Growth Management Act, Sumner Planning Commission recommendations, and City Council consideration and approval.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The proposal includes adoption of a Town Center Subarea Plan Update that would alter Future Land Use Map designations and Zoning districts, as well as provide refreshed policies, strategies, and a form based code. A Planned Action designation is under consideration pursuant to RCW 43.21C.440, which would facilitate future development consistent with a Planned Action Ordinance when it meets the City's Town Center Plan provisions and mitigation measures.

Exhibit 1 provides a comparison of current and proposed designations for Action Alternatives 1 and 2 that were developed with community input in fall 2017 and winter 2018. Alternative 1 is considered a Preferred Alternative based on the direction of recent community engagement workshops. Alternative 2 is provided as an option that provides a different range of dwelling types. The No Action Alternative – continuation of current plans and regulations - provides a future baseline for comparison of impacts.

Exhibit 1. Comparison of Zones, Acres, and Stories

Designation / District	Stories	Alternative 1: Preferred Revised*	Alternative 2*	Alternative 3: No Action
Existing Designations / Zones				
Central Business District (CBD)	3 (35')			18.82
Mixed Use Development (MUD)	4 (45')			16.90
General Commercial (GC)	4 (45')			46.16
Low Density Residential (LDR)	3 (35')	-		21.28
Medium Density Residential (MDR)	3 (35')	-		23.48
High Density Residential (HDR)	3 (30')	-		0.39
Alternative Zones – Primary Uses				
Single Family/Multi-Family	2-3	0.00	17.3	
Multi-Family	3	2.8		
Multi-Family	4-5	11.1	5.4	
Multi-Family/Commercial	3-4	32.9	38.8	
Multi-Family/Commercial	5-6	82.0	67.8 ***	
Parks/Green Space (Conceptual)	NA	14.0 **	13.6	
Total Acres		142.9	143.0	127.03

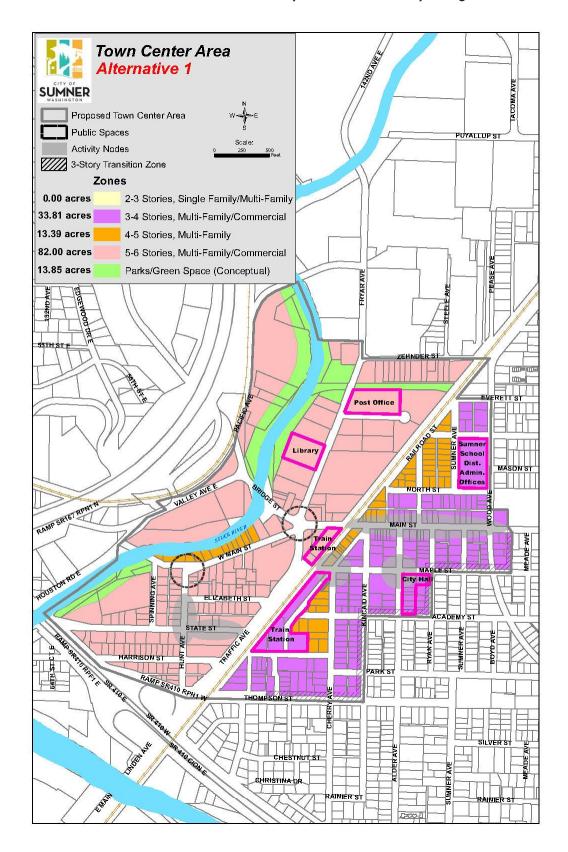
Notes: * Includes Extended Fryar Avenue boundary.

^{**} For Alternative 1 with the Reduced Fryar Avenue Boundary and Updated Open Space, the Parks/Green Space has 0.3 acres more open space and 0.3 acres less of Multi-Family/Commercial at 5-6 stories. The reduced boundary also includes 1.2 acres less of Multi-Family/Commercial at 5-6 stories which reduces the total area to 141.7 acres. The 1.2-acre property excluded would be zoned M-1.

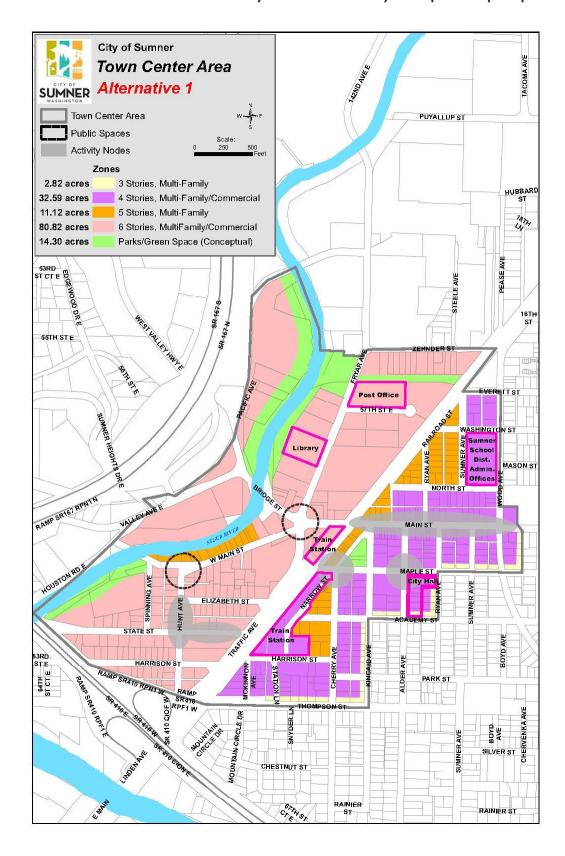
^{***} For Alternative 2 with the Reduced Fryar Avenue Boundary the Multi-Family/Commercial at 5-6 stories would have 1.2 acres less. The 1.2-acre property excluded would be zoned M-1. Source: BERK, 2018

Exhibit 2. Alternative 1: Preferred Conceptual Zoning Districts

A. Alternative 1 Revised – With Extended Fryar Avenue Boundary – August 2018



B. Alternative 1 - Revised Reduced Fryar Avenue Boundary and Updated Open Space - August 2018



C. Alternative 1 - Original May 2018

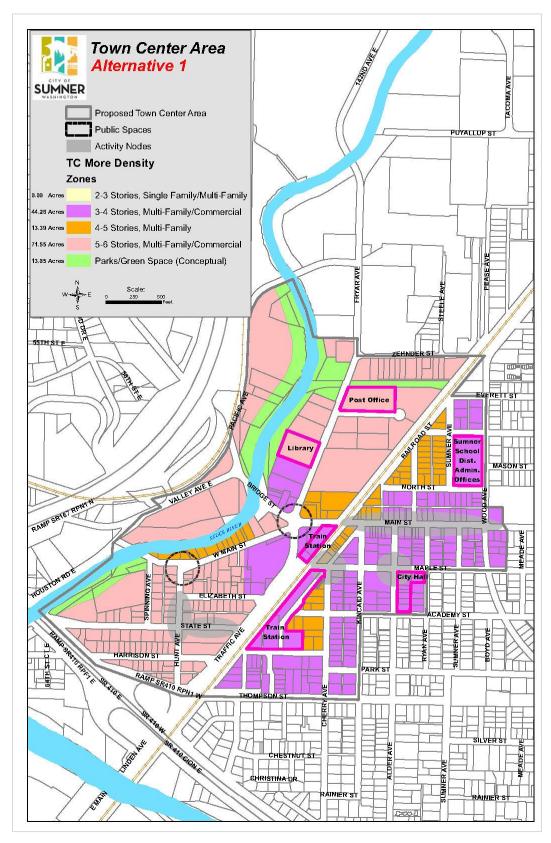
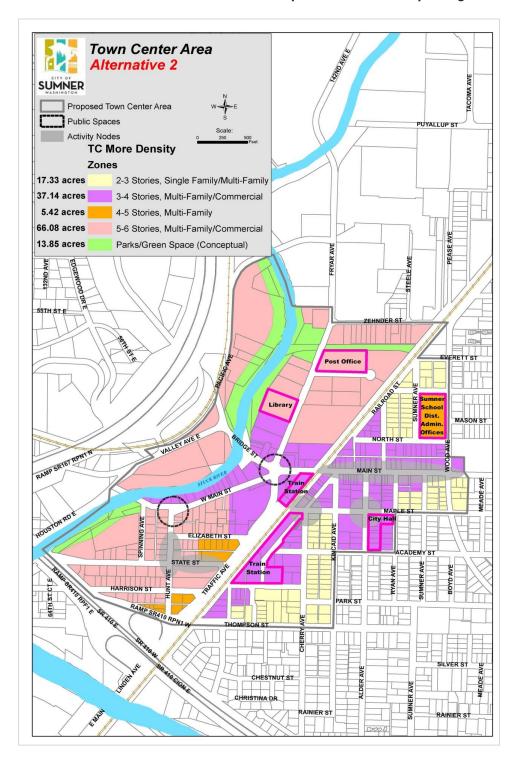
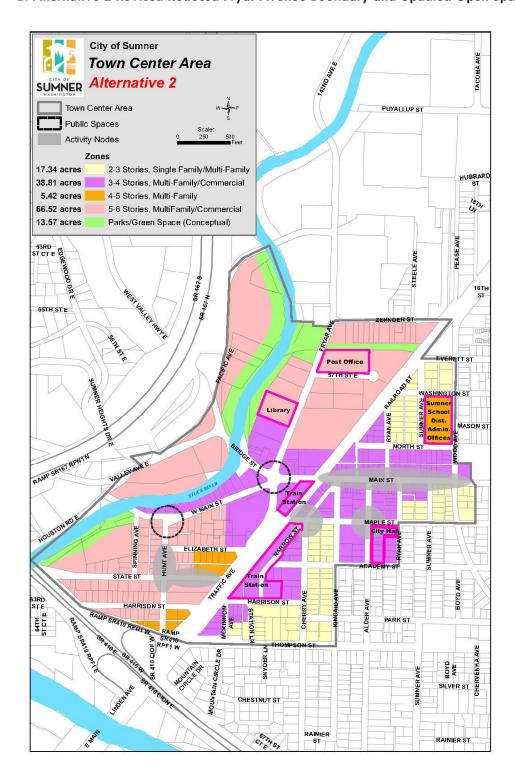


Exhibit 3. Alternative 2: Conceptual Zoning Districts

A. Alternative 2 Revised – With Extended Fryar Avenue Boundary – August 2018



B. Alternative 2 Revised Reduced Fryar Avenue Boundary and Updated Open Space - August 2018



C. Alternative 2 - Original May 2018

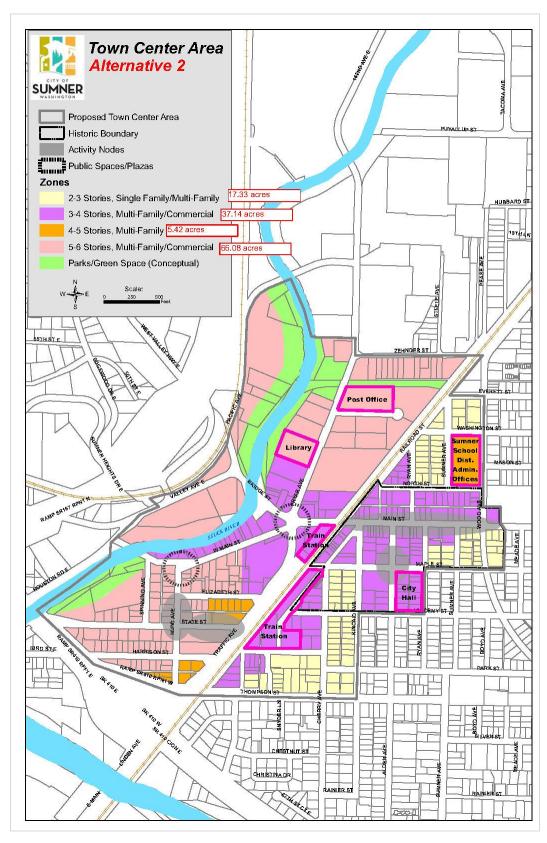
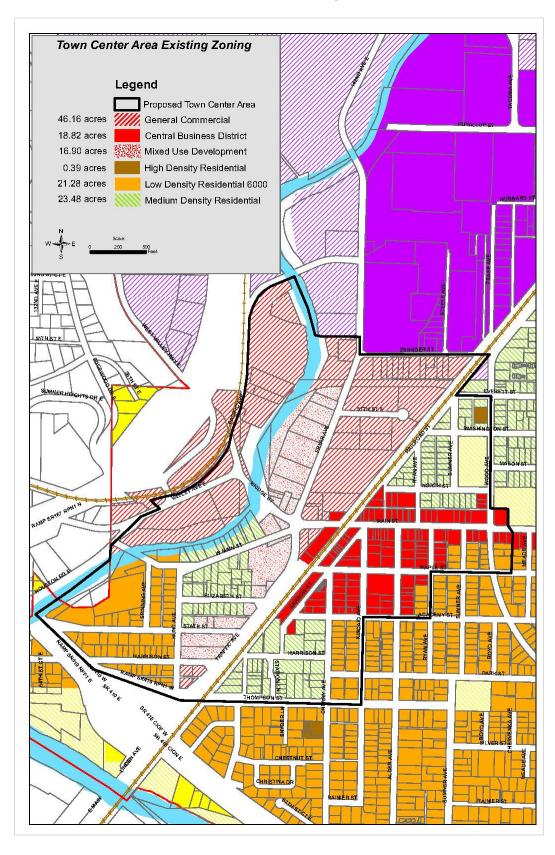


Exhibit 4. Alternative 3: No Action Alternative Zoning Districts

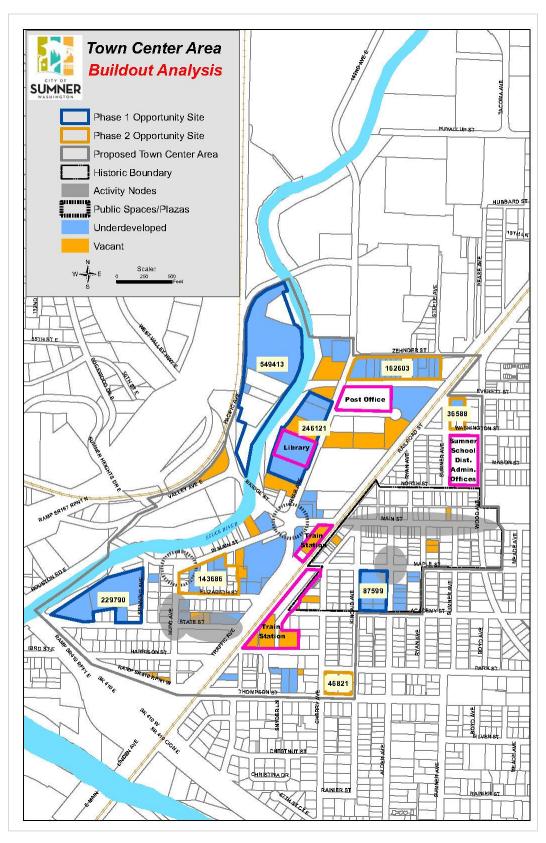


Development would be allowed throughout the subarea, but is more likely on Opportunity Sites, which include parcels that are vacant or underdeveloped or larger properties that could be redeveloped for in a different format with mixed uses. Some uses could reoccupy redeveloped sites (e.g. ground floor retail with housing or office above).

Exhibit 5. Opportunity Sites Acres

Property	Acres
Phase 1 Opportunity Sites	
Bendixen	5.6
Library	5.65
Spinning Ave	5.28
Red Apple	2
Subtotal	18.53
Phase II Opportunity Sites	
Zehnder	3.73
Elizabeth	3.3
Washington St	0.84
Cherry	2.26
Kincaid	1.07
Subtotal	11.2
Grand Total	29.73

Exhibit 6. Opportunity Sites Maps



The focus of the Town Center Subarea Plan is adding housing opportunities in proximity to the Sounder Station. The potential capacity for housing would increase in the Town Center. The City's Comprehensive Plan 2015 provides capacity to meet 2030 growth targets and a 2035 extended target.

To be consistent with the overall Comprehensive Plan growth targets, and yet to recognize the attractiveness of the Town Center in proximity to the Sounder Station and with additional park and trail and other amenities, projected housing units are reallocated in part from other areas in the Sumner city limits and Urban Growth Area considering the Preferred Alternative and Alternative 3 growth assumptions in the Sumner Comprehensive Plan Update Final SEIS issued August 6, 2015. Over 50% of the adjusted housing capacity on these sites would be assumed to be achieved by 2035.

Exhibit 7. Growth Capacity and Assumptions – Town Center Subarea Plan Update and Planned Action

Row	Phase I Opportunity Sites	Phase II Opportunity Sites	Total
Acres	18.53	11.2	29.73
Alternative Town Center Dwelling Unit Capacity	-		
Alternative 1 Net Acres and Capacity: Density Option A	1,931	954	2,886
Alternative 1 Net Acres and Capacity: Density Option B	1,695	832	2,527
Alternative 1 adjusted Public/Market Discount Factor	1,545	763	2,308
Alternative 1 Density Option B	1,356	666	2,022
Alternative 2 Net Acres and Capacity	1,886	829	2,715
Alternative 2 adjusted Public/Market Discount Factor	1,509	663	2,172
No Action per Comprehensive Plan Update 2015	Per Comp Plan capacity model	Per Comp Plan capacity model	339
Proposed SEIS Dwelling Assumptions			
Action Alternatives with Dwelling Reallocations	Proportional to capacity	Proportional to capacity	1,194
Percent of Alternative 1 Discounted Capacity	-		52%-59%
Percent of Alternative 2 Discounted Capacity	-	•	55%
No Action Alternative: Comprehensive Plan Update 2015	Per Comp Plan capacity model	Per Comp Plan capacity model	339
Proposed Job Assumptions	-		
Action Alternatives with Job Reallocations	Per Comp Plan capacity model	Per Comp Plan capacity model	460
No Action Alternative Jobs: Comprehensive Plan Update 2015	Per Comp Plan capacity model	Per Comp Plan capacity model	408

Source: City of Sumner, BERK Consulting 2018

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The study area is the Sumner Town Center area, which is reduced from the 2005 plan to exclude Manufacturing Industrial Center and some of the blocks of Low Density Residential (LDR) on the southeast. See Exhibit 4.

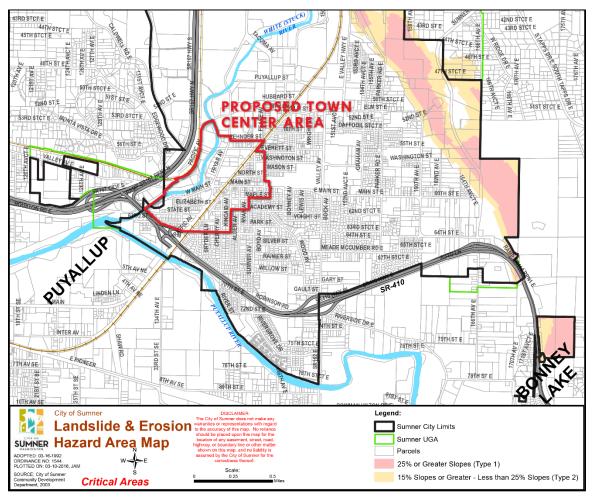
B. Environmental Elements

1. EARTH

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.....
- b. What is the steepest slope on the site (approximate percent slope)?

The study area is generally flat with slopes less than 15 percent throughout (see Exhibit 8).

Exhibit 8. Landslide and Erosion Hazard Area Map

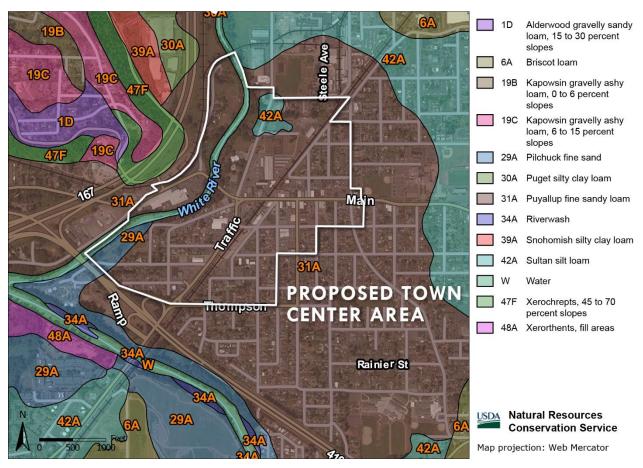


Source: (City of Sumner 2015)

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The City of Sumner is within a broad and flat valley created from glacial events. A widespread mudflow, named the Osceola Mudflow, occurred approximately 5,600 years ago and deposited mud and alluvium from Mt. Rainier over existing glacial drift on the lowland plains. It contains a high amount of clay, silt, and sand, with a smaller proportion of gravel. This material can be up to 75 feet thick in the White River valley. The Pierce County Area Soil Survey shows most of the study area is considered "Puyallup fine sandy loam" (see Exhibit 9).

Exhibit 9. Soil Survey Map

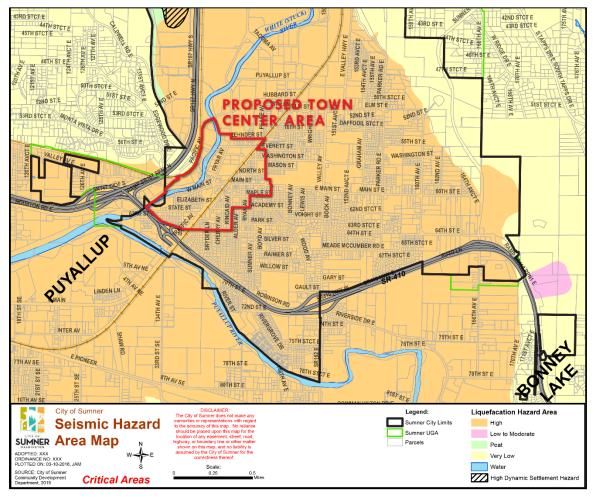


Source: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: https://websoilsurvey.sc.egov.usda.gov/. Accessed May 2018.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

The study area has no steep slopes, erosion, or landslide hazard areas. The entire study area, however, is within a high potential dynamic settlement and liquefaction hazard areas and is therefore in a susceptible seismic hazard area (see Exhibit 10); soils are at risk of liquefaction during a seismic event. The Town Center study area is also entirely within a volcanic hazard area (see Exhibit 11) – the river valleys are in the potential path of debris flows from Mt. Rainier if an eruption occurs. (City of Sumner 2015, 3-1).

Exhibit 10. Seismic Hazard Area Map



45TH STCT E **PUYALLUP ST** PROPOSED STOWN 51ST STCT E 53RD STCT E MONTA VISTA OR E 53RD STCT E HINGTON ST HINGTON ST MASON ST E MAIN ST MAIN ST F 60TH ST E ELIZABETH 64TH ST E 65TH STCT E MEADE MCCUMBER RD E 67TH STCT E WILLOW ST INTER AV 75TH ST E 76TH ST E E PIONEER 78TH ST E 8TH AV SE 80TH ST E City of Sumner **Volcanic Hazard** Sumner City Limits SUMNER Area Map Sumner UGA Parcels

Exhibit 11. Volcanic Hazard Area Map

Source: (City of Sumner 2015)

Critical Areas

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The proposal involves the phased redevelopment of existing developed sites. Development that occurs within the study area will obtain a building permit. With each building permit, the permit plans will identify site grades and type or quantity of fill.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Because the study area is generally flat, there is little potential for erosion. All sites will be stabilized during construction and monitoring points will be established consistent with the City of Sumner's Stormwater Management Regulations (Sumner Municipal Code (SMC)) SMC Chapter 13.48, addressing construction runoff as well as post-development runoff.

Volcanic Hazard Area

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The study area is mostly developed and has impervious surfaces consisting of existing buildings, surface parking, streets, and sidewalks. The City's zoning code currently allows 100% lot coverage in the Central Business District Zone, 80% lot coverage in the Mixed Use Development Zone, 75% lot coverage in the General Commercial Zone, and between 35-45% lot coverage in residential zones depending on intensity and stories (see Exhibit 12). More impervious area could occur in the form of parking. Impervious area is limited by required landscaped yards.

Exhibit 12. Comparison of Lot Coverage by Existing Zones

Designation / District	Maximum Allowed Lot Coverage
Central Business District (CBD)	100%
Mixed Use Development (MUD)	80%
General Commercial (GC)	75%
Low Density Residential (LDR)	35-45%
Medium Density Residential (MDR)	35%
High Density Residential (HDR)	45%

Source: SMC Chapter 18

It is anticipated that future development would have similar intense amounts of impervious surfaces, though subject to the City's stormwater and drainage standards. The City's stormwater and drainage standards and 2011 Stormwater Comprehensive Plan address water quality treatment and promote low impact development measures (SMC Chapter 13.48).

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Applicable Regulations and Commitments

- The City has adopted the International Building Code (SMC 15.08.010) and a City Erosion Control Ordinance (SMC 16.05) to reduce impacts caused by earthquakes, soil instability and erosion.
- Critical areas ordinances provide restrictions and regulations on certain types of development, and provides notices and reporting requirements for development within landslide and erosion hazard areas, seismic hazard areas, and volcanic hazard areas (SMC Chapters 16.50, 16.52, and 16.54).
- The City has adopted an emergency management ordinance (SMC 2.76) for the reduction of risk from situations like earthquakes and volcanic eruptions or mudflows as part of the Pierce County Emergency Management System.

Other Potential Mitigation Measures

The City could pursue implementation of mitigation measures outlined in the Pierce County Natural Hazard Mitigation Plan. Conditions of approval for future development may include pre-loading, foundation and footing system design considerations, parking area asphalt design, and compliance with the International Building Code standards, among other requirements and considerations.

Summary

This topic was evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015. Since the Town Center study area is within seismic and volcanic hazard areas, any development within these areas poses an increased risk to structures and the people living or working in them. Implementing current building codes and critical areas regulations will reduce potential risks or allow for notification of potential hazard areas. This topic will not be further evaluated in the Supplemental EIS.

2. AIR

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

The Sumner Comprehensive Plan Update Final SEIS issued August 2015 (2015 SEIS) studied air quality for the City of Sumner. Development under the Sumner Town Center study area alternatives falls within the bookends of the 2015 SEIS Assertive Collaborative Alternative and the No Action Alternative (see answer to Section A, Question 11).

The 2015 SEIS analysis found that future development in the study area – including additional housing and mixed-use development that would lead to population and employment growth – could increase localized air pollutant emissions from construction activities and commercial activity, and increase regional vehicle travel and tailpipe emissions. Tailpipe emissions, however, would be very small relative to the overall regional tailpipe emissions within the Puget Sound air basin under all 2015 SEIS alternatives. In addition, ongoing EPA motor vehicle regulations have caused steady decreases in tailpipe emissions from individual vehicles, and it is possible that those continuing decreases from individual vehicles could more than offset the increase in vehicle traffic locally. (City of Sumner 2015, 3-33-3-36)

Forecast annual GHG emissions were presumed not significant in the 2015 SEIS if the alternative caused a "business as usual" increase of less than 25,000 metric tons per year of CO₂e compared to the No Action Alternative (City of Sumner 2015, 3-36); neither the Minimal Zoning Action or Assertive Collaborative Alternative studied in the 2015 SEIS exceeded this threshold (City of Sumner 2015, 3-40).

Future transit-oriented development (TOD) around the Sounder Station is also expected to reduce GHG emissions compared to traditional development by reducing vehicle trips and fuel usage.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Light and heavy industrial uses are allowed north of the Town Center Study Area. However, these zones have performance standards to limit odor ("No use shall be permitted which creates annoying odor in such quantities as to be readily detectable beyond the boundaries of the site." SMC 18.18.060(i)).. Emissions are regulated by the Puget Sound Clean Air Agency (PSCAA).

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Incorporated Plan Features

 Proposed zoning changes under alternatives 1 and 2 provide increased opportunities for housing near the Sounder train station for households desiring the close transit availability, and services and businesses that cater to residents and train commuters.

Applicable Regulations

- National Ambient Air Quality Standards: As described in the 2015 SEIS, the EPA establishes NAAQS and specifies future dates for states to develop and implement plans to achieve these standards.
- State Ambient Air Quality Standards: the Washington State Department of Ecology establishes state ambient air quality standards for the same six pollutants that are at least as stringent as the national standards; in the case of SO₂, state standards are more stringent. Exhibit 3-8 in the 2015 SEIS lists the state ambient air quality standards for six criteria pollutants.
- Indoor Burning Smoke Reduction Zone: Puget Sound Clean Air Agency (PSCAA) and Ecology's regulatory framework for wood smoke includes:
 - More stringent emission standards for new wood burning devices than the federal EPA standards
 - Opacity standards for wood-burning appliances
 - Prohibitions on burning of certain materials or non-certified wood stoves
 - Burn ban curtailment program
 - Special attainment area provisions
- Outdoor Burning: Burning yard waste and land-clearing debris is not allowed at any time in in the City or in Pierce County. PSCAA enforces state outdoor burning regulations required by RCW 70.94.743.
- Puget Sound Clean Air Agency Regulations: All construction sites in the Puget Sound region are required to implement rigorous emission controls to minimize fugitive dust and odors during construction, as required by PSCAA Regulation 1, Section 9.15: Fugitive Dust Control Measures. All industrial and commercial air pollutant sources in the Puget Sound region are required to register with PSCAA. Facilities with substantial emissions are required to obtain a Notice of Construction air quality permit before construction is allowed to begin.
- State of Washington GHG Laws: As described in the 2015 SEIS, Washington enacted a new law establishing GHG reduction limits.
- City of Sumner Commute Trip Reduction Code (SMC Chapter 16.06): This ordinance requires affected employers (e.g., employers with 100 employees or more at a single worksite) to implement a Commute Trip Reduction program for its employees.

Other Potential Mitigation Measures

Construction Emission Control

- The City should require all construction contractors to implement air quality control plans for construction activities in the study area. The air quality control plans should include Best Management Practices to control fugitive dust and odors emitted by diesel construction equipment.
- During construction, dust from excavation and grading could cause temporary, localized increases in the ambient concentrations of fugitive dust and suspended particulate matter. The following Best Management Practices would be used to control fugitive dust:
 - Use water sprays or other non-toxic dust control methods on unpaved roadways.
 - Minimize vehicle speed while traveling on unpaved surfaces.
 - Prevent track-out of mud onto public streets.
 - Cover soil piles when practical.
 - Minimize work during periods of high winds when practical.
- Mobile construction equipment and portable stationary engines would emit air pollutants including NOx, CO, and diesel particulate matter. These emissions would be temporary and localized. It is highly unlikely that the temporary emissions would cause ambient pollutant concentrations at adjoining parcels to approach the federal limits. Typical mitigation measures to minimize air quality and odor issues caused by tailpipe emissions include the following:
 - Maintain the engines of construction equipment according to manufacturers' specifications.
 - Minimize idling of equipment while the equipment is not in use.
- Burning of slash or demolition debris would not be permitted without express approval from the PSCAA. No slash burning is anticipated for any construction projects in the study area.

Greenhouse Gas Reduction Measures

The City could expand the zones to which incentives and standards are applied to reduce GHG emissions beyond the M-1 zone; the commercial and heavy industrial zones could be included. For example, the City could allow greater building heights or relaxed parking standards for new non-residential construction if the owner or operator adopts one or more of the following mitigation measures:

- Provide end-of-trip bicycle facilities to employees. It is estimated that providing an incentive for this measure would provide a study area-wide reduction on the increase in employee vehicle trips for the action alternatives compared to existing conditions.
- Construct LEED-certified buildings. It is estimated that providing an incentive for this measure would provide a reduction in study area-wide non-residential building energy use (natural gas and electricity) for new construction for the action alternatives compared to existing conditions.
- Participate in the PSE Green Power Program. It is estimated that providing an incentive for this measure would provide a reduction in study area-wide non-residential building electricity use for new construction for the action alternatives compared to existing conditions.

Additionally, the City could require the following mitigation measure for all new non-residential construction in all commercial and industrial zones and not just the M-1 zone:

 Use energy-efficient outdoor lighting. It is estimated that requiring more energy-efficient outdoor lighting would provide a reduction in electricity use for new non-residential construction within the study area for the action alternatives compared to existing conditions.

Washington State has established GHG reduction goals with targets for 2020 (1990 levels), 2035 (20% reduction below 1990 levels) and 2050 (50% reduction below 1990 levels) limits and adopted requirements for capital investments, an energy strategy, and VMT reduction targets. However, neither Ecology nor the EPA has adopted numerical GHG emissions standards, GHG reduction requirements, or numerical GHG significance thresholds that direct local governmental land use development actions. It is the City's responsibility to implement its own GHG reduction requirements for new developments.

As noted above, mitigation measures proposed for the 2015 SEIS action alternatives and development goals and policies within the City's Comprehensive Plan will help to mitigate GHG impacts within the city. However, the City could also require or encourage future developers to implement additional mitigation, as presented in Exhibit 3-14 of the 2015 SEIS (pages 3-43 to 3-46). The measures presented in 2015 SEIS Exhibit 3-14 could reduce GHG emissions caused by transportation, facilities, building construction, space heating, and electricity usage. The table lists potential GHG reduction measures and indicates where the emission reductions might occur.

In addition to the representative GHG reduction mitigation measures listed in 2015 SEIS Exhibit 3-14, additional GHG reduction measures have been published by the California Air Pollution Control Officers Association (CAPCOA) for purposes of assisting municipalities to develop land-use related GHG reduction measures. Trip reduction measures and GHG emission reduction measures suitable for California will likely also be suitable in Washington. For example, Exhibit 3-15 of the 2015 SEIS lists additional emission reduction measures that could be adopted or incentivized (pages 3-46 and 3-47)). The table lists CAPCOA's estimated range of effectiveness for reducing VMT or GHG emissions for each measure.

Summary

This topic was evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015. No adverse impacts on regional or local air quality are anticipated for any of the three action alternatives. Temporary, localized dust and odor impacts could occur during construction activities. The regulations, incorporated plan features, and other mitigation measures described above are adequate to mitigate any adverse impacts anticipated to occur as a result of study area growth increases. This topic will not be further evaluated in the Supplemental EIS.

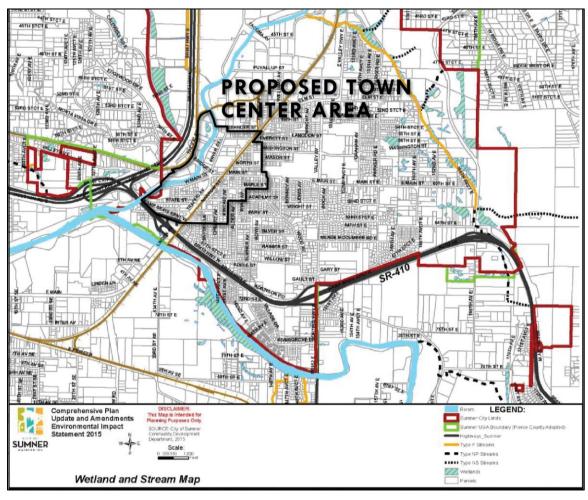
3. WATER

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The lower portion of the White River runs north to south in the middle of the city and through the western portion of the Town Center study area (see Exhibit 13). The White River originates from the Emmons and Fryingpan glaciers on the north face of Mount Rainier and flows 68 miles from the mountain source to its confluence with the Puyallup River (Shared Strategy Development Committee 2007) (Kerwin 1999). It has a drainage area of approximately 494 square miles. The lower White River is regulated by the Mud Mountain Dam at river mile 28 which diverts upstream flows to Lake Tapps. These flows rejoin the White River through the Lake Tapps diversion or the Dieringer Flume, located at approximately river mile (RM 3.6). The river is also subject to flood control modifications such as diking, levees, and gravel removal to deepen the channel. Levees reduce floodplain connectivity and increase peak flows within the main channel, therefore also causing increased flood water elevations further downstream (unless the levees are breached). Due to the extensive flood control efforts, habitat elements such as pool frequency, refugia, and off channel habitat are not properly functioning within the lower White River (City of Sumner 2015, 3-19).

Exhibit 13. Wetland and Stream Map



Source: (City of Sumner 2015)

The White River has typical sediment loading issues of a glacial fed river system. The upper portion cuts through glacial and mudflow deposits and therefore transports a lot of sediments. It has been estimated to transport about 440,000 to 1,400,000 tons of sediment annually. The sediments are deposited in the lower reaches (including the vicinity of Sumner) which cause aggradation and flooding problems in the river valley (Kerwin 1999).

There are three segments of the White River within City limits that are currently listed on the Washington State Department of Ecology's 303(d) list of impaired waters of the state (Ecology 2016). The 303(d) list identifies all assessed waters within the state that are impaired by pollutants and do not meet state surface water quality standards and are not expected to improve within the next two years. The assessed waters are placed in categories that describe the status of water quality. Category 5 waters are those polluted waters that require a total maximum daily load (TMDL) or other water quality improvement (WQI) plan. These make up the 303(d) list. The 0.2 mile segment of the White River that runs through the Town Center study area is listed as Category 5 for temperature (listing ID 10848) near the confluence with the Puyallup River.

Upstream from the study area but with the City of Sumner, the reach of the White River from the northern City limits to approximately 1.5 miles downstream is listed as a Category 5 water for pH (listing ID

7526), temperature (listing ID 17515), and dissolved oxygen (listing ID 17511). It is also listed as a Category 4c water for instream flow (listing ID 6192). Category 4c waters are impaired by a non-pollutant or waters that are impaired by causes that cannot be addressed through a TMDL. A second segment from the vicinity of 24th Street East approximately 1.3 miles downstream to the intersection of Fryar Ave and Puyallup St is listed as Category 5 for temperature (listing ID 17513) and Category 4A for bacteria (listing ID 46237). Category 4A Waters are impaired and already have an EPA-approved TMDL plan in place and implemented. No other waterbodies are listed on the 303(d) list within the Town Center study area.

The Puyallup River forms a southwest border of city limits south of the Town Center study area. Within this reach, the river has been substantially altered through channelization and loss of riparian and off-channel habitats. The river originates from the Klapatche area on the southwest slopes of Mount Rainier and drains to Commencement Bay. Summer low flows in the Puyallup River have declined continuously since at least 1980, despite the closure on new surface water withdrawals and the establishment of minimum flow requirements (Kerwin 1999). The lower portion of the Puyallup River only provides a migration corridor for salmonids as it has been dramatically altered and restricted by human developments. No portions of the Puyallup River within the City of Sumner are listed on Ecology's 303(d) list (Ecology 2016).

In addition, there are mapped wetlands in the northern portion of the Town Center study area to the east and west of the White River (see Exhibit 13).

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Future development within the Town Center study area may occur in the vicinity of the White River and near wetlands. Development that occurs within the vicinity of any regulated water body is subject to City critical area and shoreline regulations. Wetlands Protection Ordinance (SMC Chapter 16.46) and Shoreline Master Program (SMC Chapter 16.08 - 16.36) apply to new development. City authorization requires determination of potential impacts on critical areas and appropriate mitigation.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

At this time, fill or dredge is not proposed for any surface water or wetlands in the Town Center study area boundaries. Any future fill activity would need to meet the regulations and standards of the City's critical areas regulations (SMC Chapter 16).

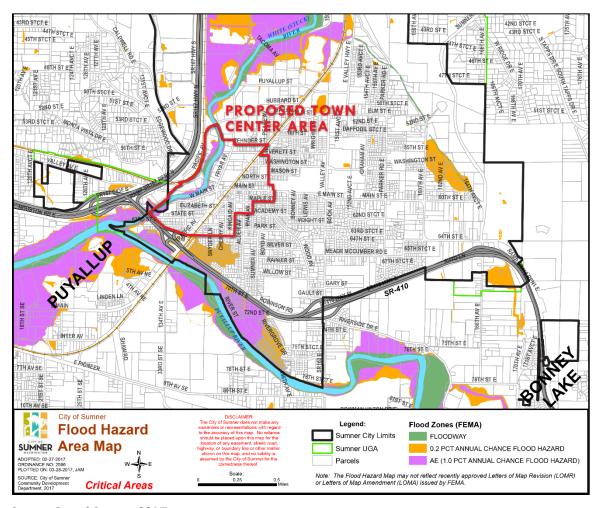
4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No surface water withdrawals or diversion are anticipated to occur as a result of the alternatives under review. If such actions were proposed, development applications will be evaluated for conformance to applicable federal, state, and local regulations at the time of submittal.

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

Portions of the Town Center study area adjacent to the White River are within a 100-year flood plain, as shown in Exhibit 14, and would be at risk of flooding during a major flood event.

Exhibit 14. Flood Hazard Area Map



Source: City of Sumner, 2017

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Development would need to comply with water quality treatment measures in the SMC. If discharge is proposed, development applications will be evaluated for conformance to applicable local, state, and federal regulations at the time of submittal.

b. Ground:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

The Town Center study area is located within highly susceptible wellhead protection areas (5- to 10-year travel time) of Sumner Springs, County, and Central wells (see Exhibit 15). Any new development that occurs within the Study Area will be connected to municipal water sources.

STCT E MONTA VISTA DRE WASHINGTON S 65TH STCT E EADE MCCUMBER RD E WILLOW ST 76TH ST E Wellhead Aquifer Recharge Cemetery Well Sumner Springs Sumner City Limits County Springs Weber Springs Sumner UGA SUMNER Area Map Elhi Springs Dieringer Well Critical Areas Drastic Zones Rated 180 or Greater

Exhibit 15. Aquifer Recharge Area Map

Source: City of Sumner, 2016

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Any new development that occurs within the study area will be connected to the municipal sewer system.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The City's zoning standards for site coverage and impervious surface coverage (SMC Chapter 18) address development standards within each City zoning designation and include regulations governing maximum lot coverage (the amount of land area covered by buildings on a given site). Maximum lot coverage regulations range from 75-100% in commercial and mixed use zones and from 35-45% in residential zones within the study area (see Exhibit 12 in Earth).

Because land east of the railroad tracks is primarily developed, impacts would be almost entirely associated with redevelopment. Redevelopment of these areas would result in little additional impervious surfaces or stormwater volume. Existing surface parking lots would be replaced by buildings with greater area, possibly served by under-building parking, depending on local soil conditions. Some excavation for construction would occur, but would not result in a significant loss of vegetation or soil productivity.

Growth and development west of the railroad tracks could increase the amount of impervious surfaces and the level of stormwater and precipitation runoff under all of the Town Center alternatives. Many existing underdeveloped or vacant sites could develop under the No Action Alternative at 75-100% maximum lot coverage depending on the underlying zone and any shoreline or critical area overlays. Increased growth capacity under the action alternatives, however, will not necessarily translate into greater amounts of impervious surfaces since additional growth will likely be accommodate through greater building heights. The most increases in impervious surfaces will be especially pronounced in areas where the current land use is predominantly agricultural, vacant or natural (vegetated). (City of Sumner 2015, 3-138)

2) Could waste materials enter ground or surface waters? If so, generally describe.

The study area is entirely within the critical aquifer recharge area and is therefore susceptible to groundwater contamination (see Exhibit 15). Potential sources of contamination that can impact groundwater sources are leaks or releases of petroleum products, pesticides, fertilizers, herbicides, and septic systems. Groundwater quality is tested on an annual basis for organics and inorganics. There was no detection of herbicides or pesticides in a 2013 test on the Crystal/County Springs well (City of Sumner 2015, 3-20). Applicable future development would need to meet the regulations and standards of the City's Aquifer Recharge Area Ordinance (SMC Chapter 16.48).

In addition, because development would connect to the City's water and sewer system and comply with stormwater standards with redevelopment, waste material entry into ground or surface water is not anticipated. As regulations may change in future years, any development would need to meet current city standards for water, sewer, and stormwater standards at the time of construction.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Any future development or redevelopment would need to comply with applicable local, state, and federal regulations at the time of submittal, including stormwater standards in SMC Chapter 13.48.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

Applicable Regulations

The City's critical area regulations provide strict provisions for the protection of wetlands, aquifer recharge areas, and buffer zones around local rivers and streams. SMC Chapter 16.05 provides regulations relating to the control of erosion and sedimentation to reduce sediment pollution from construction activity. SMC Chapter 16.48 regulates development and land use in aquifer recharge areas while SMC Chapter 16.46 provides the regulations for development in or near wetlands and requirements for mitigation if filling of wetlands should occur.

Water quality protection is also enacted by the stormwater management regulations in SMC Chapter 13.48. These regulations "establish minimum requirements and procedures to control the adverse impacts associated with increased stormwater runoff and water quality degradation for all sites located within the city..."

These regulations also adopt use of the:

- 2012 Ecology Stormwater Management Manual for Western Washington, as amended in December
 2014, together with any amendments or corrections.
- NPDES Western Washington Phase II Municipal Stormwater Permit Minimum Technical Requirements for New Development and Redevelopment, of the 2013-2018 Western Washington Phase II municipal stormwater permit.
- 2012 Puget Sound Partnership Low Impact Development Technical Guidance Manual for Puget Sound together with any amendments or corrections.

The City of Sumner updated and adopted a revised Shoreline Master Program (SMP) in December 2014. It was approved by Ecology on December 12, 2014 and was effective as of December 26, 2014. The revised SMP regulates approximately six miles of the White River and 1.5 miles of the Puyallup River. Additional measures that protect or restore surface water bodies are included in this document.

Other federal and state regulations in effect to protect water quality are the Safe Drinking Water Act and the EPA's NPDES Phase II regulations for stormwater management. The Safe Drinking Water Act requires public water system wells to be protected from potential sources of contamination. The EPA authorized the Washington State Department of Health to implement this rule by establishing a Wellhead Protection Program for all current wellhead sources (such as the South Well, Sumner, Weber/Crystal, and County springs). The wellhead protection zones are the 10-year time travel boundary that represents the maximum distance around a pumping well from which a hypothetical contaminant in the groundwater could travel to the well in a 10-year period. The City currently publishes an annual water quality report that summarizes test results of the wells and groundwater sources.

In addition, SMC Chapter 18.41 (Required Landscaping) specifies landscaping requirements for non-single-family land use permits. Standards for districts in the Town Center study area include low impact development landscaping options that have the potential to reduce impacts on the existing stormwater drainage infrastructure and strive to protect or restore the natural hydrology of a site.

Other Potential Mitigation Measures

The City could fund more public education on water quality for residents and businesses.

Summary

This topic was evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015. Direct impacts of the Town Center alternatives would be minimized to less than significant through the implementation of federal, state, and City regulations, including critical area and stormwater regulations. This topic will not be further evaluated in the Supplemental EIS.

4. PLANTS

- a. Check the types of vegetation found on the site:
- X Deciduous tree: Alder, maple, aspen, other
- X Evergreen tree: Fir, cedar, pine, other
- X Shrubs
- X Grass
- Pasture
- Crop or grain
- Orchards, vineyards or other permanent crops.
- X Wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, other
- Water plants: Water lily, eelgrass, milfoil, other
- X Other types of vegetation

The White River within the study area is generally affected by channelization, levees, and the close proximity of residential, industrial, and commercial land uses. Common vegetation in riparian areas includes invasive species such as reed canary grass and Himalayan blackberry. Other common vegetation is deciduous trees such as red alder, black cottonwood, and willows. (City of Sumner 2015, 3-14) (City of Sumner 2014, 2-9)

Existing vegetation in developed portions of the study area generally consists of ornamental landscaped areas associated with businesses, residences, and parks.

b. What kind and amount of vegetation will be removed or altered?

Vegetation may be removed or altered in association with development occurring within the study area or as part of critical area restoration projects. Development of any form would have direct impacts on vegetation through the physical removal of vegetation whether it is native vegetation or landscaped. Disturbances could also result in a higher recruitment of non-native plant species that tend to establish quickly and colonize in areas where soils have been disturbed. Impacts to wetland vegetation, if it were to occur, would reduce the amount of water filtration from stormwater runoff that they collect. (City of Sumner 2015, 3-16)

The river banks of the White River within the study area are armored with riprap and concrete. These materials could be replaced with bank stabilization materials that would enhance fish and wildlife

habitat, such as large woody debris and native plantings. In addition, it may be feasible to setback the levee along the west bank of the White River, adjacent to Pacific Avenue. This would increase the active channel width and subsequently enhance habitat-forming processes. The area has significant vegetation enhancement opportunities, such as removing non-native plant species (e.g. Himalayan blackberry) and installing native plantings. Plantings along the river bank would provide additional "over water" vegetation, provide increased protection from predation for fish species, increase habitat for birds, and input organic material to the river. (City of Sumner 2014, 2-9)

c. List threatened and endangered species known to be on or near the site.

No threatened or endangered plant species are known to occur in the study area.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Applicable Regulations

All alternatives would be subject to existing policies and regulations enacted to avoid, reduce, or minimize impacts on natural environment. These regulations include:

- City of Sumner Shoreline Master Program (SMC Chapter 16.08-16.36)
- SMC Chapter 18.41, Required Landscaping, specifies landscaping requirements for non-single-family land use permits. Standards for districts in the Town Center study area include drought tolerant plant materials the complement the natural character of the Pacific Northwest, plant species that enhance sensitive or critical areas, and landscaping options that strive to protect or restore the natural hydrology of a site through low impact development landscaping.
- FEMA's National Flood Insurance Program (NFIP) and compliance with the NMFS 2008 biological opinion on the effects of the NFIP on endangered species protected under the ESA. The biological opinion included reasonable and prudent alternatives (RPAs) that govern how the NFIP can be implemented along streams and rivers that support listed salmon populations. One of the RPAs regarded restriction of development within the 100-year floodplain. It specified that affected communities either prohibit all development in the 100-year floodplain or allow development to proceed only if ecological functions of the floodplain are preserved or compensated (i.e. mitigated). The City of Sumner currently reviews impacts on the ESA on a permit by permit basis through preparation of Habitat Management plan and annual agency consultation.
- Critical Area Regulations that address wetlands, streams, and wildlife habitat areas (SMC Chapters 16.46 and 16.56)
- City of Sumner stormwater regulations and implementation of the National Pollutant Discharge Elimination System (NPDES) requirements

Other Potential Mitigation Measures

The City could work with the Pierce County Biodiversity Alliance to implement conservation activities along the White River per the May 2016 Lower White River Biodiversity Management Area (BMA) Stewardship Plan.

Summary

This topic was evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015. All future development would likely have some impact, direct or indirect, to local plants. However, zoning changes proposed under all alternatives are within areas that have been previously disturbed by urban development, agricultural activity, or are otherwise in areas of low quality habitat. With City floodplain habitat permit review, and critical area and shoreline regulations, no significant adverse impacts are anticipated. This topic will not be further evaluated in the Supplemental EIS.

e. List all noxious weeds and invasive species known to be on or near the site.

Poision Hemlock and Tansy Ragwort are known to occur near the Town Center study area in the SR 167 and SR 410 rights-of-way (see Exhibit 16). Common vegetation in riparian areas within the study area includes invasive species such as reed canary grass and Himalayan blackberry (City of Sumner 2015, 3-14). State noxious weed laws requires that public and private landowners control and prevent the spread of these designated noxious weeds (RCW 17.10 and WAC Chapter 16-750).

2017 Infestations Area 4 Tax Parcel Infestations Poison Hemlock Poison Hemlock, Tansy Ragwort Spotted Knapweed Spotted Knapweed, Tansy Ragwort Tansy Ragwort GENERAL VICINITY OF Wild Chervil THE PROPOSED TOWN CENTER AREA Infestations on Public Rights-of-Way Giant Hogweed, Tansy Ragwort Poison Hemlock Poison Hemlock, Spotted Knapweed Poison Hemlock, Tansy Ragwort Tansy Ragwort Tansy Ragwort, Wild Chervil Wild Chervil Yellow Hawkweed

Exhibit 16. Pierce County Noxious Weed Infestations, Public Lands and ROWs, Area 4

Source: (Pierce County Noxious Weed Control Board 2017)

5. ANIMALS

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

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Birds: Hawk, heron, eagle, songbirds, other:

Mammals: Deer, bear, elk, beaver, other:

Fish: Bass, salmon, trout, herring, shellfish, other:
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Wildlife utilizing open space within the study area include terrestrial species commonly found in developed suburban environments such as raccoon, opossum, squirrels, skunk, other small rodents, crows, woodpeckers, red-tailed hawk, and songbirds. Species recorded within the White River include Coho salmon, Pink salmon, Chinook salmon, Bull trout, Steelhead trout, and Cutthroat trout. (City of Sumner 2015, 3-14)

b. List any threatened and endangered species known to be on or near the site.

The Washington Department of Fish and Wildlife (WDFW) maintains the Priority Habitat and Species database to inventory potentially significant and endangered species. No ESA-listed terrestrial species are known to occur in the City of Sumner. The US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) lists Bull trout, Chinook salmon, and Steelhead trout as threatened under the Endangered Species Act (ESA). (City of Sumner 2015, 3-14) (Washington Department of Fish and Wildlife 2018)

Wetlands are mapped in the norther portion of the study area to the east and west of the White River (see Exhibit 13). Stream and wetland features may support fish and wildlife.

c. Is the site part of a migration route? If so, explain.

See stream information regarding fish species. Wildlife depends on diverse plant communities for cover, denning, rearing, foraging, and shelter from adverse weather. The urban environment that makes up most of the study area includes considerable barriers to wildlife migration and limited areas of usable habitat. Riparian corridors, wetlands, parks, conservation areas, and other remaining open spaces do provide some wildlife habitat and connectivity.

d. Proposed measures to preserve or enhance wildlife, if any:

Development of vacant or underdeveloped properties in the study area could lead to habitat fragmentation and loss of habitat connectivity. This further reduces the biodiversity of the study area and city overall. Development and increases of impervious surface also reduce quality of aquatic habitat directly and indirectly. It could impact aquatic habitat directly through the conversion of habitat to less suitable habitat or reduction of habitat and by potentially introducing sources of pollution that may enter the water body. It impacts aquatic habitat indirectly by increasing peak flows, reducing low flows, and increasing water temperatures from runoff and reducing the amount of shade. Impacts to aquatic habitat would be minimal from any of the Town Center alternatives due to the regulations in place required prior to any individual development project occurs. This includes but is not limited to buffer requirements,

allowable in-water work windows, tree preservation/mitigation requirements, and water quality treatment requirements. (City of Sumner 2015, 3-16)

Applicable Regulations

- City of Sumner Shoreline Master Program (SMC Chapter 16.08-16.36)
- SMC Chapter 18.41, Required Landscaping, specifies landscaping requirements for non-single-family land use permits. Standards for districts in the Town Center study area include plant species that enhance sensitive or critical areas, and low impact development landscaping options that aid in meeting Endangered Species Act requirements and strive to protect or restore the natural hydrology of a site.
- FEMA's National Flood Insurance Program (NFIP) and compliance with the NMFS 2008 biological opinion on the effects of the NFIP on endangered species protected under the ESA. The biological opinion included reasonable and prudent alternatives (RPAs) that govern how the NFIP can be implemented along streams and rivers that support listed salmon populations. One of the RPAs regarded restriction of development within the 100-year floodplain. It specified that affected communities either prohibit all development in the 100-year floodplain or allow development to proceed only if ecological functions of the floodplain are preserved or compensated (i.e. mitigated). The City of Sumner currently reviews impacts on the ESA on a permit by permit basis through preparation of Habitat Management plan and annual agency consultation.
- Critical Area Regulations that address wetlands, streams, and wildlife habitat areas (SMC Chapters 16.46 and 16.56)
- City of Sumner stormwater regulations and implementation of the National Pollutant Discharge Elimination System (NPDES) requirements

Other Potential Mitigation Measures

The City could work with the Pierce County Biodiversity Alliance to implement conservation activities along the White River per the May 2016 Lower White River Biodiversity Management Area (BMA) Stewardship Plan.

Summary

This topic was evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015. All future development would likely have some impact, direct or indirect, to local wildlife. However, zoning changes proposed under all alternatives are within areas that have been previously disturbed by urban development, agricultural activity or are otherwise in areas of low quality habitat. With City floodplain habitat permit review, and critical area and shoreline regulations, no significant adverse impacts are anticipated. This topic will not be further evaluated in the Supplemental EIS.

e. List any invasive animal species known to be on or near the site.

No invasive animal species are known to occur in the Town Center study area.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The area is served with electric and natural gas power, which is used for heating primarily. See Exhibit 17. Solar power is allowed.

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Exhibit 17. Natural Gas and Electric Facility Map

Source: (City of Sumner 2015)

Natural Gas & Electric Facility Map

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Additional height in the Town Center may affect solar access. Shade and shadow will be addressed in the SEIS.

Sumner City Limits

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
- The ability to develop mixed use development under all alternatives would help promote energy conservation by reducing motorized trips.

- All development will comply with the State Energy Code as adopted by the City of Sumner (Chapter 15.20 SMC).
- Setbacks from northern property lines are required in the LDR, MDR, HDR, NC and GC zones to promote solar access (SMC 18.32.030.D).
- Please also see the greenhouse gas reduction measures n Section B.2 which address a number of energy conservation measures. Please also see the Utilities section of this checklist regarding Utilities.

Summary

The City's coordination with service providers pursuant to the Utilities analysis in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015, along with mitigation measures referenced in this section and in Utilities, should allow for increased demand to be met. Apart from shade and shadow under Aesthetics, energy will not be further evaluated in the Supplemental EIS.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

New development of specific parcels will be subject to City zoning for allowable uses and activities, and City codes for handling hazardous materials as well as State and Federal hazardous materials regulations.

The risk of explosion can come from a variety of existing and potential new sources located within the study area. The sources could include:

- Industrial production and storage. Industrial activities producing volatile chemicals or that use chemicals in an industrial process could explode if handled improperly. Chemical distribution companies may also be sources of explosion. Industrial uses and zoning are adjacent to the northern edge of the Town Center study area.
- Commercial activity. Several commercial activities could store sufficient chemicals on-site to be an
 explosion risk. These include gas stations, hardware stores, and auto supply stores.
- Commercial boilers. Boilers associated with heating of large structures such as industrial buildings or schools could cause explosion.
- Natural gas lines. Natural gas lines can cause explosions if ruptured. The magnitude of the explosion is dependent on the size of the line. One major natural gas line operated by Puget Sound Energy (PSE) bisects the Town Center study area (see Exhibit 17).
- Roadways and railroads. Accidents and/or spills associated with chemicals being transported on public streets and railroad lines could be an explosion hazard. The Union Pacific Railroad and Burlington Northern Santa Fe (BNSF) Railroad bisect the Town Center study area. The Sounder Station lies along the BNSF line in the Town Center.
- Aviation. Sumner is under the flight path for the Seattle-Tacoma International Airport as well as various local airports and heliports. An aviation accident could carry the risk of explosion.

The risk of explosion increases with new development. Additional commercial activity, as well as increased truck and rail traffic, increases the sources for explosions. Residential development located near existing natural gas lines raises the risk that an explosion would affect a greater number of residents. Demands on the fire and police departments for manpower, equipment, and support increase with the increased risk. (City of Sumner 2010, 3.7-2)

1) Describe any known or possible contamination at the site from present or past uses.

Based on a state database of confirmed and suspected contaminated sites, some sites within the Town Center Study Area have known or possible contamination; cleanup has started on several sites.

Exhibit 18. Confirmed and Suspected Contaminated Sites 2014 - Sumner Town Center Vicinity

Site Name	Address	Site Status 2014	Cleanup Type	Material
Docken Apartment Complex	1122 Zehnder St	Awaiting Cleanup	No Process	Metals, Petroleium
Johnsons Chevron Inc	1005 Wood Ave	Cleanup Started	Independent Action, Independent Action	Petroleum
PSE White River Generating Station	2111 E Valley Hwy	Cleanup Started	Independent Action	Metals, Non- Halogenated Solvents, Petroleum, Polycyclic Aromatic Hydrocarbons
Sound Transit Sumner Station	711 Narrow St	Cleanup Started	No Process	Petroleum, Polycyclic Aromatic Hydrocarbons
Sounder Square	926 Main St	Awaiting Cleanup	Independent Action	Petroleum
Sumner City Of 725 W Main St	725 W Main St	Awaiting Cleanup	Independent Action	Benzene, Petroleum
Sumner Texaco	914 Kincaid	Cleanup Started	Independent Action	Benzene, Lead, Petroleum, Non- Halogenated Organics
Sumner Towing	810 Alder Ave	Cleanup Started	Independent Action	Non-Halogenated Solvents, Petroleum, Polychlorinated biPhenyls (PCB)

Source: Ecology, 2014

See section 3.c.2 above for a discussion of the critical aquifer recharge area and potential sources of contamination that can impact groundwater sources. Applicable future development would need to meet the regulations and standards of the City's Aquifer Recharge Area Ordinance (SMC Chapter 16.48).

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

See Section 7.a above.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Future uses are likely to include retail, commercial, and residential uses. Present auto sales and service uses would likely remain. Chemicals used or stored would be required to meet all local, state, and federal laws.

4) Describe special emergency services that might be required.

Increased intensity of land use in the study area that may occur following adoption of the plan and associated development regulations may increase the overall demand for police and fire services.

5) Proposed measures to reduce or control environmental health hazards, if any:

Applicable Regulations

- The City of Sumner (City) uses the 2015 International Fire Code and International Building Code as adopted by the State of Washington (SMC Chapter 15.24 and Chapter 15.08, respectively). The International Fire Code contains sections that apply to the storage and use of explosive and hazardous materials. In conjunction with enforcing those regulations, the East Pierce County Fire District maintains records of buildings with explosive or hazardous materials.
- The City Zoning Code (SMC Chapter 18.18) prohibits the location of "manufacturing, refining or storage of noxious, volatile, toxic or explosive products" in the commercial and residential zones and, therefore, are not allowed anywhere within the study area.
- Washington State's Model Toxics Control Act (MTCA) funds and directs the investigation, cleanup,
 and prevention of sites that are contaminated by hazardous substances.
 - Model Toxics Control Act (MTCA) Chapter 70.105D RCW (MTCA law)
 - MTCA Cleanup Regulations Chapter 173-340 WAC (MTCA rule)
 - Sediment Management Standards Chapter 173-204-WAC (SMS rule)
 - Remedial Action Grants and Loans Chapter 173.322A WAC (RAG rule)
- The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) established prohibitions and requirements concerning closed and abandoned hazardous waste sites. The act provides funding and governs cleanup of identified contaminated Superfund sites.

Other Potential Mitigation Measures

 See Section 15, Public Services for mitigation measures regarding demand for fire and police services.

Summary

This topic was evaluated in the City of Sumner Comprehensive Plan Update and Amendments Draft and Final EIS issued in 2010. Applicable regulations are anticipated to adequately address impacts of future development including planned actions and infill development anticipated in the study area. This topic will not be further evaluated in the Supplemental EIS.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Major roadways and railroads along with operation of civic, commercial, and industrial uses produce noise.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The following analysis is based on the City of Sumner Comprehensive Plan Update and Amendments Draft and Final EIS issued in 2010.

Development is expected to continue in the study area, and population is expected to grow, coupled with increased traffic on City streets and highways. These anticipated increases will likely increase noise generated by construction activities, commercial facilities, and traffic in the study area.

It is likely that new commercial development would occur near either current or future residential housing. Unless properly controlled, mechanical equipment (e.g., rooftop air conditioning units) and trucks at loading docks of office and retail buildings could cause ambient noise levels at nearby residential housing units to exceed the City noise ordinance limits.

Future traffic volumes would increase under all alternatives as a result of increased population and development in the study area. For most residents adjacent to roadways, increased traffic would result in the greatest increase in ambient noise levels, caused by moving traffic, vehicles idling at intersections, and transit vehicles at new bus stops. Noise levels within the study area primarily come from the state highways (SR 410 and SR 167 to the west and south of the study area) and other high-volume roadways such as Traffic and Fryar Avenues and West Valley Highway. Traffic noise can be mitigated through motor vehicle control (prohibiting trucks¹), land use control (providing buffer areas from freeways, required landscaping, or more compatible zoning along freeways), and highway planning and design (including noise barriers). (City of Sumner 2010, 3.6-5)

Residences adjacent to a bus stop could be affected by noise from accelerating buses leaving the area. Trains decelerating and accelerating at the new Sounder Station would increase ambient noise and could affect existing and future residences.

Other sources of noise within the current plan area include noise from new construction activities, maintenance projects such as road paving and repair, airplanes, emergency vehicle sirens, and the

¹ Note: Truck traffic is largely routed north of the White River outside the Study Area via 24th Street Interchange and 136th Avenue E.

railroad. In general, industrial activities tend to be indoor operations, but some operations do generate outdoor noise, such as Western Wood Preserving in the northeast section of the study area. Noise sources from industrial or commercial activities could include loading docks, HVAC equipment, or other sources. (City of Sumner 2010, 3.6-6)

Construction of infrastructure, housing, and business facilities is usually accompanied by temporary increases in noise due to the use of heavy equipment and hauling of construction materials. Noise impacts depend on the background sound levels, the type of construction equipment being used, and the amount of time it is in use. (City of Sumner 2010, 3.6-6)

Temporary daytime construction activity is exempt from the City noise ordinance limits (SMC Chapter 8.14 and Chapter 15.34). This type of activity could cause annoyance and speech interference at outdoor locations adjacent to the construction sites, and could cause discernible noise (for several blocks away from the development site). Most nighttime construction activity, if required at all, is not exempt from the City's noise ordinance, and would be required to comply with the nighttime limits specified by the City noise ordinance.

3) Proposed measures to reduce or control noise impacts, if any:

Applicable Regulations

Certain noise-control measures would be required to comply with current City regulations (SMC Chapter 8.14). SMC Chapter 8.14 establishes limits on the noise levels and durations of noise crossing property boundaries. These required measures would be the use of low-noise mechanical equipment at office and retail facilities adequate to comply with the City noise ordinance limits. Permissible noise levels at a receiving land use depend on its environmental designation for noise abatement (EDNA) – Exhibit 19 identifies the EDNA classification of existing zones in the Town Center study area.

Exhibit 19. Existing Zoning Classification for EDNA

Designation / District	EDNA
Central Business District (CBD)	Class B
Mixed Use Development (MUD)	Class A
General Commercial (GC)	Class B
Low Density Residential (LDR)	Class A
Medium Density Residential (MDR)	Class A
High Density Residential (HDR)	Class A

Source: SMC Chapter 8.14

SMC Chapter 15.34 limits hours of construction. Construction activity may be permitted outside the daytime hourly limits set forth in SMC Chapter 15.34 only upon application and approval by the community development director.

Any roadway improvements in the Town Center study area that use state or federal funding would be required to prepare a traffic noise analysis to identify noise impacts at noise sensitive receivers and to assess whether state or federal funds could be used to abate identified impacts.

In addition, SMC Chapter 8.16 includes nuisance provisions, and the SEPA review process allows the City to consider potential noise impacts.

Other Potential Mitigation Measures

Other potential mitigation measures to address noise could include the following:

- The City could review setback standards in potentially noise-sensitive areas.
- The City could require review noise impacts for new developments and require mitigation as appropriate through the SEPA process. The City could develop a SEPA policy specifically addressing noise for the purposes of mitigating impacts of new development.
- The City could work with transit service providers to reduce noise associated with busses.
- The City could collaborate with the railroads to create a "quiet zone" through downtown Sumner that would reduce the need for train whistles at crossings. This may include signals with individual alarms/horns that are activated when the crossing arms go down.
- The City could also implement the following measures to reduce impacts of additional noise that results from new development from The Audible Landscape: A Manual for Highway Noise and Land Use (FHWA 1974):
 - Acoustical site planning such as requiring buffers between the noise source and noise-sensitive activities, using buildings as barriers, orienting noise-sensitive buildings to face away from noise sources, and placing noise compatible uses adjacent one another.
 - Acoustical architecture that incorporates noise-reducing design through window and room placement, etc.
 - Acoustical construction methods such as improved airspace and insulation for walls, using windows that are designed for noise-sensitive buildings, etc.
 - Noise barriers between noise sources and noise-sensitive areas. Barriers could be constructed of earth berms, walls, dense landscaping, etc.

Summary

This topic was evaluated in the City of Sumner Comprehensive Plan Update and Amendments Draft and Final EIS issued in 2010. Noise levels will likely increase in the study area from short-term and long-term noise sources. Applicable regulations and mitigation measures are anticipated to adequately address impacts of future development including planned actions and infill development anticipated in the study area. This topic will not be further evaluated in the Supplemental EIS.

8. LAND AND SHORELINE USE

Land and Shoreline Use will be addressed in the Town Center SEIS.

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The topic will be addressed in the Town Center SEIS.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The history of working farmlands will be addressed in the Town Center SEIS. There are no designated resource lands of long-term commercial significance.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

See "b" above.

c. Describe any structures on the site.

The topic will be addressed in the Town Center SEIS.

d. Will any structures be demolished? If so, what?

The history of working farmlands will be addressed in the Town Center SEIS.

e. What is the current zoning classification of the site?

The topic will be addressed in the Town Center SEIS. See also No Action Alternative in Section A.

f. What is the current comprehensive plan designation of the site?

The topic will be addressed in the Town Center SEIS. See also No Action Alternative in Section A.

g. If applicable, what is the current shoreline master program designation of the site?

The topic will be addressed in the Town Center SEIS.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. See Sections B.3 and B.4.

i. Approximately how many people would reside or work in the completed project?

The topic will be addressed in the Town Center SEIS.

j. Approximately how many people would the completed project displace?

The topic will be addressed in the Town Center SEIS.

k. Proposed measures to avoid or reduce displacement impacts, if any:

The topic will be addressed in the Town Center SEIS.

I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The topic will be addressed in the Town Center SEIS.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

Not applicable.

9. HOUSING

The Land and Shoreline Use analysis of the Town Center SEIS will address capacity for housing and employment.

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The topic will be addressed in the Town Center SEIS.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The topic will be addressed in the Town Center SEIS.

c. Proposed measures to reduce or control housing impacts, if any:

The topic will be addressed in the Town Center SEIS.

10. AESTHETICS

The Town Center SEIS will address aesthetics.

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The Town Center SEIS will address aesthetics. See also Exhibit 1.

b. What views in the immediate vicinity would be altered or obstructed?

The Town Center SEIS will address aesthetics.

c. Proposed measures to reduce or control aesthetic impacts, if any:

The Town Center SEIS will address aesthetics.

11. LIGHT AND GLARE

The Town Center SEIS will address shade and shadow and sources of light and glare.

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? The topic will be addressed in the Town Center SEIS.
- b. Could light or glare from the finished project be a safety hazard or interfere with views? The topic will be addressed in the Town Center SEIS.
- c. What existing offsite sources of light or glare may affect your proposal?

 The topic will be addressed in the Town Center SEIS.
- d. Proposed measures to reduce or control light and glare impacts, if any: The topic will be addressed in the Town Center SEIS.

12. RECREATION

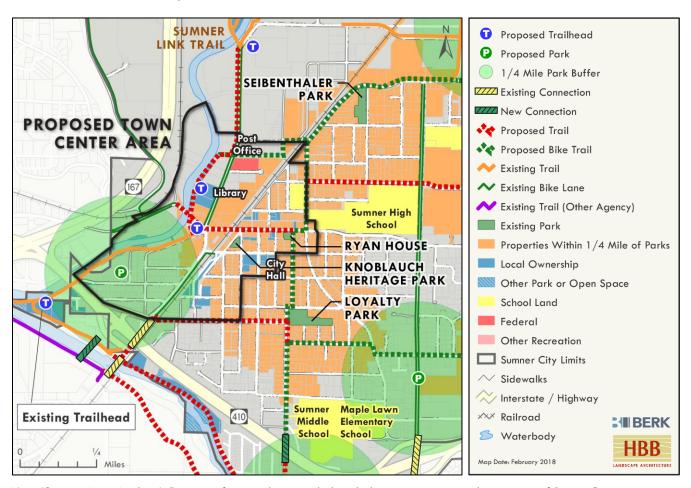
a. What designated and informal recreational opportunities are in the immediate vicinity?

Ryan House, Knoblauch Heritage Park, and portions of the Sumner Link Trail along the White River are located in the Town Center study area (see Exhibit 20):

- Ryan House is a 0.4 acre special use facility at Main St and Sumner Ave. The land was donated in 1926 by the Ryan Family to be used as a city park. The passage of time has made the house itself valued as historic and a cultural asset. Currently, the City allows the Historical Society to use the house as a museum that participates in events such as Rhubarb Days, Street of Treats, etc. (City of Sumner 2015, 3-147) (City of Sumner 2018, 8-55)
- Knoblauch Heritage Park is a 0.5 acre improved community park near Main St and Kincaid Ave. The park is a focal point for festivals and performances. (City of Sumner 2015, 3-147) (City of Sumner 2018, 8-53)
- The Sumner Link Trail links the Interurban Trail and Lakeland Hills Trail in the north of the city and the Foothills Trail and Riverwalk Trail to the south, roughly following the White River. There is an existing identified gap in the Sumner Link Trail within the Town Center study area. (City of Sumner 2018, 2-11, 8-42)

Loyalty Park, Seibenthaler Park, and Sumner High School are also near the study area. The 2018 Sumner Parks and Trails Plan proposes a new park near State St and Spinning Ave, as well as several trail and bike trail connections to address existing gaps in the park and trail systems (City of Sumner 2018, 8-56).

Exhibit 20. Park and Trail System Plan



Note (Service Area Analysis): Distances from parks are calculated along a street network consisting of Pierce County street centerlines (where sidewalks are present), Sumner trails, and Sumner bike lanes. A 50 ft. buffer was used on the parks layer in order to ensure an intersection between the transportation network used and the park boundary. Any intersection where a trail or road with a sidewalk crosses a park boundary is considered an access point for that given park, and is used as a point from which distance traveled is calculated. It is noted that more accurate access points were not available in GIS format for this analysis.

Source: (City of Sumner 2018)

b. Would the proposed project displace any existing recreational uses? If so, describe.

The Town Center proposal is not anticipated to displace recreational uses.

Future development in the study area would add population and would likely increase demand for parks and recreation facilities. Impacts on these facilities would be proportionate to the amount of population increase, and each alternative would result in some LOS deficiencies if additional parks and recreation resources are not acquired (City of Sumner 2018, 3-153).

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Applicable Plans and Regulations

- The Sumner Comprehensive Plan contains a Parks and Open Space Element including goals and policies guiding parks and recreation services and facilities.
- The City's 2018 Sumner Parks and Trails Plan provides policies and recommended park and trail improvements, including a new park near State St and Spinning Ave, and several trail and bike trail connections to address existing gaps in the park and trail systems (see Exhibit 20) (City of Sumner 2018, 8-56).
- Per Ordinance 2628, the City collects a SEPA park and trail mitigation fee as follows. Accessory dwelling units are charge 50% of the fee for a dwelling unit.
 - Single-family dwelling unit: \$2,580.23 per dwelling unit
 - Multifamily: \$2,214.08 per dwelling unit
 - Commercial: \$1,294.76 per 1,000 square feet
 - Industrial: \$606.92 per 1,000 square feet

Other Potential Mitigation Measures

- The City could pursue more aggressive grant and bond financing for parks and trails projects.
- The City could develop a policy and corresponding program to protect estate properties from development.

Summary

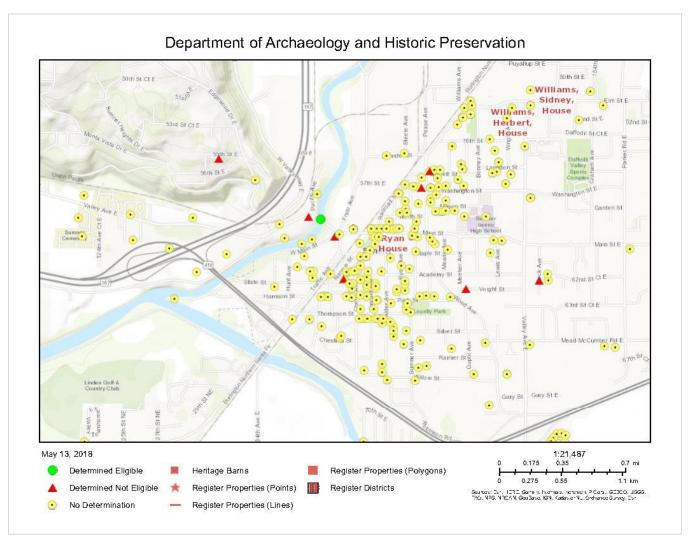
This topic was evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015, and the Sumner Parks and Trails Plan adopted February 2018. Anticipated growth under all alternatives will increase the demand for recreational facilities in the City of Sumner and impact the City's ability to meet established LOS standards. The City will need to implement the identified mitigation measures to ensure adequate park and recreation facilities to serve the City of Sumner. This topic will not be further evaluated in the Supplemental EIS.

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

There are sites that are more than 45 years old. The Ryan House is listed in the National and State Register (see description under Recreation). The Stuck River Bridge is determined eligible for listing. Several sites have been determined not eligible, and many more have not been determined.

Exhibit 21. State Department of Archaeology and Historic Preservation WISAARD Records

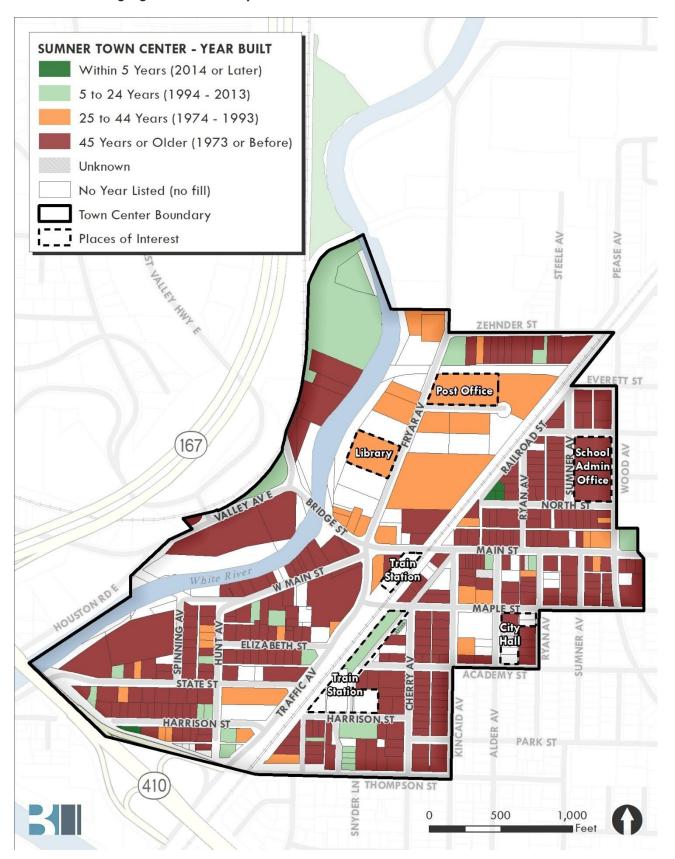


Source: State Department of Archaeology and Historic Preservation, 2018

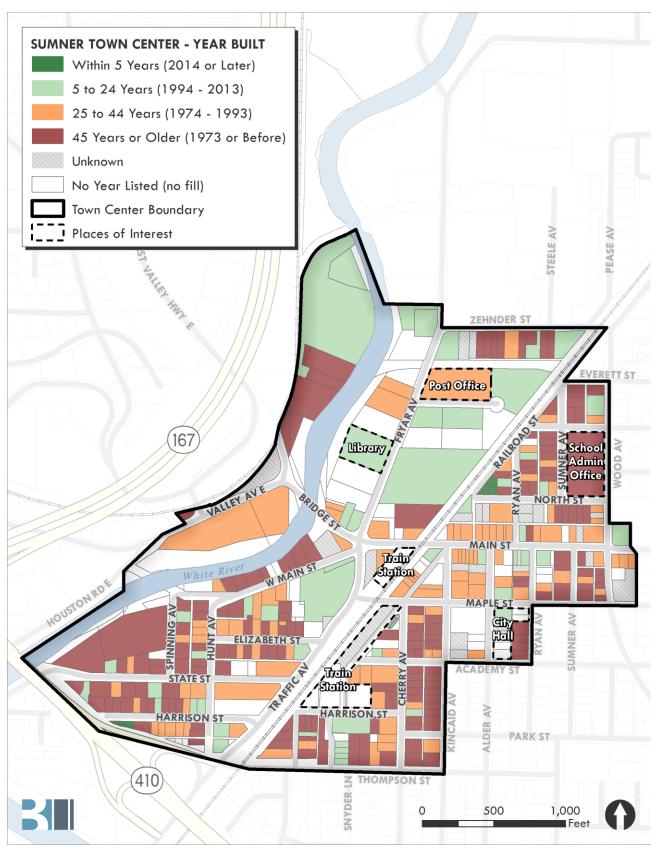
Exhibit 22 Map A shows year built based on actual year constructed per Pierce County Assessor records, and Map B shows adjusted building age based on the effective quality of construction per Pierce County Assessor records. Map A shows more structures that are 45 years or older than Map B. Map B may reflect alterations and modernization efforts over decades.

Exhibit 22. Building Age

A. Actual Building Age - Pierce County Assessor Records



B. Adjusted Building Age - Pierce County Assessor Records

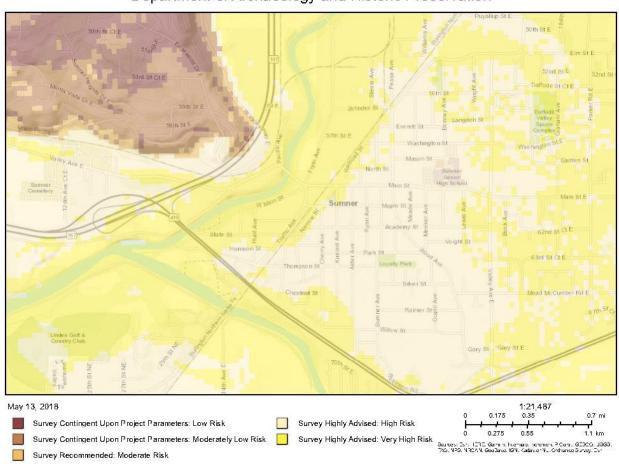


Source: Pierce County Assessor, BERK 2018

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation. This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Much of the area along the White River is considered to have a very high risk of cultural resources.

Exhibit 23. Environmental Factors with Archaeological Resources



Department of Archaeology and Historic Preservation

Source: State Department of Archaeology and Historic Preservation, 2018

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The City prepared an Environmental Impact Statement in 2005 and 2010 addressing Cultural Resources and integrated cultural and historic information from published sources, and considered surveys of historic structures prepared by Pierce County and their cultural resources consultants. The SEPA documents were provided to Puyallup and Muckleshoot Tribes and DAHP for review and comment opportunities.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Incorporated Plan Features

- The City Comprehensive Plan includes policies that support historic preservation and application of design guidelines in general to address mitigation of visual and site development impacts.
- The Ryan House would retain its Public-Private Utilities & Facilities Plan designation.

Applicable Plans and Regulations

- The City adopted historic preservation regulations to promote a special tax valuation to promote historic site rehabilitation and preservation in Chapter 18.39 SMC.
- The City currently supports the Sumner Historical Society by providing use of the Ryan House.
- The City's Design and Development Guidelines (Chapter 18.40 SMC) encourage development in most zones that is sensitive to the context and surroundings and would take into consideration nearby historic resources and lands.
- Through the SEPA process, impacts on historic and archaeological resources would be considered.
- The following federal laws would be applicable:
 - The Archaeological Resource Protection Act of 1979 protects archaeological resources and sites that are on public and tribal lands and assists in information sharing among entities seeking to preserve these resources.
 - The National Historic Preservation Act of 1966, as amended, establishes national standards for designating historic and culturally significant properties and establishes the authority of the State Historic Preservation Officer. Section 106 USC 470(a)(d) of this law establishes a program that requires federal agencies to consider effects to historic properties caused by federally sponsored undertakings.
 - The Archaeological and Historic Preservation Act of 1974 governs archaeological and other historic and cultural resources found in federal construction activities, including the construction of dams.
 - The Native American Graves and Repatriation Act governs the protection, preservation, and repatriation of Native American remains and cultural artifacts found in Native American burial sites.
- The following state laws and directives would be applicable:
 - Under SEPA, DAHP is the specified agency with the technical expertise to consider the effects of a proposed action on cultural resources and to provide formal recommendations to local governments and other state agencies for appropriate treatments or actions. DAHP does not regulate the treatment of properties that are found to be significant; a local governing authority may choose to uphold the DAHP recommendation and may require mitigation of adverse effects to significant properties.

- The Governor's Executive Order 05-05 requires state agencies with Capital Improvement Projects to integrate DAHP, the Governor's Office of Indian Affairs, and concerned tribes into their capital project planning process. This Executive Order affects any capital construction projects and any land acquisitions for purposes of capital construction.
- RCW 27.44 Indian Graves and Records provides protection for Native American graves and burial grounds, encourages voluntary reporting of said sites when they are discovered, and mandates a penalty for disturbance or desecration of such sites.
- RCW 27.53 Archaeological Sites and Resources governs the protection and preservation of archaeological sites and resources and establishes DAHP as the administering agency for these regulations.
- RCW 68.60 Abandoned and Historic Cemeteries and Historic Graves provides for the protection and preservation of abandoned and historic cemeteries and historic graves.

Other Potential Mitigation Measures

- The City could implement its new historic preservation regulations to promote historic and cultural education and recognition, and potentially include regulatory measures on such landmarks.
- The City could work with other groups to acquire and/or restore key historic properties or their development rights.
- The City could require buffers and apply special design standards for new development that are compatible with the Charles W. Orton home in the Orton Junction expansion area to provide a compatible context for the historic property.
- The following mitigation measures are recommended for all future development projects located on or in proximity to properties containing known archaeological and historic resources:
 - To the extent feasible, the preservation, rehabilitation, restoration, reconstruction or adaptive reuse of historic resources should meet the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.
 - Proposed new construction, exterior alterations, and demolition that could impact properties listed in the NRHP, the WHR, or the Sumner Historic Register should comply with the City's Design and Development Guidelines.
 - In the event that a future development project is proposed on a site containing a property listed in local historic inventories that is not listed in the NRHP, WHR, or the Sumner Historic Register, the project would be required to undergo SEPA review to determine whether the property is considered an historic resource.
 - In addition to the archaeological resources already known to exist in the study area, it is possible that intact buried deposits remain in areas not yet tested, particularly those areas in the vicinity of the Stuck/White or Puyallup Rivers. Archaeological testing should be completed for proposed projects that involve significant excavation or any changes made to the vegetation and landforms near these rivers. Archaeological project monitoring is suggested for subsurface excavation and construction in these high probability areas.

- In the event that a future development project in the study area is proposed on or immediately surrounding a site containing an archaeological resource, the potential impacts on the archaeological resource should be considered and, if needed, a study conducted by a qualified archaeologist to determine whether the proposed development project would materially impact the archaeological resource. If the project would disturb an archaeological resource, the City would impose any and all measures to avoid or substantially lessen the impact. If avoidance of the archaeological resource is not possible, an appropriate research design should be developed and implemented with full data recovery of the archaeological resource prior to the development project. The avoidance of archaeological resources through selection of project alternatives and changes in design of project features in the specific area of the affected resource(s) would eliminate the need for measuring or mitigating impacts.
- Non-site-specific mitigation could involve finding other opportunities in the community for mitigation measures that are not specific to the affected site(s). Some of the options for non-sitespecific mitigation include developing an educational program, interpretive displays, design guidelines that focus on compatible materials, and professional publications.

Planned Action Mitigation

It is proposed that the mitigation measures identified in the 2010 EIS be made part of the Planned Action Ordinance in order to be considered Planned Action. This would include:

- Requiring developers of projects on sites with structures more than 45 years old to request a project review with DAHP to determine whether the property is considered an historic resource. If it is found to be a historic resource, consultation and appropriate mitigation would be required.
- Include Inadvertent Human Remains Discovery Language recommended by DAHP as a condition of project approval.

Summary

This topic was evaluated in the Draft and Final EIS issued in 2010. The EIS indicated that: The impacts on cultural resources caused by new development associated with the proposed alternatives could be significant and unavoidable, depending on the nature of the proposed development project. Implementation of mitigation measures would address potential impacts on cultural resources, reducing them to less-than-significant levels.

This topic will not be further evaluated in the Supplemental EIS.

14. TRANSPORTATION

This topic will be addressed in the Town Center SEIS.

a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

This topic will be addressed in the Town Center SEIS.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

This topic will be addressed in the Town Center SEIS.

c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

This topic will be addressed in the Town Center SEIS.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

This topic will be addressed in the Town Center SEIS.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

This topic will be addressed in the Town Center SEIS.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

This topic will be addressed in the Town Center SEIS.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

This topic will be addressed in the Town Center SEIS.

h. Proposed measures to reduce or control transportation impacts, if any:

This topic will be addressed in the Town Center SEIS.

15. PUBLIC SERVICES

This section addresses police, libraries, and schools. Fire protection/emergency medical services and public transit will be analyzed as part of the 2018 Supplemental EIS.

a. Would the project result in an increased need for public services (for example: Fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The Sumner Comprehensive Plan Update Final SEIS issued August 2015 (2015 SEIS) studied public services for the City of Sumner. Development under the Sumner Town Center study area alternatives falls within the bookends of the 2015 SEIS Assertive Collaborative Alternative and the No Action Alternative (see answer to Section A, Question 11). The following analysis is based on the 2015 SEIS.

Fire protection/emergency medical services and public transit will be analyzed as part of the 2018 Supplemental EIS.

Police Services

The Sumner Police Department provides law enforcement services within city limits. Sumner Police Department headquarters are located at Sumner City Hall at 1104 Maple Street. The Police Department has 24 authorized full-time employees for the 2017-2018 biennium (City of Sumner 2016, 83). These staffing levels include 19 commissioned officers, 3.5 limited commission officers, 12.5 civilians. The Sumner Municipal Court is the court of limited jurisdiction for the City and has jurisdiction over traffic infractions and criminal matters including misdemeanors, gross misdemeanors, criminal traffic violations, and other violations of City ordinances.

The City of Sumner has adopted a Level of Service (LOS) standard of two police officers per 1,000 residents (City of Sumner 2015, 104) (City of Sumner 2015, 47). Based on the City's estimated population of 9,981 in 2018, the City requires 20 officers to meet its adopted LOS standard. As such, the City is currently not meeting its adopted LOS standards for police staffing. In addition to a standard of two commissioned officers per 1,000 population, the Comprehensive Plan includes the following LOS standards:

- Maintain a ratio of at least one commissioned patrol officer for every 1,000 calls for service each year.
- Provide one sergeant for every 6-7 commissioned patrol officers.
- Provide and maintain one detective position at a ratio of 1/400 part A offenses.

It is anticipated that additional growth accommodated within the study area under all alternatives would result in increased demand for public safety services. To maintain the ability to respond to emergency calls in a timely manner, it may be necessary for the Police Department to hire additional officers and support staff during the planning period. New development would likely enhance assessed valuation, tax base, and revenues available to the affected jurisdictions and special districts for providing police and emergency services. Availability of services will be dependent on allocated budgets. As portions of the City's UGA are annexed to the City, police service would transfer from Pierce County Sheriff's Office to the Sumner Police Department. (City of Sumner 2015, 3-112)

The City's Comprehensive Plan has an adopted LOS standard for police building space of 0.44 square feet per capita. Based on estimated City population of 9,981 in 2018, the City would require approximately 4,400 square feet of building space to meet its adopted standard. With a current space allocation of 7,654 square feet, the City is currently meeting its adopted LOS standard for police building space. (City of Sumner 2015, 3-112)

Libraries

The Pierce County Library System (PCLS) provides library services in the current plan area. In 2016 it served a population of 580,000 persons in unincorporated Pierce County and the cities and towns of Bonney Lake, Buckley, Dupont, Eatonville, Edgewood, Fife, Gig Harbor, Lakewood, Milton, Orting, South Prairie, Steilacoom, Sumner, University Place, and Wilkeson (Pierce County Library System 2016). The Sumner Library, located in the Town Center study area at 1116 Fryar Ave, is a regional branch library(see Exhibit 20). The library is open 7 days and 63 hours per week. The 10,600 square foot

building was constructed in 1979 and expanded in 1995. The land on which the library is located is owned by the City of Sumner and leased to the Library. The City and the PCLS each own a one-half interest in the building. (City of Sumner 2015, 3-118)

The 2012 Sumner Comprehensive Plan sets a Level of Service for library services based on the Pierce County Library District standard (Policy 1.4). PCLS's long-term capital facilities plan, *Pierce County Library* 2030, recommends an LOS standard of 0.61 to 0.71 square foot per capita (Pierce County Library System 2014). Based on the City of Sumner's estimated 2018 population of 9,981 and library facility space of 10,600 square feet at the Sumner Library, the existing effective level of service is 1.06 square feet per person, well above the range of LOS recommended by the Pierce County Library District. Over time as growth occurs, the space per person will decline. Under the proposed PCLS LOS standard, the Sumner library can serve between 14,930 and 17,377 people.

Schools

The Sumner School District serves the Town Center study area. The District includes two high schools, three middle schools, and eight elementary schools (Sumner School District 2018). The following schools serve the study area:

- High School: Sumner High School
- Middle School: Sumner Middle School
- Elementary Schools: Daffodil Valley Elementary and Maple Lawn Elementary (see Exhibit 24)

PROPOSED TOWN
CENTER AREA
DAFFODIL
VALLEY

MAPLE LAWN

DRAFT Map created November 2016

Exhibit 24. Sumner School district Elementary Attendance Boundaries

Source: Sumner School District 2018 (https://www.sumnersd.org/Page/3359)

The Sumner School District maintains student generation numbers to determine the number of students that can be expected from new residential construction. These numbers were updated in the Sumner School District 2014 Capital Facilities Plan. The student generation rates for single and multifamily dwellings, respectively are:

Elementary: 0.323 and 0.112

Middle School: 0.152 and 0.070

Senior High: 0.174 and 0.102

Based on these rates, growth citywide by 2035 would result in an increase of 1,477 students, with most of that increase in the Elementary level. (City of Sumner 2015, 3-124)

The Sumner School District 2014-2020 Capital Facilities Plan predicts the need for several new school facilities in the District by 2034 to keep pace with growth, including at least two new elementary schools, one new middle school, and additions to or a new comprehensive high school. In addition, the District has installed portable classrooms at schools to temporarily meet growth demands. (City of Sumner 2015, 3-123)

b. Proposed measures to reduce or control direct impacts on public services, if any.

Applicable Plans and Regulations

Police Services

- LOS standards for police staffing as adopted in the 2015 Comprehensive Plan will help ensure staffing levels are adequate to serve the needs of the City based on both population and employment. These include: two police officers per 1,000 residents; one commissioned patrol officer for every 1,000 calls for service each year; one sergeant for every 6-7 commissioned patrol officers; and one detective position at a ratio of 1/400 part A offenses.
- The Sumner Police department enforces various regulations of the City such as Title 9 Criminal Code,
 Title 10, Vehicles and Traffic.

Libraries

Pierce County Library 2030 proposes to relocate and expand the Sumner Library. The plan includes options for expanding the library on its current site or preferably relocating it more central to Downtown Sumner. The plan proposes to expand the Sumner Library to a facility in the range of 27,200 to 31,700 square feet to meet the needs of the Sumner community to the 2030 planning horizon. A potential joint-use/mixed use development with the City of Sumner is mentioned at "Sumner Site 1" or another location downtown. (Pierce County Library System 2014)

Schools

The Sumner School District Board of Directors, in association with local jurisdictions, establishes impact fees for new residential construction. Impact fees are a means of collecting funds to meet the "unhoused student need" and provide funds to accommodate growth and demand for school facilities. These impact fees ensure that new development pays for a fair share proportional amount of the costs incurred by the school district for expanding facilities and new construction. The impact

fee charged is based on the costs for providing the additional space and the projected number of students in each new residential unit. The current impact fee is \$3,330 for a single-family residence and \$1,755 for a multifamily residential unit (SMC 3.50.110).

Other Potential Mitigation Measures

Police Services

- The City could develop an "adequacy of public facilities" standard to address the sizing and concurrency of needed capital facilities in relation to growth.
- The City could implement Crime Prevention through Environmental Design principles to allow for appropriate lighting, landscaping, and visibility.
- The City could consider implementing or revising SEPA mitigation fees to help pay for other needs and services.

Libraries

None proposed.

Schools

 Consistent with City policies, the City should coordinate with the Sumner School Districts along with adjacent municipalities and the county to ensure timely exchange of growth information.

Summary

Police services, libraries, and school facilities were evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015. Future population growth and development will continue to increase the need for these services and facilities under all alternatives. Regular capital facility and staffing need planning can minimize impacts and meet future demand. These topics will not be further evaluated in the Supplemental EIS.

Fire protection/emergency medical services and public transit will be analyzed as part of the 2018 Supplemental EIS.

16. UTILITIES

a. Circle utilities currently available at the site: Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Electricity and Natural Gas

Puget Sound Energy (PSE) provides both electric and natural gas services in Sumner. PSE is the oldest local energy provider in Washington and maintains nearly 2,400 miles of electric distribution lines and nearly 2,500 miles of natural gas pipeline in Pierce County. While natural gas is a non-essential utility, the Washington Utilities and Transportation Commission (WUTC) requires providers of electricity to provide service on demand in support of growth that occurs in their service areas. As such PSE conducts its own ongoing capacity planning process to ensure their power supply and infrastructure are adequate to

meet anticipated future needs. Exhibit 17 generally depicts the location of natural gas and electric facilities.

Water

The Sumner Water Utility provides potable water to the Town Center study area. Citywide, the Utility delivers potable water through 64 miles of pipeline, five storage tanks, 3,450 meters, springs, and three wells. Sumner's primary water supply comes from springs on the east hill. There are three spring fields: Sumner Springs, Crystal/County Springs, and Elhi Springs. To meet peak demand in the summer, the City also uses three wells: West Well, South Well, and Dieringer Well. The Sumner water system has five storage tanks. Four serve the Sumner service area at large, while the fifth tank is exclusively associated with the Sumner Viewpoint development. Combined storage capacity for the four primary tanks is 5.068 million gallons; including the Sumner Viewpoint tank increases capacity to 5.398 million gallons. (City of Sumner 2015, 3-131)

The 2009 Water System Plan showed a surplus of 0.58 mgd in 2008, but predicted that water source would be insufficient to meet peak daily demand by the end of 2012 (City of Sumner 2010). However, the 2009 water plan notes that "through a series of planned source improvements, new interties, new source construction and water right transfers the shortfall will be filled and a surplus created". The 2014 Sumner Meadows SEIS, which involved adding over 3,000 new jobs, determined there is sufficient capacity to meet demand due to the implementation of the planned water capital improvements. (City of Sumner 2015, 3-132)

The City is working on expansions to existing sources, development of new interties with adjacent providers, and acquisition of additional water rights. These efforts include a 450-gallon-per-minute (gpm) intertie with the City of Pacific, a 347-gpm intertie with the Mountain View–Edgewood Water District, improvements to spring sources, and construction of a new well. Combined, these improvements could provide an additional 3.31 mgd of source capacity by 2011. (City of Sumner 2010)

The 2015 Comprehensive Plan Capital Facilities and Public Services Element establishes policies for level of service for the water system. This includes the following Levels of Service for water supply (Policy 1.6.1):

- Residential Demand: 60.3 gallons per day (gpd)/capita
- Employee Demand: 58.3 gpd/employee plus 252,000 gpd

Using estimates from the 2009 Water System Plan of 85.24 gallons per capita per day for residential water demand and 36.87 gallons per day per employee, there is a surplus of 737,729 gallons per day citywide under all alternatives (City of Sumner 2015, 3-133).

The City is in progress with a Water System Plan Update. It will address growth in the Town Center Plan study area, city limits, and water service area through 2035 and additional decades beyond.

Solid Waste Service

Pierce County contracts with Waste Connection, Inc., a collection of subsidiary waste disposal companies, to provide waste collection services. DM Disposal currently provides garbage collection services within Sumner city limits; and Murrey's Disposal Company and American Disposal collect garbage in the unincorporated portions of Pierce County around Sumner. Currently, all solid waste collected by waste

management systems in Pierce County is disposed of at the privately owned LRI landfill south of Graham on SR 161. LRI also operates a compost factory and gas-to-energy plant. (City of Sumner 2015, 3-140)

The 19 cities using the Pierce County disposal system have adopted and implemented recycling collection programs similar to the minimum service levels established by the County. The City of Sumner offers two separate recycling programs: one for yard waste and one for comingled recyclables (excluding glass). DM Recycling Company, a subsidiary of Waste Connections, provides recycling collection services throughout Pierce County, including within the current plan area. Curbside pick-up for recycling and yard waste is organized on a biweekly schedule. (City of Sumner 2015, 3-140)

Using the 2008-2012 historic average rate of 3.92 pounds of solid waste per capita per day, growth citywide would result in daily solid waste disposal of 66,656 pounds by 2035. The 2008 Pierce County Solid Waste Plan assumes a per capita municipal solid waste disposal of 4.5 pounds per day – under this plan, growth citywide would result in daily solid waste disposal of 76,518 pounds by 2035. (City of Sumner 2015, 3-141)

Telecommunications

Telephone service in Sumner is provided by CenturyLink (formerly Qwest Communications), who owns a main feeder line in Fryar Avenue in western Sumner and a primary feed line along the BNSF railroad that runs along the eastern boundary of the golf course property. CenturyLink commonly co-locates its facilities, including both underground and aerial lines, with the facilities of electric power providers, such as Puget Sound Energy. The BNSF right-of-way is also the location of a Sprint fiber optic line for highspeed data transfer. Telecommunication providers, such as CenturyLink and Sprint, provide their services upon demand from consumers and engage in their own capacity planning processes to ensure that they have adequate facilities to accommodate future growth in their service areas. In addition, providers of essential utilities, such as landline telephone service, are required by the Washington Utilities and Transportation Commission (WUTC) to regularly evaluate the capacity of their facilities.

Sanitary Sewer

The City of Sumner (City) has operated a sanitary sewer system since 1927 and a wastewater treatment plant since 1957. The City's sanitary sewer service area includes the Sumner city limits, as well as portions of the Sumner UGA. As of 2010, the 7.2-square-mile service area contains 33.90 miles of sewer mains and 15 pump stations for different drainage basins throughout the area. The service area is divided into basins to analyze capacity needs. There are existing sewer lines throughout the Town Center study area. (City of Sumner 2015, 3-125)

A regional wastewater treatment plant (WWTP) is located at 13114 63rd Street East, at the confluence of the Puyallup and White (Stuck) rivers. The WWTP provides sanitary sewer treatment to the Cities of Sumner and Bonney Lake. The WWTP is a secondary treatment facility and discharges treated effluent to the White (Stuck) River. (City of Sumner 2015, 3-127)

Increased demand for wastewater treatment citywide, with construction of planned improvements, would result in a deficit of approximately 1.55 million gallons per day (mgd) by 2035 (City of Sumner 2015, 3-129). The wastewater calculations based on zoning show a higher demand for service with HDR zoning compared with CBD, GC, MDR, or LDR. Mixed use zoning would be in the range studied. The City is required to plan for sufficient wastewater treatment, and prepares a capital plan approximately every six years.

The City is in progress with a Sewer System Plan Update. It will address growth in the Town Center Plan study area, city limits, and water service area through 2035 and additional decades beyond.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Applicable Plans and Regulations

Utilities will monitor growth and demand through their regular capital facility planning and budgeting processes.

Electricity, Natural Gas, and Telecommunications

The City should continue to implement the Washington State Energy Code.

Water

- The Washington State Department of Health requires water systems with 1,000 or more connections to submit water system plan updates every six years.
- Ecology regulations apply to water rights and source development, including rules for the appropriate treatment of groundwater.
- The City has adopted the 2009 Water System Plan Update and 2010 Water System Plan Revisions.
- The City manages its water system under Sumner Municipal Code Title 13, Public Services.

Solid Waste Service

 The City participates in an interlocal agreement with Pierce County for solid waste and recycling services.

Sanitary Sewer

- The U.S. Environmental Protection Agency (EPA) regulates wastewater discharge under the Federal Water Pollution Control Act and the Clean Water Act. EPA administers the National Pollutant Discharge Elimination System, which requires permits for various types of discharge to streams and rivers, including treated wastewater effluent. In Washington State, EPA delegates its permitting authority to the Washington State Department of Ecology (Ecology).
- Public sanitary sewer system operations in Washington State are regulated under Chapters 35.67 and 36.94 of the Revised Code of Washington (RCW), as well as RCW Title 57.
- The City manages its sewer system under Sumner Municipal Code Title 13, Public Services.

Other Potential Mitigation Measures

Electricity, Natural Gas, and Telecommunications

 Consistent with City policies, the City should provide annual updated population, employment and development projections to Puget Sound Energy so they can evaluate actual patterns and rates of growth, and compare these patterns to electrical demand forecasts. The City could coordinate and cooperate with other jurisdictions in the implementation of multijurisdictional electric utility facility additions and improvements.

Water

- The City could implement an aggressive water conservation program for residential, commercial, and industrial users.
- The City could expand the watershed protection by acquiring additional land around the existing watershed.
- The City is in progress with Water System Plan Updates as of 2018. Until adopted, the current Water System Plan will apply. Improvements may be required to achieve system plan needs and to ensure adequate fire flow.
- Future development will be subject to system development charges necessary to implement Water
 System Plan improvements at the time of application.
- The City could establish a policy for new and/or existing businesses to use water at the average per capita employee level. Those not able to meet the goal should be encouraged to conserve, reuse water, or develop new sources.
- In conjunction with developing additional sources, the City could develop a more detailed well head and groundwater protection program.
- The City should continue efforts to complete the planned improvements to long-range water supply, including construction of physical source improvements, additional wells, and the acquisition of additional water rights.

Solid Waste Service

The City could support added public outreach efforts to increase awareness of recycling programs.

Sanitary Sewer

- The City could implement recommendations of the City Sanitary Sewer Plan to correct existing deficiencies in the 6-year planning period. The City is in progress with a Sewer System Plan Update as of 2018. Until adopted, the current Sewer System Plan will apply. Improvements may be required to achieve system plan needs and to ensure adequate collection and treatment.
- The City could identify additional improvements for the 20-year planning period to address deficiencies projected in the long-term.
- Future development will be subject to system development charges necessary to implement Sewer System Plan improvements at the time of application.

Summary

Utilities were evaluated in the Sumner Comprehensive Plan Update Draft and Final SEIS issued in 2015. The analysis produced a list of adopted regulations and additional mitigation measures intended to reduce impacts, and these measures are incorporated into this SEPA analysis. The City's coordination with

service providers along with mitigation measures should allow for increased demand to be met. This topic will not be further evaluated in the Supplemental EIS.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Date Submitted: May 14, 2018, Updated September 10, 2018.

D. Supplemental Sheet for Nonproject Actions

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

See Part B.

Proposed measures to avoid or reduce such increases are:

See Part B.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

See Part B.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

See Part B.

3. How would the proposal be likely to deplete energy or natural resources?

See Part B.

Proposed measures to protect or conserve energy and natural resources are:

See Part B.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, flood plains, or prime farmlands?

See Part B.

Proposed measures to protect such resources or to avoid or reduce impacts are:

See Part B.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

See Part B.

Proposed measures to avoid or reduce shoreline and land use impacts are:

See Part B.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

See Part B.

Proposed measures to reduce or respond to such demand(s) are:

See Part B.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

See Part B.

B. Draft Planned Action Ordinance

NOVEMBER 2018 B-1

ORDINANCE NO XX

AN ORDINANCE OF THE CITY OF SUMNER, WASHINGTON, ESTABLISHING A PLANNED ACTION FOR THE TOWN CENTER SUBAREA PLAN PURSUANT TO THE STATE ENVIRONMENTAL POLICY ACT.

WHEREAS, the State Environmental Policy Act (SEPA) and its implementing regulations provide for the integration of environmental review with land use planning and project review through the designation of planned actions by jurisdictions planning under the Growth Management Act (GMA), such as the City of Sumner ("City"); and

WHEREAS, Section 43.21C.440 of the Revised Code of Washington (RCW), Sections 197-11-164 through 172 of the Washington Administrative Code (WAC), and Section 16.04.170 of the Sumner Municipal Code (SMC) allow for and govern the adoption and application of a planned action designation under SEPA; and

WHEREAS, the designation of a planned action expedites the permitting process for projects of which the impacts have been previously addressed in a supplemental environmental impact statement (SEIS); and

WHEREAS, a subarea of the City commonly referred to as the "Town Center", as depicted on the map attached hereto as Exhibit A and incorporated herein by this reference, has been identified as a planned action area for future development ("Planned Action Area"); and

WHEREAS, the City has developed and adopted a subarea plan titled the Town Center Plan and Form Based Code adopted XXX through Ordinance No. XX and Ordinance No. XX, respectively, complying with the GMA (RCW 36.70A) to guide the development of the Town Center; and

WHEREAS, after extensive public participation and coordination with all affected parties, the City, as lead SEPA agency, issued the Sumner Town Center Subarea Plan Update and Planned Action Final Supplemental Environmental Impact Statement ("Final SEIS") dated November 26, 2018, which identifies the impacts and mitigation measures associated with planned development in the Planned Action Area as identified in the Comprehensive Plan; the Final SEIS includes by incorporation the associated Draft SEIS issued on September 12, 2018 (collectively referred to herein as the "Planned Action SEIS"); and

WHEREAS, the City desires to designate a planned action under SEPA for the Town Center Plan ("Planned Action"); and

WHEREAS, adopting a Planned Action for Town Center with appropriate standards and procedures will help achieve efficient permit processing and promote environmental quality protection; and

WHEREAS, the City has adopted development regulations and ordinances that will help protect the environment and will adopt regulations to guide the allocation, form, and quality of development in the Town Center; and

WHEREAS, the City Council finds that adopting this Ordinance is in the public interest and will advance the public health, safety, and welfare;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SUMNER, WASHINGTON DOES HEREBY ORDAIN AS FOLLOWS:

Section I. Purpose. The purpose of this Ordinance is to:

A. Combine environmental analysis, land use plans, development regulations, and City codes and ordinances together with the mitigation measures in the Planned Action SEIS to mitigate environmental impacts and process Planned Action development applications in the Planned Action Area;

- **B.** Designate the Town Center shown in Exhibit A as a Planned Action Area for purposes of environmental review and permitting of designated Planned Action Projects pursuant RCW 43.21C.440;
 - C. Determine that the Planned Action SEIS meets the requirements of a planned action SEIS pursuant to SEPA;
- **D.** Establish criteria and procedures for the designation of certain projects within the Planned Action Area as "Planned Action Projects" consistent with RCW 43.21C.440;
- **E.** Provide clear definition as to what constitutes a Planned Action Project within the Planned Action Area, the criteria for Planned Action Project approval, and how development project applications that qualify as Planned Action Projects will be processed by the City;
 - F. Streamline and expedite the land use permit review process by relying on the Planned Action SEIS; and
- **G.** Apply applicable regulations within the City's development regulations and the mitigation framework contained in this Ordinance for the processing of Planned Action Project applications and to incorporate the applicable mitigation measures into the underlying project permit conditions to address the impacts of future development contemplated by this Ordinance.

Section II. *Findings*. The City Council finds as follows:

- **A.** The Recitals above are adopted herein as Findings of the City Council.
- **B.** The City is subject to the requirements of the Growth Management Act (GMA).
- **C.** The City has adopted a Comprehensive Plan complying with the GMA and an associated subarea plan with text and policies specific to the Town Center.
- **D.** The City is adopting zoning and development regulations concurrent with the Comprehensive Plan to implement said Plan, including this Ordinance.
- **E.** The Town Center Subarea Plan Update Planned Action SEIS adequately identifies and addresses the probable significant environmental impacts associated with the type and amount of development planned to occur in the designated Planned Action Area.
- **F.** The mitigation measures identified in the Sumner Town Center Subarea Plan Update and Planned Action SEIS, attached to this Ordinance as Exhibit B, and incorporated herein by reference, together with adopted City development regulations are adequate to mitigate significant adverse impacts from development within the Planned Action Area.
- **G.** The Sumner Town Center Subarea Plan Update and Planned Action SEIS identifies the location, type, and amount of development that is contemplated by the Planned Action.
- **H.** Future projects that are implemented consistent with the Planned Action will protect the environment, benefit the public, and enhance economic development.
- **I.** The City provided several opportunities for meaningful public involvement and review in the Sumner Town Center Subarea Plan Update and Planned Action SEIS process, including a community meeting consistent with RCW 43.21C.440; has considered all comments received; and, as appropriate, has modified the proposal or mitigation measures in response to comments.
- **J.** Essential public facilities as defined in RCW 36.70A.200 are excluded from the Planned Action as designated herein and are not eligible for review or permitting as Planned Action Projects unless they are accessory to or part of a project that otherwise qualifies as a Planned Action Project.
 - **K.** The designated Planned Action Area is located entirely within an urban growth area (UGA).
- **L.** Implementation of the mitigation measures identified in the Sumner Town Center Subarea Plan Update and Planned Action SEIS will provide for adequate public services and facilities to serve the proposed Planned Action Area.

Section III. Procedures and Criteria for Evaluating and Determining Planned Action Projects within the Planned Action Area.

- **A. Planned Action Area.** This "Planned Action" designation shall apply to the area shown in Exhibit A of this Ordinance.
- **B. Environmental Document.** A Planned Action Project determination for a site-specific project application within the Planned Action Area shall be based on the environmental analysis contained in the Sumner Town Center Subarea Plan Update and Planned Action SEIS. The mitigation measures contained in Exhibit B of this Ordinance are based upon the findings of the SEIS and shall, along with adopted City regulations, provide the framework the City will use to apply appropriate conditions on qualifying Planned Action Projects within the Planned Action Area.
- C. Planned Action Project Designated. Land uses and activities described in the Sumner Town Center Subarea Plan Update and Planned Action SEIS, subject to the thresholds described in Subsection III.D of this Ordinance and the mitigation measures contained in Exhibit B of this Ordinance, are designated "Planned Action Projects" pursuant to RCW 43.21C.440. A development application for a site-specific project located within the Planned Action Area shall be designated a Planned Action Project if it meets the criteria set forth in Subsection III.D of this Ordinance and all other applicable laws, codes, development regulations, and standards of the City, including this Ordinance, are met.
- **D. Planned Action Qualifications.** The following thresholds shall be used to determine if a site-specific development proposed within the Planned Action Area was contemplated as a Planned Action Project and has had its environmental impacts evaluated in the Planned Action SEIS:

(1) Qualifying Land Uses.

- (a) A primary land use can qualify as a Planned Action Project land use when:
 - i. it is within the Planned Action Area as shown in Exhibit A of this Ordinance;
 - ii. it is consistent with land use categories and activities studied in the SEIS and consistent with formbased code districts and other zoning and development regulations applied to properties within the Planned Action Area.
 - A Planned Action Project may be a single Planned Action land use or a combination of Planned Action land uses together in a mixed-use development. Planned Action land uses may include accessory uses.
- (b) Public Services: The following public services, infrastructure, and utilities can also qualify as Planned Actions: city roads, city utilities, parks, trails, and similar facilities developed consistent with the Planned Action SEIS mitigation measures, City and special district design standards, shoreline master program, critical area regulations, and the Sumner Municipal Code.

(2) Development Thresholds:

(a) Land Use: The following thresholds of new land uses are contemplated by the Planned Action:

Projected Net Land Use 2015-2035

Use	No Action Alternative	Action Alternatives
New Housing Units	339	1,194
New Employment (Jobs)	408	460

(b) Shifting development amounts between land uses in identified in Subsection III.D(2)(a) may be permitted when the total build-out is less than the aggregate amount of development reviewed in the Sumner Town Center Subarea Plan Update and Planned Action SEIS; the traffic trips for the preferred alternative are not exceeded; and, the development impacts identified in the Sumner Comprehensive Plan and Municipal Code Update SEIS are mitigated consistent with Exhibit B of this Ordinance.

- (c) Density: The form-based code allows unlimited density provided height, setbacks, parking, and landscaping standards are met, which indirectly control density. For the purposes of environmental impact analysis, densities were assumed. Development that is consistent with the form-based code and other applicable zoning and development regulations and is within the limits of the net land use in Subsection (2)(a) is considered a Planned Action even where density proposed is different than the SEIS assumed density. However, the SEPA responsible official may request supporting information demonstrating consistency with the City's transportation, infrastructure, and public services levels of service standards and applicable codes and standards.
- (d) Height: The form-based code regulates height by stories, establishing minimum floor-to-floor heights. For the purposes of environmental impact analysis, the SEIS studies both stories and height in feet that is consistent with the form-based code and modestly higher than the minimum floor-to-floor heights. Development that is consistent with the form-based code standards but taller than the heights assumed in the SEIS, but no greater than 10 percent taller, are considered Planned Actions. Proposals with building heights that are greater than 10 percent above SEIS assumptions are subject to additional technical analysis. The City may require aesthetic or shade/shadow analysis or modeling to determine that applicable design standards and mitigation measures in Exhibit B reduce impacts to a less than significant level.
- (e) Further environmental review may be required pursuant to WAC 197-11-172, if any individual Planned Action Project or combination of Planned Action Projects exceeds the development thresholds specified in this Ordinance and/or alter the assumptions and analysis in the Sumner Comprehensive Plan and Municipal Code Update SEIS.

(3) <u>Transportation Thresholds</u>:

(a) Trip Ranges & Thresholds. The number of new PM peak hour trips anticipated in the Planned Action Area and reviewed in the Planned Action SEIS for 2035 is as follows:

Action Alternative Estimated Weekday PM Peak Hour Town Center Trip Generation¹

Alternative	Inbound	Outbound	Total	
Planning Commission Preferred / Alternative 1: Density Option A	2,004	1,775	3,778	_
Planning Commission Preferred / Alternative 1: Density Option B	2,009	1,789	3,799	

^{1.} Trip generation based on the City of Sumner travel demand model and land use plan for each Alternative. Source: Transpo 2018

- (b) Concurrency. All Planned Action Projects shall meet the transportation concurrency requirements and the Level of Service (LOS) thresholds established in the Sumner Transportation Plan and implementing code, as appropriate.
- (c) Transportation Impact Mitigation. Transportation impact fees shall be paid consistent with Chapter 12.36 SMC. Transportation mitigation shall also be provided consistent with mitigation measures in Exhibit B, Attachment B-1 of this Ordinance attached hereto and incorporated by this reference.
- (d) The City SEPA responsible official shall require documentation by Planned Action Project applicants demonstrating that the total trips identified in Subsection III.D(3)(a) are not exceeded, that the project meets the concurrency standards of Subsection III.D(3)(b), and that the project has mitigated impacts consistent with Subsection III.D (3)(c).
- (e) Discretion.

- i. The Public Works Director or designee shall have discretion to determine incremental and total trip generation, consistent with the Institute of Traffic Engineers (ITE) Trip Generation Manual (latest edition) or an alternative manual accepted by the City's Public Works Director at his or her sole discretion, for each project permit application proposed under this Planned Action.
- ii. The Public Works Director or designee shall have discretion to condition Planned Action Project applications to meet the provisions of this Planned Action Ordinance and the Sumner Municipal Code.
- iii. The Public Works Director or designee shall have the discretion to adjust the allocation of responsibility for required improvements between individual Planned Action Projects based upon their identified impacts.
- iv. Densities may differ in levels and location studied in the SEIS as described in (2)(c). If development is within the overall land use and trip maximums in (2)(a) and (3)(a) and meets City levels of service and mitigation requirements in Exhibit B, the City may determine a development is considered a Planned Action proposal.
- (4) <u>Elements of the Environment and Degree of Impacts</u>. A proposed project that would result in a significant change in the type or degree of adverse impacts to any element(s) of the environment analyzed in the Sumner Town Center Subarea Plan Update and Planned Action SEIS would not qualify as a Planned Action Project.
- (5) <u>Changed Conditions</u>. Should environmental conditions change significantly from those analyzed in the Planned Action SEIS, the City's SEPA Responsible Official may determine that the Planned Action Project designation is no longer applicable until supplemental environmental review is conducted.

E. Planned Action Project Review Criteria.

- (1) The City's SEPA Responsible Official, or authorized representative, may designate as a Planned Action Project, pursuant to RCW 43.21C.440, a project application that meets all of the following conditions:
 - (a) the project is located within the Planned Action Area identified in Exhibit A of this Ordinance;
 - (b) the proposed uses and activities are consistent with those described in the Sumner Town Center Subarea Plan Update and Planned Action SEIS and Subsection III.D of this Ordinance;
 - (c) the project is within the Planned Action thresholds and other criteria of Subsection III.D of this Ordinance;
 - (d) the project is consistent with the Town Center Plan including the regulations of the Town Center Form Based Code integrated into the Sumner Municipal Code;
 - (e) the project's significant adverse environmental impacts have been identified in the Sumner Town Center Subarea Plan Update and Planned Action SEIS;
 - (f) the project's significant impacts have been mitigated by application of the measures identified in Exhibit B of this Ordinance and other applicable City regulations, together with any conditions, modifications, variances, or special permits that may be required;
 - (g) the project complies with all applicable local, state and/or federal laws and regulations and the SEPA Responsible Official determines that these constitute adequate mitigation; and
 - (h) the project is not an essential public facility as defined by RCW 36.70A.200, unless the essential public facility is accessory to or part of a development that is designated as a Planned Action Project under this Ordinance.
- (2) The City shall base its decision to qualify a project as a Planned Action Project on review of the Subarea SEPA Checklist form included in Exhibit B to this Ordinance and review of the Planned Action Project submittal and supporting documentation, provided on City required forms.

F. Effect of Planned Action Designation.

- (1) Designation as a Planned Action Project by the City's SEPA Responsible Official means that a qualifying project application has been reviewed in accordance with this Ordinance and found to be consistent with the development parameters and thresholds established herein and with the environmental analysis contained in the Planned Action SEIS.
- (2) Upon determination by the City's SEPA Responsible Official that the project application meets the criteria of Subsection III.D and qualifies as a Planned Action Project, the project shall not require a SEPA threshold determination, preparation of an SEIS, or be subject to further review pursuant to SEPA. Planned Action Projects will still be subject to all other applicable City, state, and federal regulatory requirements. The Planned Action Project designation shall not excuse a project from meeting the City's code and ordinance requirements apart from the SEPA process.
- **G. Planned Action Project Permit Process.** Applications submitted for qualification as a Planned Action Project shall be reviewed pursuant to the following process:
- (1) Development applications shall meet all applicable requirements of the Sumner Municipal Code and this Ordinance in place at the time of the Planned Action Project application. Planned Action Projects shall not vest to regulations required to protect public health and safety.
- (2) Applications for Planned Action Projects shall:
 - (a) be made on forms provided by the City;
 - (b) include a SEPA checklist consistent with WAC 197-11;
 - (c) provide a conceptual site plan to scale and narrative documenting how the planned action project meets the requirements of this Ordinance and the Town Center Plan as well as relevant Form Based Code standards and other Sumner Municipal Code requirements. The written summary shall identify the consistency of the Planned Action Project application with the Town Center Plan "Plan Elements" concepts and strategies. and
 - (d) meet all applicable requirements of the form-based code and other development standards contained in the Sumner Municipal Code and this Ordinance.
- (3) The City's SEPA Responsible Official shall determine whether the application is complete and shall review the application to determine if it is consistent with and meets all the criteria for qualification as a Planned Action Project as set forth in this Ordinance.
- (4) (a) If the City's SEPA Responsible Official determines that a proposed project qualifies as a Planned Action Project, he/she shall issue a "Determination of Consistency" and shall mail or otherwise verifiably deliver said Determination to the applicant; the owner of the property as listed on the application; and federally recognized tribal governments and agencies with jurisdiction over the Planned Action Project, pursuant to RCW 43.21C.440.
 - (b) Upon issuance of the Determination of Consistency, the review of the underlying project permit(s) shall proceed in accordance with the applicable permit review procedures specified in Title 18 SMC, except that no SEPA threshold determination, SEIS, or additional SEPA review shall be required.
 - (c) The Determination of Consistency shall remain valid and in effect if the underlying project application approval is also in effect.
 - (d) Public notice and review for qualified Planned Action Projects shall be tied to the underlying project permit(s). If notice is otherwise required for the underlying permit(s), the notice shall state that the project qualifies as a Planned Action Project. If notice is not otherwise required for the underlying project permit(s), no special notice is required by this Ordinance.

- (6) (a) If the City's SEPA Responsible Official determines that a proposed project does not qualify as a Planned Action Project, he/she shall issue a "Determination of Inconsistency" and shall mail or otherwise verifiably deliver said Determination to the applicant; the owner of the property as listed on the application; and federally recognized tribal governments and agencies with jurisdiction over the Planned Action Project, pursuant to RCW 43.21c.440.
 - (b) The Determination of Inconsistency shall describe the elements of the Planned Action Project application that result in failure to qualify as a Planned Action Project.
 - (c) Upon issuance of the Determination of Inconsistency, the City's SEPA Responsible Official shall prescribe a SEPA review procedure for the non-qualifying project that is consistent with the City's SEPA regulations and the requirements of state law.
 - (d) A project that fails to qualify as a Planned Action Project may incorporate or otherwise use relevant elements of the Planned Action SEIS, as well as other relevant SEPA documents, to meet the non-qualifying project's SEPA requirements. The City's SEPA Responsible Official may limit the scope of SEPA review for the non-qualifying project to those issues and environmental impacts not previously addressed in the Planned Action SEIS.
- (7) To provide additional certainty about applicable requirements, the City or applicant may request consideration and execution of a development agreement for a Planned Action Project, consistent with RCW 36.70B.170 et seq.
- (8) A Determination of Consistency or Inconsistency is a Type II land use decision subject to the procedures established in Title 18 SMC. An appeal of a Determination of Consistency shall be consolidation with any pre-decision or appeal hearing on the underlying project application where applicable.

Section IV. Monitoring and Review.

- **A.** The City should monitor the progress of development in the designated Planned Action area as deemed appropriate to ensure that it is consistent with the assumptions of this Ordinance and the Sumner Town Center Subarea Plan Update and Planned Action SEIS regarding the type and amount of development and associated impacts and with the mitigation measures and improvements planned for the Planned Action Area.
- **B.** This Planned Action Ordinance shall be reviewed by the SEPA Responsible Official no later than five (5) years from its effective date in conjunction with the City's regular Comprehensive Plan review cycle, as applicable. The timing of subsequent reviews after the first review shall be determined with the completion of the first review. The review shall determine the continuing relevance of the Planned Action assumptions and findings with respect to environmental conditions in the Planned Action Area, the impacts of development, and required mitigation measures (Exhibit B) and Public Agency Actions and Commitments (Exhibit C). Based upon this review, the City may propose amendments to this Ordinance or may supplement or revise the Sumner Town Center Subarea Plan Update and Planned Action SEIS.

Section V. *Conflict.* In the event of a conflict between this Ordinance or any mitigation measures imposed thereto, and any ordinance or regulation of the City, the provisions of this Ordinance shall control.

<u>Section VI. Severability</u>. If any one or more sections, subsections, or sentences of this Ordinance are held to be unconstitutional or invalid such decision shall not affect the validity of the remaining portions of this Ordinance and the same shall remain in full force and effect.

<u>Section VII. Effective Date</u>. This Ordinance shall take effect and be in force ten (10) days after publication as provided by law.

Passed by the City Council of the City of Sumner the	day of, 2018.
	Mayor
ATTESTED:	PUBLISHED: XXX, 2018
	EFFECTIVE: XXX, 2018
City Clerk	
First Reading: Second Reading: Date Adopted: Date of Publication: Effective Date:	
APPROVED AS TO FORM:	
City Attorney	

EXHIBIT A SUMNER TOWN CENTER PLANNED ACTION AREA

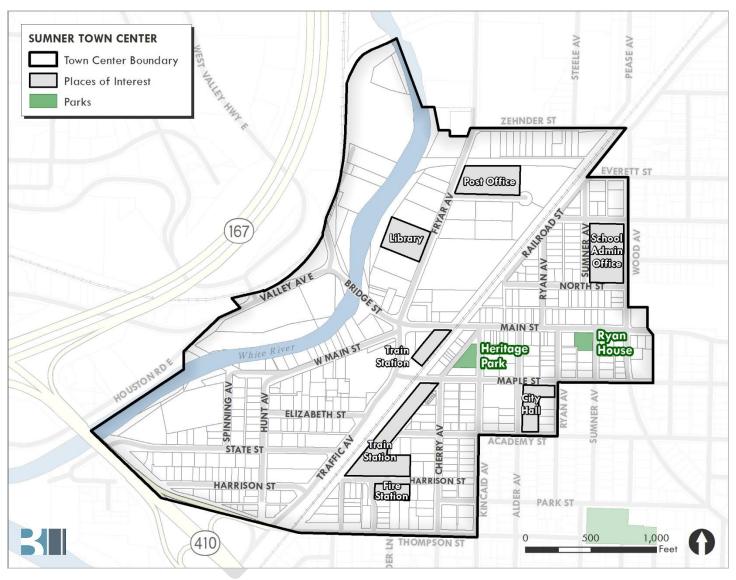


EXHIBIT B MITIGATION MEASURES

INTRODUCTION

The State Environmental Policy Act (SEPA) requires environmental review for project and non-project proposals that are likely to have adverse impacts upon the environment. To meet SEPA requirements, the City of Sumner issued the Sumner Town Center Subarea Plan Update and Planned Action SEIS, as defined in this Town Center Planned Action Ordinance ("Ordinance") in which this Exhibit is attached. The Sumner Town Center Subarea Plan Update and Planned Action SEIS has identified significant beneficial and adverse impacts that are anticipated to occur with the future development of the Planned Action Area, together with several possible measures to mitigate those significant adverse impacts.

The City of Sumner has established a Planned Action designation for the Town Center (see **Exhibit A**) based on the Sumner Town Center Subarea Plan Update and Planned Action SEIS. SEPA Rules indicate review of a Planned Action Project is intended to be simpler and more focused than for other projects (WAC 197-11-172).

MITIGATION DOCUMENT

A Mitigation Document is provided in **Attachment B-1** to this Exhibit B and establishes specific mitigation measures, based upon significant adverse impacts identified in the Planned Action SEIS. These mitigation measures shall apply to future development proposals which are found consistent with the Planned Action thresholds in Subsection III.D of this Ordinance and located within the Planned Action Area (see **Exhibit A**).

APPLICABLE PLANS AND REGULATIONS

The Planned Action SEIS identifies specific regulations that act as mitigation measures. These are summarized by SEIS topic in **Attachment B-2** to this Exhibit B and are advisory to applicants. All applicable federal, state, and local regulations shall apply to Planned Action Projects. Planned Action Project applicants shall comply with all adopted regulations where applicable, including those listed in the Planned Action SEIS and those not included in the Planned Action SEIS.

November 2018 10

ATTACHMENT B-1

Mitigation Required for Development Applications

INTRODUCTION

The Planned Action SEIS has identified significant beneficial and adverse impacts that are anticipated to occur with the future development of the Planned Action Area, together with several possible measures to mitigate those significant adverse impacts. Please see Final SEIS Chapter 1 Summary for a description of impacts, mitigation measures, and significant unavoidable adverse impacts.

A Mitigation Document is provided in this **Attachment B-1** to establish specific mitigation measures based upon significant adverse impacts identified in the Planned Action SEIS. The mitigation measures in this **Attachment B-1** shall apply to Planned Action Project applications that are consistent with the Preferred Alternative range reviewed in the Planned Action SEIS and which are located within the Planned Action Area (see **Exhibit A**).

Where a mitigation measure includes the words "shall" or "will," inclusion of that measure in Planned Action Project application plans is mandatory to qualify as a Planned Action Project. Where "should" or "would" appear, the mitigation measure may be considered by the project applicant as a source of additional mitigation, as feasible or necessary, to ensure that a project qualifies as a Planned Action Project. Unless stated specifically otherwise, the mitigation measures that require preparation of plans, conduct of studies, construction of improvements, conduct of maintenance activities, etc., are the responsibility of the applicant or designee to fund and/or perform.

All references to decisions to be made or actions to be taken by the City's SEPA Responsible Official may also be performed by the City's SEPA Responsible Official's authorized designee.

MITIGATION MEASURES

Earth (2015 SEIS)

Conditions of approval for development include pre-loading, foundation and footing system design
considerations, parking area asphalt design, and compliance with the International Building Code standards,
among other requirements and considerations.

Air Quality and Greenhouse Gases (2015 SEIS)

- All construction contractors are required to implement air quality control plans for construction activities in the study area. The air quality control plans include Best Management Practices to control fugitive dust and odors emitted by diesel construction equipment.
- The following Best Management Practices shall be used to control fugitive dust:
 - Use water sprays or other non-toxic dust control methods on unpaved roadways.
 - o Minimize vehicle speed while traveling on unpaved surfaces.
 - o Prevent track-out of mud onto public streets.
 - o Cover soil piles when practical.
 - o Minimize work during periods of high winds when practical.

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- Minimize air quality and odor issues caused by tailpipe emissions maintaining the engines of construction
 equipment according to manufacturers' specifications and minimizing idling of equipment while the equipment
 is not in use
- Burning of slash or demolition debris is not be permitted without express approval from the Puget Sound Clean Air Agency.
- Table B.1.1 Other Potential GHG Reduction Mitigation Measures lists a variety of mitigation measures that could reduce GHG emissions caused by transportation facilities, building construction, space heating, and electricity usage (Ecology 2008). The table lists potential GHG reduction measures and indicates where the emission reductions might occur. The City SEPA Responsible Official or his/her designee shall require development applicants to consider the reduction measures shown in Table B.1-1 Other Potential GHG Reduction Mitigation Measures and Table B.1-2 Emission Reduction Measures for their projects and identify which measures are feasible and incorporated into their projects, and which measures are infeasible together with a rationale and explanation. The City SEPA Responsible Official or his/her designee may condition development applications to incorporate GHG reduction measures found to be feasible.



Table B-1.1. Other GHG Mitigation Measures for Consideration

Reduction Measures	Comments
Site Design	
Retain and enhance vegetated open spaces.	Retains or increases sequestration by plants.
Plant trees and vegetation near structures to shade buildings.	Reduces onsite fuel combustion emissions and purchased electricity, and enhances carbon sinks.
Minimize building footprint.	Reduces onsite fuel combustion emissions and purchased electricity consumption, materials used, maintenance, land disturbance, and direct construction emissions.
Design water efficient landscaping.	Minimizes water consumption, purchased energy, and upstream emissions from water management.
Minimize energy use through building orientation.	Reduces onsite fuel combustion emissions and purchased electricity consumption.
Building Design and Operations	
Apply LEED standards (or equivalent) for design and operations.	Reduces onsite fuel combustion emissions and offsite/indirect purchased electricity, water use, waste disposal.
Purchase Energy Star equipment and appliances for public agency use.	Reduces onsite fuel combustion emissions and purchased electricity consumption.
Incorporate onsite renewable energy production, including installation of photovoltaic cells or other solar options.	Reduces onsite fuel combustion emissions and purchased electricity consumption.
Design street lights to use energy-efficient bulbs and fixtures.	Reduces purchased electricity.
Construct "green roofs" and use high-albedo roofing materials.	Reduces onsite fuel combustion emissions and purchased electricity consumption.
Install high-efficiency HVAC systems.	Minimizes fuel combustion and purchased electricity consumption.
Eliminate or reduce use of refrigerants in HVAC systems.	Reduces fugitive emissions. Compare refrigerant usage before/after to determine GHG reduction.
Maximize interior day lighting through floor plates, increased building perimeter and use of skylights, clerestories, and light wells.	Increases natural/day lighting initiatives and reduces purchased electrical energy consumption.
Incorporate energy efficiency technology such as super insulation motion sensors for lighting and climate-control-efficient, directed exterior lighting.	Reduces fuel combustion and purchased electricity consumption.
Use water-conserving fixtures that surpass building code requirements.	Reduces water consumption.
Reuse gray water and/or collect and reuse rainwater.	Reduces water consumption with its indirect upstream electricity requirements.
Use recycled building materials and products.	Reduces extraction of purchased materials, possibly reduces transportation of materials, encourages recycling and reduction of solid waste disposal.
Use building materials that are extracted and/or manufactured within the region.	Reduces transportation of purchased materials.
Use rapidly renewable building materials.	Reduces emissions from extraction of purchased materials.
Conduct third-party building commissioning to ensure energy performance.	Reduces fuel combustion and purchased electricity consumption.

Reduction Measures	Comments
Track energy performance of building and develop strategy to maintain efficiency.	Reduces fuel combustion and purchased electricity consumption.
Transportation	
Size parking capacity to not exceed local parking requirements and, where possible, seek reductions in parking supply through special permits or waivers.	Reduced parking discourages auto-dependent travel, encouraging alternative modes such as transit, walking, and biking. Reduces direct and indirect VMT.
Develop and implement a marketing/information program that includes posting and distribution of ridesharing/transit information.	Reduces direct and indirect VMT.
Subsidize transit passes. Reduce employee trips during peak periods through alternative work schedules, telecommuting, and/or flex time. Provide a guaranteed-ride-home program.	Reduces employee VMT.
Provide bicycle storage and showers/changing rooms.	Reduces employee VMT.
Use traffic signalization and coordination to improve traffic flow and support pedestrian and bicycle safety.	Reduces transportation emissions and VMT.
Apply advanced technology systems and management strategies to improve operational efficiency of local streets.	Reduces emissions from transportation by minimizing idling and maximizing transportation routes/systems for fuel efficiency.
Develop shuttle systems around business district parking garages to reduce congestion and create shorter commutes. This includes the Town Center Plan bus/wheeled trolley route.	Reduces idling fuel emissions and direct and indirect VMT.

LEED = Leadership in Energy and Environmental Design; HVAC = heating, ventilation, and air-conditioning

Source: Ecology, 2008.

• In addition to the representative GHG reduction mitigation measures listed in Table B-1.1, additional GHG reduction measures have been published by the California Air Pollution Control Officers Association (CAPCOA) for purposes of assisting municipalities to develop land-use related GHG reduction measures. Trip reduction measures and GHG emission reduction measures suitable for California will likely also be suitable in Washington. For example, Table B-1.2 lists additional emission reduction measures that could be adopted or incentivized (CAPCOA 2010). The table lists CAPCOA's estimated range of effectiveness for reducing VMT or GHG emissions for each measure.

Table B-1.2 Emission Reduction Measures

Measure			Range of
Number	Title	Description	Effectiveness
Transporta	ntion	-	
TRT-1	Voluntary Commute Trip Reduction	A successful program will include all of the following: carpooling encouragement; ridematching assistance; preferential carpool parking; flexible work schedules for carpools; half-time transportation coordinator; vanpool assistance; bicycle end-of-trip facilities.	1.0 – 6.2%
TRT-11	Provide Employer- Sponsored Vanpool/Shuttle	A successful program will entail an employer purchasing or leasing vans for employee use, and often subsidizing the cost of at least program administration, if not more. The driver usually receives personal use of the van, often for a mileage fee.	0.3 – 13.4%
Building E	nergy		
BE-1	Use Building Insulation Methods That Surpass State Energy Code	Greenhouse gases (GHGs) are emitted as a result of activities in residential and commercial buildings when electricity and natural gas are used as energy sources. New buildings must be designed to meet the building energy efficiency standards of the state energy code, which regulates energy uses including space heating and cooling, hot water heating, and ventilation. By committing to a percent improvement over the state code, a development reduces its energy use and resulting GHG emissions.	0.2 – 5.5% for electricity usage 7-10% for natural gas usage
BE-2	Install Programmable Thermostat Timers	Building management can decrease heating energy use by lowering the wintertime thermostat setting by $10-15$ degrees for at least eight hours per day (during business/bed time hours). Likewise by increasing the summertime thermostat setting. There is large variability in individual building occupant programming behavior; therefore this mitigation measure is considered a Best Management Practice (BMP) to allow educated occupants to have the most efficient means of controlling their heating/cooling energy use.	BMP – In order to take quantitative credit, the project applicant would need to provide substantial evidence supporting reduction in energy use.
BE-4	Install Energy Efficient Appliances	To reduce GHG emissions from electricity use: For residential dwellings, typical builder-supplied appliances include refrigerators and dishwashers and, for commercial land use, energy efficient grocery store refrigerators. Energy use of a building is dependent on building type, size and climate zone but typical reductions with ENERGY STAR refrigerators, clothes washers, dishwashers, and ceiling fans use 15%, 25%, 40%, and 50% less electricity than standard appliances, respectively.	2 – 4% (residential) 17 – 22% (grocery stores)

Measure Number Alternative	Title	Description	Range of Effectiveness
AE-2	Establish Onsite Renewable Energy Systems – Solar Power	Using electricity generated from photovoltaic (PV) systems displaces electricity demand that would ordinarily be supplied by the local utility. Since zero GHG emissions are associated with electricity provided by PV systems, the GHG emissions reductions are equivalent to the emissions that would have been produced had electricity been supplied by a local utility.	Variable
Water Use			
WUW-3	Design Water Efficient Residential & Commercial Landscapes	As an indirect decrease of GHG emissions through reduced energy consumption for pumping, treating, and distributing water, decrease water use by reducing lawn sizes, planting vegetation with minimal water needs, such as Washington native species, and choosing complimentary plants with similar water needs which can provide each other with shade and/or water.	0 – 70%
WUW-4	Use Water-Efficient landscape Irrigation System	"Smart" irrigation control systems use weather, climate, and/or soil moisture data to automatically adjust watering schedules in response to environmental and climate conditions, such as the change in temperature or levels of precipitation. Expected reductions have been as high as 30% with historical high water users.	1 - 6.1%
Vegetation			
V-1	Urban Tree Planting	Planting trees sequesters CO ₂ while the trees are actively growing. The amount of CO ₂ sequestered depends on the type of tree. Typically, the active growing period of a tree is 20 years and after this time the amount of carbon in biomass slows and will be completely offset by losses from clipping, pruning, and occasional death.	Variable by number of trees

Source: California Air Pollution Control Officers Association, 2010.

Historic and Cultural Resources (2010 EIS; 2018 Scoping Checklist)

- The City shall require developers of projects on sites with structures more than 45 years old to request a project review with State Department of Archaeology and Historic Preservation (DAHP) to determine whether the property is considered an historic resource. If it is found to be a historic resource, consultation and appropriate mitigation shall be required.
- The City shall require Inadvertent Human Remains Discovery Language recommended by DAHP as a condition of project approval consistent with RCWs 68.50.645, 27.44.055, and 68.60.055:

If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance until the State provides notice to proceed. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology

and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Aesthetics (2018 SEIS)

- As part of the design review process, require new projects meeting the following criteria to prepare a shading study that evaluates potential impacts of the project on adjacent lower-intensity uses and public spaces. If shading impacts are identified, impose permit conditions and mitigation measures to address such impacts, such as upper-story setbacks or modifications to roof forms that minimize shading effects
 - Meets the criteria for design commission review, and
 - o Is 2-3 stories higher than adjacent development (or taller than 35 feet if located within the Shoreline Management Area).; and meets one or more of the following conditions
 - Adjacent to property zoned Low-Density Residential, or,
 - · Adjacent to a public park, or
 - · Adjacent to an activity node, or public space designated or required in the Town Center Plan, or
 - Within shoreline management area.
- In the Main Street corridor, use the design review process to ensure the design of new development is consistent with the historic character and architectural style present in this area.
- In the portion of the Town Center adjacent to the White River, require preservation and/or enhancement of riparian vegetation and encourage development to incorporate pedestrian access to the White River Trail, where possible.

Transportation (2018 SEIS)

- The City shall require implementation of street sections and multi-modal priorities required in the Town Center Plan, Town Center Transportation Study, and Form-Based Code, through street frontage requirements. The City may allow exceptions per the Complete Streets code at SMC 12.02.040.
- The City shall require a Planned Action project to pay its fair share of Intelligent Transportation Systems (ITS) improvements identified in the SEIS and Town Center Transportation Study, such as adaptive signal control (ASC) systems where not included in the City's impact-fee funded capital improvements.
- The City shall require a Planned Action project to pay its fair share of capacity improvements identified in the SEIS and Town Center Transportation Study, including at the following locations where not included in the City's impact-fee funded capital improvements, and where the City has a level of service (LOS) standard / concurrency requirement that requires the improvement:
 - Traffic Avenue/Bridge Street/Main Street
 - Alder Avenue/Main Street
 - Wood Avenue/Main Street
 - Traffic Avenue/SR 410 WB Ramps/Thompson Street
 - Traffic Avenue/SR 410 EB Ramps
 - Fryar Avenue/Zehnder Avenue

• The City shall determine the fair share of implementing capacity projects in the City's Capital Facility Plan and Transportation Improvement Program by requiring payment of its impact fee in place at the time of application. For improvements not included in the impact fee basis and required to mitigate impacts per the SEIS and Town Center Transportation Study, the City may approve a voluntary agreement for a fee-in-lieu collection.

Public Services, Capital Facilities and Utilities (2015 SEIS; 2018 Scoping Checklist)

- The City shall require new development to design street layouts and recreation areas that promote visibility for
 residents and police. Street and sidewalk lighting and safety measures for vehicles, cyclists, and pedestrians
 shall be implemented per the Sumner Municipal Code and to meet Crime Prevention through Environmental
 Design principles.
- The City is in progress with Water System Plan Updates as of 2018. Until adopted, the current Water System
 Plan will apply. The City may require improvements to achieve system plan needs and to ensure adequate fire
 flow.
- Future development will be subject to system development charges necessary to implement Water System Plan improvements at the time of application.
- The City is in progress with a Sewer System Plan Update as of 2018. Until adopted, the current Sewer System Plan will apply. The City may require improvements to achieve system plan needs and to ensure adequate collection and treatment.
- Future development will be subject to system development charges necessary to implement Sewer System Plan improvements at the time of application.

ATTACHMENT B-2

Advisory Notes to Applicants: Applicable Regulations and Commitments

The Planned Action SEIS identifies specific regulations that act as mitigation measures. These are summarized in Table B-2.1 by SEIS topic. All applicable federal, state, and local regulations shall apply to Planned Action Projects. Planned Action Project applicants shall comply with all adopted regulations where applicable including those listed in the Planned Action SEIS and those not included in the Planned Action SEIS.

Table B-2.1. Applicable Regulations and Commitments

Topic	Regulation/Commitment
Earth	 The City has adopted the International Building Code (SMC 15.08.010) and a City Erosion Control Ordinance (SMC 16.05) to reduce impacts caused by earthquakes, soil instability and erosion. Critical areas ordinances provide restrictions and regulations on certain types of development and provides notices and reporting requirements for development within landslide and erosion hazard areas, seismic hazard areas, and volcanic hazard areas (SMC 16.50, 16.52, and 16.54.)
Flooding	 The City implements requirements of the National Flood Insurance Program to protect new and existing development in and near floodplains (SMC 15.52). Water quality protection is also enacted by the stormwater management regulations in SMC Chapter 13,48. These regulations also adopt use of the: 2012 Ecology Stormwater Management Manual for Western Washington, as amended in December 2014, together with any amendments or corrections. NPDES Western Washington Phase II Municipal Stormwater Permit – Minimum Technical Requirements for New Development and Redevelopment, of the 2013-2018 Western Washington Phase II municipal stormwater permit. 2012 Puget Sound Partnership Low Impact Development Technical Guidance Manual for Puget Sound together with any amendments or corrections. The City enforces the Shoreline Master Program (SMC 16.08, 16.12, 16.14, 16.16, 16.20, 16.24, 16.28, 16.30, 16.32, and 16.36) and critical area regulations (SMC 16.05, 16.46, and 16.48).

November 2018

Topic	Regulation/Commitment
Plants and Animals	• City of Sumner Shoreline Master Program (SMC 16.08, 16.12, 16.14, 16.16, 16.20, 16.24, 16.28, 16.30, 16.32, and 16.36)
	 National Flood Insurance Program and compliance with the National Marine Fisheries Service 2008 Biological Opinion for Puget Sound.
	 Critical Area Regulations address wetlands, streams, and wildlife habitat areas (SMC 16.05, 16.46, and 16.56).
	City of Sumner stormwater regulations and implementation of the National Pollutant Discharge Elimination System requirements
	 SMC Chapter 18.41, Required Landscaping, specifies landscaping requirements for non-single-family land use permits. Standards include drought tolerant plant materials the complement the natural character of the Pacific Northwest, plant species that enhance sensitive or critical areas, and landscaping options that strive to protect or restore the natural hydrology of a site through low impact development landscaping.
Water Resources	 Critical Areas Regulations. The City's critical area regulations provide provisions for the protection of wetlands, aquifer recharge areas, and buffer zones around local rivers and streams. SMC 16.05 regulates erosion and sedimentation to reduce sediment pollution from construction activity. SMC 16.48 regulates development and land use in aquifer recharge areas. SMC 16.46 regulates development in or near wetlands and mitigation for wetland filling.
	• Stormwater Management. Water quality protection is enacted by SMC 13.48. These regulations "establish minimum requirements and procedures to control the adverse impacts associated with increased stormwater runoff and water quality degradation for all sites located within the city" These regulations also adopt use of the 2012 Ecology Stormwater Management Manual for Western Washington, the NPDES Western Washington Phase II Municipal Stormwater Permit, - Minimum Technical Requirements for New Development and Redevelopment, and the 2005 Puget Sound Partnership Low Impact Development Technical Guidance Manual for Puget Sound.
	• Shoreline Master Program. The City of Sumner updated and adopted a revised Shoreline Master Program in December 2014 (SMC 16.08, 16.12, 16.14, 16.16, 16.20, 16.24, 16.28, 16.30, 16.32, and 16.36). The revised SMP regulates approximately six miles of the White River and 1.5 miles of the Puyallup River.
	 Safe Drinking Water Act. Requires public water system wells be protected from potential sources of contamination.

Topic	Regulation/Commitment
Air Quality and Greenhouse	National Ambient Air Quality Standards (NAAQS). The EPA establishes NAAQS and specifies dates for states to develop and implement plans to achieve these standards.
Gases	• State Ambient Air Quality Standards. The Washington State Department of Ecology establishes state ambient air quality standards for the same six pollutants that are as stringent as the national standards; in the case of SO2, state standards are more stringent.
	 Indoor Burning Smoke Reduction Zone. PSCAA and Ecology's regulatory framework for wood smoke includes: more stringent emission standards for new wood burning devices than the federal EPA standards; opacity standards for wood-burning appliances; prohibitions on burning of certain materials or non-certified wood stoves; burn ban curtailment program; and special attainment area provisions.
	 Outdoor Burning. Burning yard waste and land-clearing debris is not allowed in the City of Sumner or in Pierce County. PSCAA enforces state outdoor burning regulations required by RCW 70.94.743.
	 Puget Sound Clean Air Agency Regulations. All construction sites in the Puget Sound region are required to implement rigorous emission controls to minimize fugitive dust and odors during construction, as required by PSCAA Regulation 1, Section 9.15: Fugitive Dust Control Measures. All industrial and commercial air pollutant sources in the Puget Sound region are required to register with PSCAA. Facilities with substantial emissions are required to obtain a Notice of Construction air quality permit before construction is allowed to begin.
	 State of Washington GHG Laws. Washington enacted a new law establishing GHG reduction limits.
	 City of Sumner Ordinance 1587. This ordinance requires affected employers (employers with 100 employees or more at a single worksite) to implement a Commute Trip Reduction program for their employees. (SMC 16.06)
Land Use Plans & Policies	Shoreline Master Program. The City applies SMP goals, policies, and regulations to lands approximately within 200 feet of the White and Puyallup Rivers. Land uses, impervious area, building height, and vegetation management conditions apply.
	Historic Properties. Chapter 18.39 of the Sumner Municipal Code establishes procedures for listing properties on the Sumner Historic Register and the consultation steps required before alteration of listed properties.
Public Services and Utilities:	
Law Enforcement	The Sumner Police department enforces various City regulations such as Title 9 Criminal Code and Title 10 Vehicles and Traffic.

Topic	Regulation/Commitment					
Fire and Emergency Medical Services	All future development will be required to comply with the provisions of Chapter 15 – Building and Construction. Specifically:					
	• SMC 15.24 Fire Code, which is comprised of the International Fire Code with Sumner amendments. Fire department access requirements, permitting procedures, and requirements for fire prevention and suppression technology will be provided as required by the code.					
	 SMC 15.28 Fire Flow and Hydrants, which codifies fire flow and hydrant requirements as established in the City's 2009 Water System Plan. Adequate fire flow to serve potential development will be provided as required by the code. 					
	The East Pierce Fire & Rescue Fire Prevention Division reviews proposed street improvements on a project-by-project basis to identify potential negative impacts on response times and ensure street improvements are consistent with the City's Fire Code.					
Schools	The Sumner School District has established impact fees for new residential construction. The City collects the fee based on the District capital plan (SMC 3.50)					
Sewer	 The U.S. Environmental Protection Agency (EPA) regulates wastewater discharge under the Federal Water Pollution Control Act and the Clean Water Act. EPA administers the National Pollutant Discharge Elimination System, which requires permits for various types of discharge to streams and rivers, including treated wastewater effluent. In Washington State, EPA delegates its permitting authority to the Washington State Department of Ecology. Public sanitary sewer system operations in Washington State are regulated under Chapters 35.67 and 36.94 of the Revised Code of Washington (RCW), as well as RCW Title 57. The City manages its sewer system under Sumner Municipal Code Title 13, Public 					
Water	 Services. The Washington State Department of Health requires water systems with 1,000 or more connections to submit water system plan updates every six years. Ecology regulations apply to water rights and source development, including rules for the 					
	 appropriate treatment of groundwater. The City has adopted the 2009 Water System Plan Update and 2010 Water System Plan Revisions. The City manages its water system under Sumner Municipal Code Title 13, Public Services. 					
Stormwater	The City is required to comply with the National Pollution Discharge Elimination System (NPDES) permit program.					
	 See Water Resources for City water quality and stormwater standards. Implement the capital improvement projects described in Sumner's Stormwater Comprehensive Plan. 					
	Washington State Hydraulic Permit Approval requirements apply to City outfalls and secondary standards also apply to new development utilizing those outfalls.					
Solid Waste	 The City participates in an interlocal agreement with Pierce County for solid waste and recycling services. 					
Utilities	The City implements the Washington State Energy Code.					
Parks and Recreation	Per Ordinance 2628, the City collects a SEPA park and trail mitigation fee					

Topic	Regulation/Commitment					
Transportation	• Traffic Impact Fee – All new development requiring a building permit is required to pa transportation impact fee based on the number of new weekday P.M. peak hour equival car trips generated by the development.					
	 Concurrency - Transportation improvements or strategies shall be constructed to ensure that an adequate transportation system is in place to serve increased travel demands. Concurrency is defined as having a financial commitment in place to resolve the deficiency within six years. Concurrency is implemented as part of the City's development review process under SEPA. The City will not approve new developments unless the LOS standards are met; therefore, additional projects would likely need to be incorporated into the TIP as part of the Town Center plan to meet concurrency and/or concurrency policies may need to be revisited. Commute Trip Reduction (CTR) - The City of Sumner has adopted a CTR program. The CTR program establishes goals consistent with State legislation. The individual demand management strategies that are typical elements of the CTR and Transportation Demand Management (TDM) programs are tailored to employment and residential developments. A 5 to 10 percent reduction in overall vehicular traffic in the study area would reduce delays at the study intersection and improve overall LOS. 					

EXHIBIT C

Public Agency Actions and Commitments

INTRODUCTION

Under some elements of the Planned Action SEIS, specific City or other agency actions are identified. Generally, incorporation of these actions is intended to provide for consistency within the City's Comprehensive Plan and implementing regulations; to document pending City actions; to establish a protocol for long-term measures to provide for coordination with other agencies; or to identify optional actions that the City may take to reduce impacts. These actions are listed below in Table C.1.

Actions identified as "Proposed Concurrent Actions" refer to legislative actions proposed for adoption together with the Comprehensive Plan and Municipal Code Update. Actions identified as short term are currently underway and expected to be adopted in the next five years. Longer term and other agency actions will occur in the future, depending on need. The projected timeframe and responsible departments are identified and will be used in monitoring the implementation of this Ordinance.

This Exhibit C will be used in the monitoring process established in Section IV of this Ordinance.

Table C.1. Public Agency Mitigation Measures

		v 0			
Mitigation Measures	Proposed Synchronous Amendments	Short Term: Next Docket or Periodic Review	Long Term	Other Agency	Responsible Department
Earth:					
The City could pursue implementation of mitigation measures outlined in the Pierce County Natural Hazard Mitigation Plan.		X			Public Works, Community Development
Plants and Animals:					
The City could work with the Pierce County Biodiversity Alliance to implement conservation activities along the White River per the May 2016 Lower White River Biodiversity Management Area (BMA) Stewardship Plan.			X		Community Development
Water Resources:					
The City could fund more public education on water quality for residents and businesses.			X		Public Works

Mitigation Measures	Proposed Synchronous Amendments	Short Term: Next Docket or Periodic Review	Long Term	Other Agency	Responsible Department
Air Quality and Greenhouse Gases:					
The City could expand the zones to which incentives and standards are applied to reduce GHG emissions beyond the M-1 zone; the commercial and heavy industrial zones could be included. For example, the City could allow greater building heights or relaxed parking standards for new non-residential construction if the owner or operator adopts one or more of the following mitigation measures:		X			Community Development
 Provide end-of-trip bicycle facilities to employees. 					
 Construct LEED-certified buildings. 					
 Participate in the PSE Green Power Program. 					
The City could require the use of energy-efficient outdoor lighting for all new non-residential construction in all commercial and industrial zones and not just the M-1 zone.		Х			Community Development
Transportation					
LOS Policy – Increasing capacity at intersections and along the roadway system may improve LOS for vehicles; however, it could create impacts for other modes. The City may desire to revisit LOS policies to have a more multimodal LOS that gives priority to other modes and considers connectivity of the pedestrian and bicycle network and/or minimizing barriers for nonauto modes. The LOS policy could be changed for just the Town Center or the City as a whole.		X			Public Works, Community Development

Mitigation Measures	Proposed Synchronous Amendments	Short Term: Next Docket or Periodic Review	Long Term	Other Agency	Responsible Department
Traffic Impact Fee – With adoption of the Town Center Plan, the City should revisit the traffic impact fee to determine if the appropriate transportation improvements in the Town Center are included and if adjustments should be made to the Town Center Fees based on the land uses changes		X			Public Works, Community Development



C. Transportation

NOVEMBER 2018 C-1

Draft

SUMNER TOWN CENTER SUBAREA PLAN UPDATE TRANSPORTATION STUDY

Prepared for: City of Sumner

September 2018

Prepared by:



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Chapter 1. Introduction

The Sumner Town Center Plan, July 2005 presented a vision and strategies for the 210-arce Town Center. In addition, the City updated the Sumner Comprehensive Plan in 2015. Since completion of these documents the City has identified the need to change the zoning for the Town Center to allow for additional height, density, and mixed-use of residential and commercial development. This study evaluates the transportation impacts of increasing the land use densities within the Sumner Town Center.

The analysis focuses on the study area located south of Zehnder Street, east of SR 167, north of Thompson Street, and the eastern most boundary is Meade Avenue as shown on Figure 1. The study area is bisected by the railroad. Most of the existing development in the study area is comprised of commercial development in the center with low density residential along the periphery.

Purpose

The City of Sumner's Town Center Subarea Plan is currently under revision and update. The City conducted an Open House and it was determined that population in the Town Center Plan Subarea will increase significantly allowing between 3-6 story buildings and adopting Form-based code regulations. The cumulative impacts of increased density may impact the transportation system in the Town Center. The purpose of the Town Center Subarea Plan Transportation Study is to identify transportation system needs to support growth within the Town Center over the next 20 years. The primary objectives of this study include:

- Determining pedestrian routes and consider pedestrian streets
- Identifying existing and future traffic safety and operational issues
- Defining intersection and roadway improvements to meet existing and future development levels including consideration of on-street parking
- Identify access to the train station

This study focuses on safety, capacity, and operational improvements on streets serving the Town Center to serve motor vehicles, pedestrians, and bicyclists. It is intended to support the Town Center Subarea Plan Update and Planned Action Environment Impact Statement (EIS) being completed by the City. This study provides the City with a guide for transportation system improvements to meet existing and future travel needs and integrates the community's priorities for transportation improvements.

Study Organization

The remainder of this report is organized as follows:

- Chapter 2. Existing Transportation System Inventory describes the characteristics of the existing transportation system within the City of Sumner Town Center Subarea.
- Chapter 3. Travel Forecasting and Alternatives Evaluation discusses the methodology for travel demand forecasting and the transportation system alternatives to accommodate future growth.
- Chapter 4. Recommended Transportation Improvements presents the recommended plan for accommodating future traffic growth.

Study Area and Approach

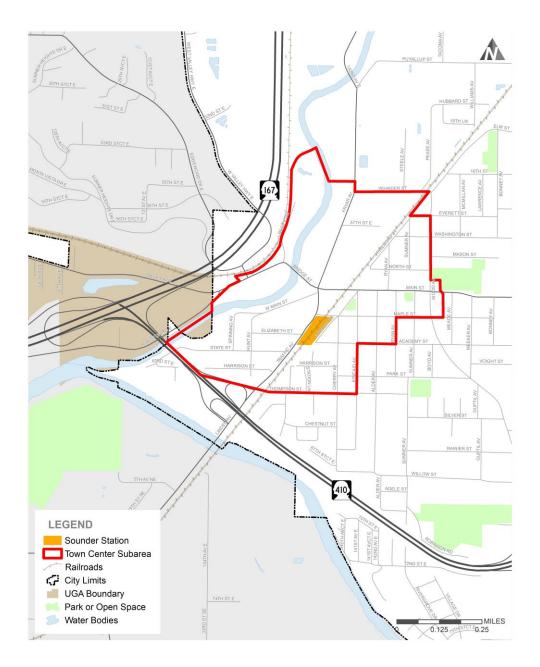
The study area includes key intersections within the Town Center. The analysis focuses on the weekday PM peak period (4:00 to 6:00 p.m.) operations at seven key intersections. The weekday PM peak period typically represents the highest cumulative total traffic for the adjacent street system, which is useful in defining transportation improvement needs for the Subarea. The study intersections include:

- Traffic Avenue/Bridge Street/Main Street
- Alder Avenue/Main Street
- Wood Avenue/ Main Street
- Traffic Avenue/Maple Street
- Traffic Avenue/SR 410 WB Ramps/Thompson Street
- Traffic Avenue/SR 410 EB Ramps
- Fryar Avenue/Zehnder Street

Figure 1 shows the study area and intersections. As shown on the figure, the study area extends beyond the Town Center boundary. This larger area accounts for the transportation system serving the Town Center, extending from SR 410 to Main Street.



Figure 1. Study Area



Chapter 2. Existing Transportation System Inventory

The transportation system in and around the Sumner Town Center consists of various facilities including state highways, collectors, local streets, transit service, and pedestrian and bicycle facilities. Existing conditions of the facilities within the study area are primarily based on information provided in the Sumner Comprehensive Plan 2015 with updated information from WSDOT. This inventory examines the characteristics of the street system, transit service, and non-motorized facilities.

Street System

The following summarizes the existing conditions for the roadways serving the Town Center based on the Sumner Comprehensive Plan 2015. The street system is described in terms general facility characteristics as well as traffic volumes, operations, and safety.

Roadway Characteristics

The study area includes freeways, arterials, collectors, and local streets.

Freeways

SR 410 is a four-lane freeway linking the cities of Bonney Lake and Buckley with SR 167. It has a posted speed of 55 mph. Access to the Town Center is mainly provided by the Traffic Avenue and Valley Avenue/Orting Highway (SR 162) interchanges. SR 410 is a State Highway of Regional Significance. Level of service standards for SR 410 have been established by the Puget Sound Regional Council (PSRC), in consultation with WSDOT.

SR 167 is a four-lane freeway through Sumner, west of the Town Center. To the south and west, it connects to Puyallup and Tacoma. To the north, it connects to Auburn, Kent, and Renton. Within the Sumner urban growth area (UGA), SR 167 has a posted speed of 60 mph. Access to the Town Center is provided at the SR 167/SR 410 interchange. The freeway portion of SR 167 presently terminates at SR 512 west of Sumner's UGA. WSDOT has plans to extend the freeway west to intersect with I-5 to connect with the Port of Tacoma area.

Arterials and Collectors

Traffic Avenue is the primary north-south arterial providing access between SR 410, the Sumner Town Center, and commuter rail station. It is five lanes between just north of Thompson and Main Streets. The adjacent land use primarily includes commercial developments. All minor intersections on the side street approaches are stop-controlled except State Street, which is signalized. Additional signalized intersections are provided at Main Street and the east and west ramp terminus of SR 410. The posted speed limit is 25 mph.

North of Main Street, Traffic Avenue becomes **Fryar Avenue**, accessing Sumner's industrial areas. Fryar Avenue is three-lane roadway between W Main Street and 142nd Avenue E with bike lanes. Land uses adjacent to Fryar Avenue include the Sumner City Library and Senior Center, a United States Post Office, and other commercial developments.

Main Street is the primary east-west arterial through the Town Center. It begins west of the City center at Traffic Avenue and continues through downtown Sumner through the eastern residential areas to an intersection with Sumner-Tapps Highway. Land uses along this roadway in the Town Center are primarily commercial uses with single family residences east



of the Town Center. A railroad crossing, with gates and signals, is located just east of Traffic Avenue.

Bridge Street is the extension of Main Street between Traffic and Pacific Avenues. It includes an old (1927), narrow, two-lane bridge over the White (Stuck) River that is in the process of being replaced by another two-lane bridge with wider travel lanes, bike lanes, and sidewalks.

Alder Avenue is a two-lane, north-south collector providing access between Main Street E and Willow Street. Alder Avenue primarily serves single-family residential homes with a posted speed limit of 25 mph. The Sumner Police Department is located along the east side of Alder Avenue, south of Maple Street.

Thompson Street is an east-west collector providing access to the City's central residential areas. It connects Traffic Avenue to Alder Avenue, terminating at Sumner Avenue. It begins at the Traffic Avenue/Westbound SR 410 ramp intersection, where signs identify the preferred route to the City center. Between Station Lane and Traffic Avenue, the street is 40-feet wide and striped for three lanes. The remaining section is a two-lane collector. The posted speed limit is 25 mph.

Wood Avenue is a two-lane, north-south collector roadway linking Valley Avenue and Elm Street just east of the Sumner City center. It primarily provides access to the residential areas north and south of Main Street. The Main Street intersection is signalized. The posted speed limit is 25 mph.

Zehnder Avenue is classified as a two-lane, east-west collector between Fryar and Wood Avenues where it then connects to Elm Street. Since completion of the 2002 Sumner Transportation Plan, the street has been reconstructed to collector street standards with curb, gutter, and sidewalks on both sides. It has a posted speed limit of 25 mph. The east end of Zehnder Street crosses two railroad tracks. Crossing gates and lights control the crossing.

Traffic Volumes

Daily and PM peak hour traffic volumes were collected from two sources. Daily 2017 volumes along State Routes were obtained from the WSDOT. The weekday PM peak hour volumes are from the Sumner Comprehensive Plan 2015 and represent 2013 conditions.

The two State highways, SR 167 and SR 410, carry the highest traffic volumes in the study area. The average daily traffic (ADT) along SR 410 west of Traffic Avenue is approximately 76,000 vehicles per day (vpd). East of Traffic Avenue, the ADT along SR 410 is approximately 64,000 vpd. Along SR 167 south of the SR 410 interchange the ADT is approximately 109,000 vpd and between the SR 410 and the 24th Street E interchange the ADT is approximately 62,000 vpd. The existing daily traffic volumes along SR 167 and SR 410 are shown on Figure 2.

Figure 3 shows the existing (2013/2014) weekday PM peak hour traffic volumes for roadways in and around the Town Center. As shown on the figure, Traffic Avenue, Main Street and Valley Avenue carry the highest traffic levels. Thompson Street also has high weekday PM peak hour volumes due to the access it provides to the Sounder Station. The remaining local streets within the Town Center carry approximately 200 to 300 vehicles per hour during the weekday PM peak period.

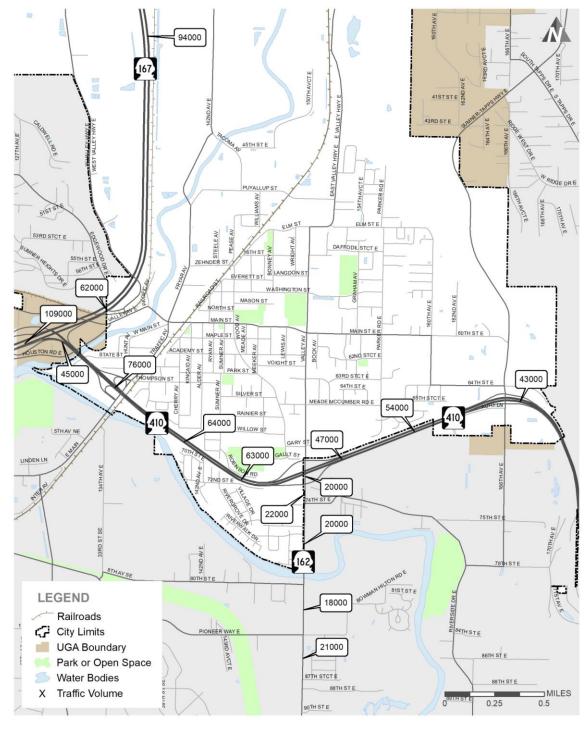


Figure 2. Existing (2017) Average Daily Traffic on State Routes

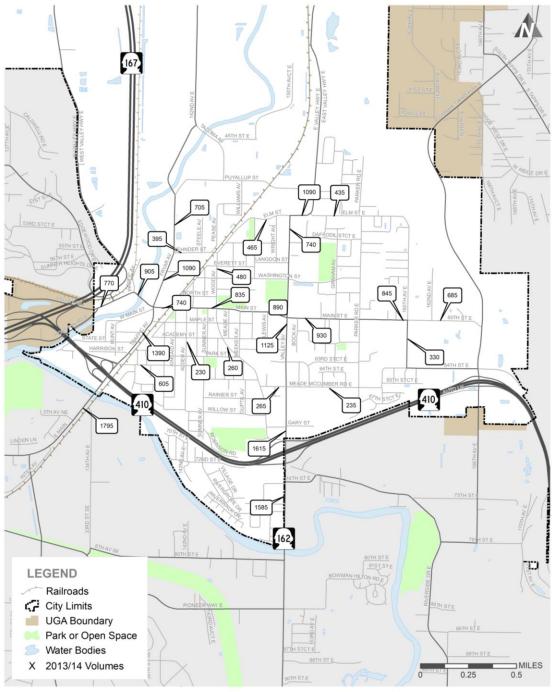


Figure 3. Existing (2013/2014) Weekday PM Peak Hour Traffic Volume

Traffic Operations

Traffic operations analysis provides a quantitative method for evaluating existing transportation conditions. Intersection operations and queuing were evaluated within the study area.

The operational characteristics of intersections are determined by calculating level of service (LOS). Level of service is used as a tool to qualitatively measure the operational conditions of a transportation system. The operations of an intersection and its individual turning movements can be described alphabetically by a range of levels of service designations from LOS A, indicating free-flowing traffic, to LOS F, indicating extreme congestion and long vehicle delays. At signalized intersections, LOS is measured in terms of average control delay per vehicle and is reported for the intersection as a whole. Control delay is a complex measure based on many variables, including signal phasing and coordination (i.e., progression of movements through the intersection and along the corridor), signal cycle length, and traffic volumes with respect to intersection capacity and resulting queues. At unsignalized intersections, LOS is expressed in terms of the weighted average control delay of the overall intersection for all-way stop controlled intersections or by minor street movement for side-street stop-controlled intersections.

The City of Sumner has an adopted LOS D standard for peak hour traffic flow except at the Traffic Avenue/Bridge Street/Main Street and Alder Avenue/Main Street intersections where a LOS F standard is adopted.

WSDOT has adopted a LOS D standard for State highways in urban areas. For non-HSS facilities, the State requires that an agency coordinate with WSDOT in establishing a LOS standard for those facilities. SR 410 is a non-HSS-designated facility. Puget Sound Regional Council (PSRC) has adopted LOS standards for regionally significant state highways or state transportation facilities that are non-HSS such as SR 410. Based on the PSRC tiered LOS system, SR 410 have an adopted LOS D standard. Appendix A contains a detailed explanation of LOS criteria and definitions.

Table 1 summarizes the existing weekday PM peak hour LOS for the study intersections based on the analysis completed as part of the 2015 Comprehensive Plan.

Table 1. Existing (2014) Weekday PM Peak Hour Intersection Levels of Service Summar					
Intersection	Traffic Control ¹	LOS ²	Delay ³	WM ⁴	
Traffic Avenue/Bridge Street/Main Street	Signal	С	27	-	
Alder Avenue/Main Street	AWSC	В	12	-	
Wood Avenue/Main Street	Signal	В	13	-	
Traffic Avenue/Maple Street	PSC	В	10	WB	
Traffic Avenue/SR 410 WB Ramps/Thompson Street ⁵	Signal	В	14	-	
Traffic Avenue/SR 410 EB Ramps⁵	Signal	D	42	-	
Fryar Avenue/Zehnder Avenue	TWSC	С	21	WB	

Source: Highway Capacity Manual, TRB, 2010 and Transpo Group, 2010.

- 1. PSC = Partial Stop Control, AWSC = All-way Stop Control, TWSC = Two-way Stop Control.
- 2. Level of service, based on 2000 Highway Capacity Manual methodology.
- 3. Average delay in seconds per vehicle
- 4. Worst movement (WM) reported for unsignalized intersections, where NB = northbound, SB = southbound, NBL = northbound left-turn, and WB = westbound. For all-way stop control, NA (not applicable) is shown.
- 5. Delays at this intersection may be than longer than reported. Traffic queues are observed to block adjacent intersections.

The analysis indicates that all intersections currently meet the LOS standards. All but three of the study intersections are currently operating at LOS B or better during the PM peak hour. The very good intersection operations reflect the lower traffic volumes within the study area.



As indicated in the table, the signalized intersection of Traffic Avenue/SR 410 EB Ramps operates at LOS D during the PM peak hour. Traffic queues at the SR 410 ramps were observed to block adjacent intersections, the resulting delays at these intersections may be longer than reported. The 2019-2024 Six-Year Transportation Improvement Plan (TIP) includes improvements at the Traffic Avenue/SR 410 interchange and the City is currently in the design stage and securing funding. The planned improvement includes widening the roadway and existing WSDOT overpass to four lanes.

Traffic Safety

Collision records for a three-year period were reviewed as part of the Sumner Comprehensive Plan 2015. Historical safety data were collected from WSDOT for the period of January 1, 2011 to December 31, 2013. A review of historical collisions was completed to identify potential safety issues for vehicles, pedestrians, and cyclists. There were four fatalities over the three-year period review within Sumner, but these were not located within Town Center. Additionally, there were 8 pedestrian-bicycle related collisions reported within the three-year period evaluated and 3 of the pedestrian-bicycle collisions were within the Town Center. Within the Town Center pedestrian-bicycle collisions were reported at the Traffic Avenue/Maple Street, Traffic Avenue/SR 410 EB Ramps intersections, and along Main Street between Traffic Avenue and Valley Avenue. As noted previously, these roadways carry the highest level of traffic volumes. The City has a planned improvement at the Traffic Avenue/SR 410 interchange that will address capacity and safety improvements.

Further review in the study area was completed by compiling crash rates by study intersection to identify potentially problematic locations. An analysis of crash rates for the study intersections was completed to identify the average crash frequency based on the number of vehicles traveling through the study intersections. The typical measure for determining crash rates at intersections is the number of crashes per million entering vehicles (MEV).

Critical Crash Rate

The observed crash rate at intersections was compared to a critical crash rate calculated for each intersection to compare among study intersections that have similar characteristics. For the study intersections in the Town Center Subarea, the intersections were grouped into three categories: traffic signals; side-street stop-control; and all-way stop-control intersections. This is consistent with guidance provided in Chapter 4 of the *Highway Safety Manual* (AASHTO, 2010). Table 2 summarizes the factors and calculations to determine the critical crash rate for the study intersections.

Table 2. Study Interse	ctions with Crash F	Rates				
Intersection	Peak Hour TEV ¹	Intersection Control	Observed Crash Rate ²	Weighted Average Crash Rate ³	Critical Crash Rate ⁴	Observed Greater than Critical?
Traffic Avenue/Bridge Street/ Main Street	2,320	Signal	0.19	0.40	0.65	No
Alder Avenue/Main Street	885	AWSC	0.00	0.05	0.00	No
Wood Avenue/Main Street	1,165	Signal	0.28	0.40	0.77	No
Traffic Avenue/Maple Street	1,430	Side Street Stop	0.23	0.34	0.64	No
Traffic Avenue/SR 410 WB Ram Thompson Street	nps/ 2,320	Signal	0.57	0.40	0.65	No
Traffic Avenue/SR 410 EB Ram	ps 2,190	Signal	0.55	0.40	0.66	No
Fryar Avenue/Zehnder Avenue	1,040	Side Street Stop	0.21	0.34	0.70	No

- 1. Total Entering Vehicles. Total Entering Vehicles.
- 2. Crashes per Million Entering Vehicles (MEV).
- 3. Calculated according to Equation 4-10 in the Highway Safety Manual, 2010.
- 4. Calculated according to Equation 4-11 in the Highway Safety Manual, 2010.

As shown in the table, none of the study intersections had an observed crash rate higher than the intersection's critical crash rate. No safety issues are identified at the study intersections.

Non-Motorized Facilities

The City's existing transportation system was historically designed and constructed for vehicular traffic. Sidewalks exist along some of the study area arterials. Where sidewalks are not available, pedestrians must use the roadway shoulders. Arterial and collector roadways that currently have sidewalks within the Town Center include:

- Main Street (Traffic Avenue to 158th Avenue Court East)
- Traffic Avenue (Main Street to Thompson Street)
- Thompson Street (Traffic Avenue to Alder Avenue)
- Alder Avenue (Main Street to Thompson Street)
- Wood Avenue (Southern terminus to Zehnder Street)

Additionally, sidewalks are provided along both sides of the local streets in the lower density residential area of the Town Center and in the vicinity of the Sumner Station. Marked crosswalks are also provided at a number of the local streets in the Town Center.

There are limited formal bicycle facilities in Sumner and none provided in the Town Center. For the most part, bicyclists share the road with motorized traffic or use paved roadway shoulders, where available. Formal bike lanes are present on both sides of Valley Avenue and both sides of Fryar Avenue from Main Street to the Fryar Avenue Bridge, outside of the Town Center Subarea.

Transit Service

Sound Transit provides bus service in the Town Center (Figure 4). The majority of the routes provide transit service to the Sumner Sounder Train Station facility located on the east side of Traffic Avenue at Maple Street. Based on Sumner Comprehensive Plan 2015, transit routes



that serve the Sumner Train Station include Routes 577/578 and 596. In addition, Pierce County provides Beyond the Borders Connector bus service for eligible residents to public transportation, medical services, employment, shopping, and social activities. Sumner area transit route descriptions and service characteristics are shown on Figure 4.

Route 577/578 provides service between Seattle to Puyallup. This is intended to be a train shadow and currently runs with stops in Puyallup, Sumner, Federal Way, and has three stops in Seattle. The route operates on 30-minute headways on weekdays and hour headways on weekends.

Route 596 provides shuttle service between Bonney Lake Park and Ride to Sumner Sounder Station. The route operates on 20 to 30-minute headways on weekdays with no weekend service. This route is scheduled in coordination with the train schedule to shuttle commuters to and from the Bonney Lake Park and Ride.

Within the Town Center stops for the above listed routes are located west of Narrow Street north of Academy Street.

Beyond the Borders Connector

Pierce County provides a local bus service called Beyond the Borders, which helps eligible residents access public transportation, medical services, employment, shopping, and social activities. There is no cost to riders. Use of the service is unlimited and riders can get on and off at all stops throughout the community and ride multiple times each day.

Commuter Rail Service

Sound Transit's Sounder line offers commuter rail service between Lakewood and downtown Seattle with stops in Tacoma, Puyallup, Sumner, Auburn, Kent, and Tukwila. Sound Transit's Sounder service shares the Burlington Northern Santa Fe (BNSF) tracks.

The Sumner Station is located south of Maple Street between Narrow and Traffic Streets in the Town Center and is central to the subarea. Access to commuter parking is accessed via Harrison Street, Narrow Street, and Academy Street. Amenities at the Sumner Station also include bicycle lockers and racks. Additionally, sidewalk connectivity is provided along local streets to residential neighborhoods to the east.

The station opened in September 2000 and was part of the first phase of Sound Transit's program to provide commuter rail service between Everett and Lakewood. There are currently eight morning and two afternoon trains serving the Sumner Station during the commute hours. Ten morning and ten afternoon trains are planned within the next three years. According to Sound Transit, 352 total parking spaces are available near the Sumner commuter rail station with an additional 529 parking spaces proposed as part of Sound Transit's Sumner Access Improvement Project.

Weekly ridership on the Sounder commuter trains has increased steadily since its start-up in September 2000. Ridership has more than doubled from 5,900 passengers in September 2000 to almost 13,000 passengers in 2014.

Station Lane links Thompson and Harrison Streets on the west end of the fire station and provides a direct route to and from SR 410 for commuter traffic accessing the rail station. Traffic Avenue was reconstructed to improve traffic circulation in the station area. It was widened to provide four lanes with a landscaped median and dedicated left-turn lanes. A drop-off lane provides access to the train station off Traffic Avenue.

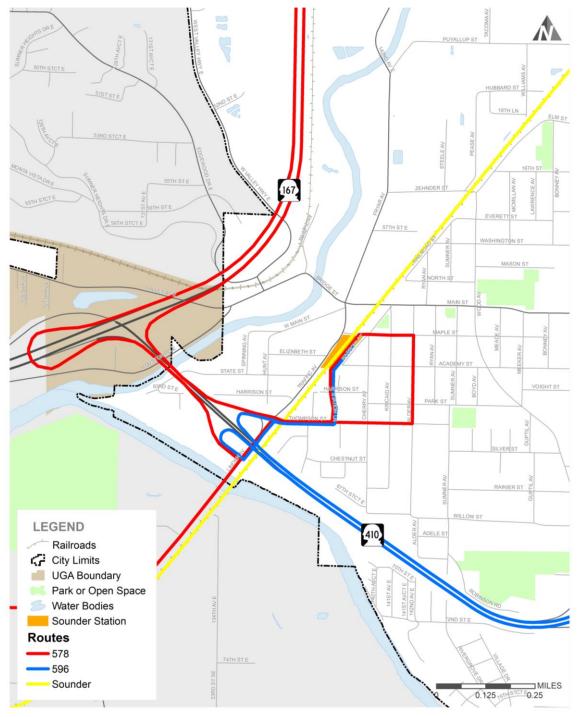


Figure 4. Existing Transit Routes and Railroads

Chapter 3. Travel Forecasting and Alternatives Evaluation

The chapter describes the method used to determine future transportation conditions as well as provides an evaluation of alternatives to accommodate future growth. The evaluation focuses on 2035 baseline conditions representing the development levels anticipated in the Sumner Comprehensive Plan 2015 (i.e., No Action Alternative). An evaluation of three Action Alternatives (Alternatives 1A, 1B and 2) with increased density is also presented. The review of the Action Alternatives provides insight on potential needs to help ensure long-term adequacy of the transportation system for the Town Center.

Street System

The following summarizes the street system in terms of planned improvements as well as traffic volumes and operations.

Planned Improvements

City, County, and State transportation improvement projects likely to be funded and built by 2035 within the Town Center were reviewed and included, as appropriate, as part of the future roadway network. Key improvements in the vicinity of the Town Center include:

SR 410/Traffic Avenue Interchange Improvements. This project was identified in the Sumner Comprehensive Plan 2015 and as described previously, is on the Sumner 2019-2024 Six-Year TIP and construction funds are being secured from several sources including the City of Sumner, Freight Mobility Strategic Investment Board (FMSIB), State, Sound Transit, Port of Tacoma, and other local sources. The improvement includes widening the Traffic Avenue bridge to provide 4 travel lanes with turn lanes at the ramp intersections. At the SR 410 westbound ramp terminal intersection, the existing northbound and southbound right-turn lanes would be converted to a shared through/right turn lane and the eastbound approach would be expanded to have a separate left-turn. At the SR 410 eastbound ramp terminal, the northbound and southbound approaches would be expanded to provide an additional through lane and the eastbound off-ramp approach would be expanded to provide a left-turn lane, shared left/right-turn lane and right-turn lane. The signal timing would also be updated at both ramp terminal intersections as evaluated in the *SR 410/Traffic Avenue Overpass Improvements Intersection Control Analysis*, Parametrix, August 2017.

Main Street and Wood Avenue Intersection Improvements. This project was identified in the Sumner Comprehensive Plan 2015 and is identified on the Sumner 2019-2024 Six-Year TIP. The improvements include upgrading the traffic signal to include protected left-turn phasing on the eastbound-westbound directions to improve vehicle queues. In addition, the traffic signal would be upgraded to comply with ADA standards and the intersection would be reconstructed to minor arterial roadway standards.

Fryar Avenue/Zehnder Avenue. The Sumner Comprehensive Plan 2015 identified future signalization as mitigation at this intersection. The future alternatives analysis assumed signalization of this intersection. The signal would need to be installed as development occurs and warrants are met.

Traffic Volumes

Future 2035 traffic forecasts were based on the same method and assumptions as the Sumner Comprehensive Plan 2015. The No Action Alternative represents the Sumner

Comprehensive Plan 2015 Assertive Alternative 3 with the 24th Street E extension¹. The Action Alternative (Alternatives 1A, 1B, and 2) travel forecasts were developed by updating the Sumner Comprehensive Plan 2015 travel demand model within the Town Center area for additional density. Increased density in the Town Center would be achieved by reallocating land use from other areas of the City. The 2015 Sumner Transportation Plan, June 2015 summarized the travel demand model land use data by district. The land use data are based on the model transportation analysis zones (TAZs) and do not specifically match the Town Center Subarea. The Town Center is located within the Downtown district. Table 3 provides a summary of the Downtown district 2035 housing and employment for the three Alternatives.

Table 3. Summary of Downtown District 2035 Land Use by Alternative					
Alternative	Total Households ¹	Total Jobs ¹			
No Action	927 units	1,870 employees			
Alternative 1: Density Option A	1,782 units	1,922 employees			
Alternative 1: Density Option B	1,782 units	1,922 employees			
Alternative 2	1,782 units	1,922 employees			

Source: Berk Consulting, 2018 and 2015 Sumner Transportation Plan.

As shown in the table, Alternatives 1A, 1B, and 2 would increase the Town Center housing by 855 units and 52 jobs. All Action Alternatives have consistent land use but the allocation of land use by TAZ is slightly different.

Based on the land use plan and trip rates in the travel demand model, Table 4 summaries the weekday PM peak hour trip generation for each Action Alternative.

Outbound 1,775	Total 3.778
1,775	3.778
	0,
1,789	3,799
1,776	3,779
	,

As shown in the table, the trip generation is very similar with Alternative 1B generating approximately 20 trips more than Alternatives 1A and 2. The remainder of this discussion focuses on Alternative 1B, which represents the highest level of trip generation for disclosing potential transportation impacts.

Based on the land use, the future 2035 weekday PM peak hour traffic volumes for No Action and Alternative 1B were forecasted at the study intersections and along roadways within the Town Center. The greatest differences in traffic volumes between the No Action and Alternative 1B are anticipated along the Traffic Avenue and Main Street. Alternative 1B weekday PM peak hour traffic volumes along these corridors are anticipated to be up to 68 percent higher than the No Action Alternative. Alternative 1B is anticipated to increase weekday PM peak hour traffic volumes at the SR 410 interchanges with Traffic Avenue by between 53 and 63 percent. Figure 5 provides a comparison of the future 2035 No Action and Alternative 1B weekday PM peak hour traffic volumes in the Town Center.

Some inquiries have been made about rezoning parcels on the west side of Fryar Avenue near Zehnder Street to allow for manufacturing/industrial uses. The current Town Center land use alternatives assume retail/offices uses, which have higher daily trip generation rates

¹ The 24th Street E extension is north of the Town Center and generally forecasts within the Town Center are consistent for the with and without extension scenarios.

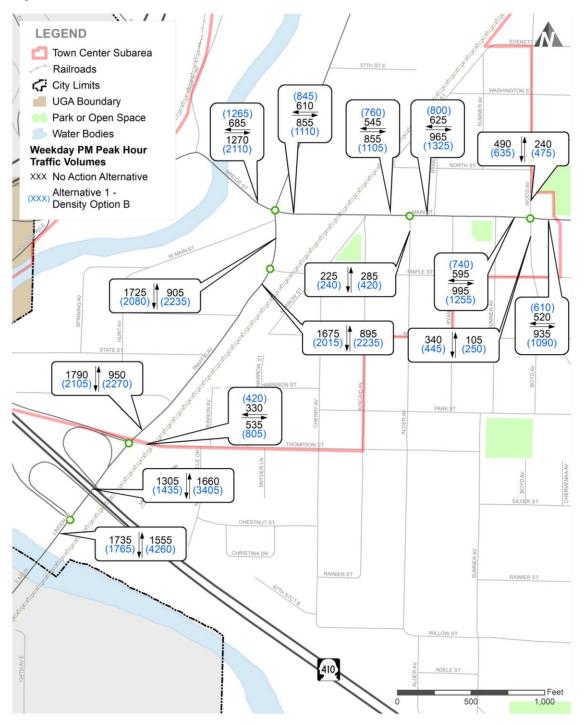


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The land use data are based on the model transportation analysis zones (TAZs) and do not specifically match the planned Town Center subarea. The Downtown district includes the Town Center Subarea.

compared to the industrial uses. The Sumner travel demand model trip rate for office is 8.29 daily trips per employee and retail is 23.21 daily trips per employee while the industrial trip rate is 3.84 daily trips per employee. Therefore, if the properties were rezoned then it is likely that trip generation would decrease compared to what has been evaluated. The analysis shown represents a conservative estimate of transportation impacts.

Figure 5. Future 2035 Traffic Volumes



Traffic Operations

Intersection levels of service were calculated for the weekday PM peak hour No Action and Alternative 1 conditions using the same methodology as existing conditions. A comparison between the No Action Alternative and Alternative 1B is provided in Table 5. Appendix B provides the detailed LOS. Signal timing splits were optimized under Alternative 1 conditions. Additionally, at the SR 410 ramps, offsets and the cycle length were optimized.

Table 5. Existing and Future (2035) Weekday PM Peak Hour Intersection Levels of Service Summary

	Traffic		Existing		No Act	tion Alte	native		ternative sity Opti	-
Intersection	Control ¹	LOS ²	Delay ³	WM ⁴	LOS ²	Delay ³	WM ⁴	LOS	Delay	WM
Traffic Avenue/Bridge Street/Main Street	Signal	С	27	-	F	>80	-	F	>80	-
Alder Avenue/Main Street	AWSC	В	12	-	F	44	-	F	>50	-
Wood Avenue/Main Street	Signal	В	13	-	D	52	-	F	>80	-
Traffic Avenue/Maple Street	PSC	В	10	WB	В	12	WB	D	30	WB
Traffic Avenue/SR 410 WB Ramps/ Thompson Street ⁵	Signal	В	14	-	E	75	-	F	>80	-
Traffic Avenue/SR 410 EB Ramps ⁵	Signal	D	42	-	D	47	-	F	>80	-
Fryar Avenue/Zehnder Avenue	Signal ⁶	С	21	WB	С	22	-	F	>80	-

Source: Highway Capacity Manual, TRB, 2000 and Transpo Group, 2010.

- 1. PSC = Partial Stop Control, AWSC = All-way Stop Control, TWSC = Two-way Stop Control.
- 2. Level of service, based on 2000 Highway Capacity Manual methodology.
- Average delay in seconds per vehicle
- 4. Worst movement (WM) reported for unsignalized intersections, where NB = northbound, SB = southbound, NBL = northbound left-turn, and WB = westbound. For all-way stop control, NA (not applicable) is shown.
- 5. Delays at this intersection may be than longer than reported. Traffic queues are observed to block adjacent intersections.
- Intersection was evaluated as a signal under future (2035) conditions, consistent with findings in the 2015 Sumner Transportation Plan.

As shown in Table 5, intersection delays are anticipated to increase at the study intersections with Alternative 1B compared to the No Action Alternative. The Traffic Avenue/Bridge Street/ Main Street, Alder Avenue/Main Street, Wood Avenue/Main Street, and Fryar Avenue/Zehnder Avenue intersections would operate at LOS F during the weekday PM peak hour for the Alternative 1B conditions. The City has a LOS F standard at the Traffic Avenue/Bridge Street/ Main Street and Alder Avenue/Main Street intersections. The Traffic Avenue/SR 410 WB Ramps/Thompson Street and Traffic Avenue/SR 410 EB Ramps intersections are anticipated to also operate at LOS F under the Alternative 1B conditions during the weekday PM peak hour. Improvements which would offset or reduce impacts associated with the Town Center Plan are discussed in the following chapter.

The Town Center Plan includes W Main Street as one-way eastbound, which would help reduce traffic volumes to and from this approach of the congested Traffic Avenue/Bridge Street/ Main Street intersection. Vehicles heading westbound would access development along Elizabeth, State and Harrison Streets reducing the concentration of traffic volumes along Traffic Avenue at any one intersection.

Non-Motorized Facilities

Figure 6 illustrates the future pedestrian system within the Town Center area. Sidewalks, walkways, and trails are integral parts of the pedestrian system. As documented in the Sumner Comprehensive Plan 2015, the City desires to have sidewalks on both sides of all City streets, unless special circumstances on topography make it cost prohibitive. The Public



Works Director will make the determination. Sidewalks should also be located along streets providing access to the downtown areas, schools, parks, shopping areas, office buildings, and the transit station and routes.

The Sumner Comprehensive Plan 2015 includes a project to construct a non-motorized overcrossing of SR 410 located south of the Town Center. The non-motorized crossing is anticipated to connect Sumner Avenue to the Rivergrove area. The overcrossing is an important pedestrian and bicyclist connection and helps link the southern part of the City to the shopping and residential areas of the downtown area. In addition, the overcrossing provides an alternate route for pedestrians to cross SR 410 rather than using the existing SR 162/Valley Avenue Bridge or bridges at the other interchanges.

As shown in the Sumner Comprehensive Plan 2015, the proposed bicycle system within the Town Center will generally be designated bicycle routes along the existing roadways due to the limited right-of-way to accommodate bicycle lanes.

Transit Service and Transportation Demand Management

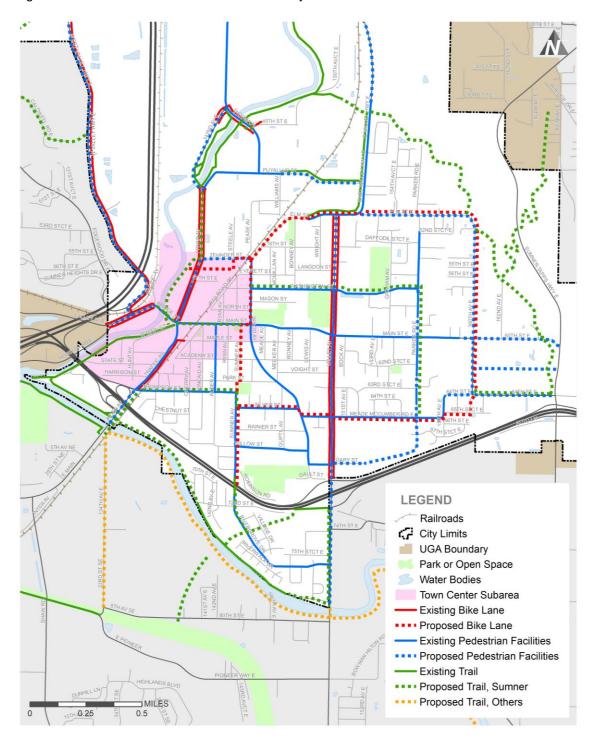
As documented in the Sumner Comprehensive Plan 2015, the City recognizes the importance of Transit and Transportation Demand Management (TDM) programs. In general, these programs build on regional programs with some refinements to reflect the specific needs of the City. Some reductions in future peak hour traffic generation were incorporated into the travel forecasting process to reflect the potential effect of regional and local transit/TDM programs. With additional density in the Town Center under the Action Alternatives, there would be an increase focus on transit, TDM and non-motorized that could result in further reduction in vehicular traffic.

The Comprehensive Plan includes projects for enhancing transit facilities and suggested service improvements. The facility improvements are consistent with Sound Transit's Express 2014 Service Implementation Plan and Sound Move. Successful use of transit and other HOV modes in the City is largely tied to the development of a regional system of HOV facilities and programs. The Washington State Highway System Plan: 2007-2026 includes southbound HOV lanes on SR 167 between 8th Street to 277th Street and SR 167/SR 509 to I-5 Stage One - New Freeway in the vicinity of the Town Center. In addition, the SR 167 Auburn to Puyallup HOT lane extension from 8th St E (Jovita Blvd) on SR 167 northbound lanes to 15th St SW in Auburn would improve mobility to and from the Town Center.

Parking

Parking pressures in the Town Center would likely increase with the Action Alternatives. The Town Center Plan includes policies to both increase parking supply as well as a develop a mixed-use environment and improve access via walking, biking and transit to reduce the need for vehicle ownership. On-street parking is planned along key facilities including Main Street, Bridge Street, Thompson Street, Kincaid Avenue and areas north of Main Street. The Plan also includes continuing to study parking so that short-, mid- and long-term parking strategies can be adjusted and refined to meet the parking needs.

Figure 6. Town Center Area Non-Motorized System



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Chapter 4. Recommended Transportation System

Network classifications are one of the key implementation tools establishing priorities for the transportation system. It is unreasonable and uneconomical to build each street to accommodate every function and user and so priorities must be set. The Functional Classification identifies whether mobility or access is a priority for each street. The Truck Route Classification identifies routes that should be designed to accommodate regular truck activity. The City already has functional and truck route classifications for the corridors within the Town Center and it is anticipated that these would not change with the Action Alternatives. The Travel Context Classification is another tool for identifying whether auto, bikes, or pedestrians are the priority for each street. With additional density within the Town Center, it is recommended that Travel Context Classifications be identified along key facilities.

The following describes the three Travel Context Classifications.

- Auto Priority Classification The Auto Priority class emphasizes automobile
 mobility over other modes. Pedestrian and bicycle facilities are focused on facilitating
 local access; however, overall non-motorized travel would be more comfortable on
 alternate parallel routes.
- **Bike/Ped Priority Classification** The Bike/Ped Priority class emphasizes bicycle and pedestrian mobility over other modes. Posted vehicle speeds would be lower and the number of vehicle lanes would be minimized.
- Shared Priority Classification The Shared Priority class represents corridors were vehicle mobility is balanced with nonmotorized travel comfort. This type of street has been referred to as a "complete street".

Based on the evaluation presented in this study and street type in the Town Center Plan, Figure 7 illustrates the recommended priorities for key corridors within the Town Center. Auto Priority is recommended along Traffic Avenue, which serve the highest levels of vehicular traffic within the Town Center. Bike/Ped Priority is recommended along Academy Street, Cherry Avenue, portions of State Street, and Harrison Street to facilitate access to the Sounder Station and the proposed activity nodes of the Town Center. These streets may provide treatments to eliminate or deemphasize vehicles use along the corridor. Shared Priority is recommended along Bridge Street/Main Street, portions of Maple Street, Alder Street, Ryan Avenue north of Main Street, and Kincaid Avenue facilitating access to activity nodes for all modes. Shared streets may accommodate various treatments such as parking, wider sidewalks and bicycle lanes (if right-of-way allows).

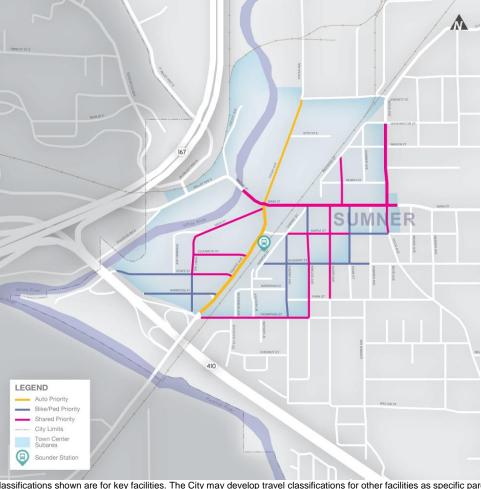


Figure 7. Town Center Recommended Travel Context Classifications

Travel Classifications shown are for key facilities. The City may develop travel classifications for other facilities as specific parcels are developed

Potential Other Improvements

The analysis of intersection operations with Alternative 1B identified potential impacts at the Wood Avenue/Main Street, Traffic Avenue/SR 410 WB Ramps/Thompson Street, and Traffic Avenue/SR 410 EB Ramps intersections. Mitigation may be needed at these intersections to facilitate vehicular traffic. In addition, mitigation measures to reduce the overall reliance on the auto mode and achieve the Town Center Plan vision of a network more reliant on non-motorized and transit modes would also be needed. Measures could include:

• TDM Strategies – As described previously, with additional density in the Town Center under the Action Alternatives, there could be further reduction in vehicular traffic with an increase in transit and non-motorized use. Consistent with policies in the Comprehensive Plan, employers in the Town Center could be encouraged to implement TDM programs. In addition, residential developers and building managers could also be encouraged to provide a TDM strategy for buildings such as commuter information, facilitation of rideshare, promotion of bikeshare, provision of vanpool/carpool spaces, and incentive programs such as transit passes. A 5 to 10 percent reduction in overall vehicular traffic in the study area would reduce delays at the study intersection and improve overall LOS.

- Non-Motorized Improvements The Town Center has a gridded network but there
 are sidewalks missing in some locations. As development occurs, required frontage
 improvements would help complete the network. Frontage improvements should
 consider the appropriate pedestrian and bicycle facilities based on the street and
 travel classifications. A trail is proposed along Thompson Street and a connection
 should be considered to the Sounder Station to improve last mile travel.
- Transit Improvements Transit service is currently limited in the Town Center and consistent with the Plan, the feasibility of a wheeled trolley system should continue to be explored. A trolley system would provide connectivity between West Sumner (west of Traffic Avenue) and the Winco and Fred Meyer area as well as to the Sounder Station. The purpose of the trolley would be to reduce dependence on auto and transport residents and visitors between the key areas of the Town Center. Improving transit provides capacity for moving more people in the transportation system compared to personal vehicles.
- LOS Policy Increasing capacity at intersections and along the roadway system
 may improve LOS for vehicles; however, it could create impacts for other modes. The
 City may desire to revisit LOS policies to have a more multimodal LOS that gives
 priority to other modes and considers connectivity of the pedestrian and bicycle
 network and/or minimizing barriers for non-auto modes. The LOS policy could be
 changed for just the Town Center or the City as a whole.
- Intelligent Transportation Systems (ITS) ITS improvements such as adaptive signal control (ASC) systems would improve traffic operations at intersections within the Town Center. Implementation of such strategies could result in an overall improvement of 10 to 15 percent.

Travel demand can be variable and unpredictable, which often outpaces the signal timing plans that are programmed every 3 to 5 years. This can lead to inefficient operation of the signalized intersections resulting in vehicle delays and congestion. ASC seeks to remediate this issue by adjusting signal timing in real-time based on measured vehicle demand. ASC adjusts when green lights start and end to accommodate the current traffic patterns to promote smooth flow and ease traffic congestion. The main benefits of ASC over the conventional time-of-day plans typically include:

- Automatically adapts to unexpected changes in traffic conditions.
- Reduces driver complaints and frustration by reducing travel times and increasing arrivals on green.
- Improves travel time reliability so commute times are consistent throughout the week.
- Reduces congestion and fuel consumption.
- Makes traffic signal operation proactive by monitoring and responding to gaps in performance.

Adaptive signal control encompasses the following types of traffic signal control operations:

- Traffic Responsive the system monitors detectors along the system corridor and implements pre-configured traffic signal timing plans based on user defined volume or occupancy (congestion) thresholds.
- Corridor Based Adaptive the system monitors detectors at each intersection and along the system corridor. The system automatically

optimizes cycles, offsets, and/or phase split times and implements the cycle-based patterns.

Grid-network Adaptive – the system operates in closely spaced, downtown like grid networks. These systems may use cycle-based optimization algorithms or flow based (no fixed cycle).

• Capacity Improvements -

- Traffic Avenue/Bridge Street/Main Street As described previously, converting W Main Street to one-way eastbound would help reduce some of the traffic demands at this intersection. This intersection is significantly over capacity consistent with the City's LOS F standard at this location. Various mitigation options were reviewed at this intersection including adding capacity and providing a roundabout. The inclusion of an additional eastbound left-turn lane, southbound right turn-lane, and conversion of the northbound right-lane into a through-right lane could reduce the overall intersection delay but the LOS would continue to be LOS F. Additionally, a roundabout was considered, which would still result in LOS F operations during the peak hours due to the high traffic volumes (unless triple lanes were provided); however, it would provide continuous flow at the intersection and operations during off-peak hours may be better than with a traffic signal.
- Alder Avenue/Main Street This intersection also has an LOS F standard; however, consideration could be given to installing a traffic signal. Signal warrants were evaluated and met for both the future 2035 No Action and Alternative 1B conditions. A traffic signal would reduce the overall delay at this location. The Town Center Plan includes parking along both Alder Avenue and Main Street and the current standard is LOS F. The City could consider a westbound left-turn lane with permitted/protected phasing and northbound right-turn lane with a permissive/overlap phasing to provide LOS D operations under future 2035 Alternative 1B conditions. Given the desire to improve walking and biking and to reduce vehicle use within the Town Center, priorities will need to be determined for each mode.
- Wood Avenue/Main Street Provision of northbound and southbound leftturn lanes would improve intersection operations to LOS D during the weekday PM peak hour under future 2035 conditions with Alternative 1B. In addition, consideration should be given to ensuring all sidewalk facilities are ADA compliant.
- Traffic Avenue/SR 410 WB Ramps/Thompson Street Provision of two additional southbound right-turn lanes with a permissive/overlap phasing would improve intersection operations to LOS D during the weekday PM peak hour under future 2035 conditions with Alternatives 1B. Additionally, based on operations, it is anticipated that the second southbound through lane may not be needed and could instead be utilized as one of the southbound right-turn lanes.
- Traffic Avenue/SR 410 EB Ramps Provision of an additional northbound left-turn lane and eastbound right-turn lane (for four total eastbound lanes) as well as permissive/overlap phasing for the eastbound right-turn would improve intersection operations at this intersection to LOS E during the weekday PM peak hour under future 2035 conditions with Alternatives 1B.
- Fryar Avenue/Zehnder Avenue Providing northbound and westbound rightturn lanes as well as an additional left turn (for a total of two) would decrease the delay; however, the intersection would continue to operate at LOS F during the weekday PM peak hour. Adding northbound and southbound

through lanes (for a total of two through lanes in each direction) would improve operations to LOS D.

Policy and Program Considerations

The analysis completed provides an understanding of the SEPA-related transportation impacts associated with development of the Town Center. As development occurs, it is likely that no additional transportation SEPA requirements would need to be addressed if the anticipated trip generation is within the bounds of the Alternatives evaluated. Individual development SEPA impacts would be mitigated through addressing required frontage improvements, payment of impacts fees, addressing site specific issues/transportation impacts, implementing TDM strategies or other measures consistent with the Town Center Plan, etc. If the City desires to use the Planned Action EIS as disclosure of transportation impacts for individual developments, consideration may need to be given to the following:

- Traffic Impact Fee With adoption of the Town Center Plan, the City should revisit
 the traffic impact fee to determine if the appropriate transportation improvements in
 the Town Center are included and if adjustments should be made to the Town Center
 Fees based on the land uses changes. The associated transportation improvement
 program (TIP) would also need to be updated.
- Trip Bank The evaluation of the Alternatives considers up to 3,799 weekday PM
 peak hour trips. The City should consider developing a trip bank system such that as
 development occurs there is a check to ensure that the proposal is consistent with
 the Town Center Plan. If development occurs beyond what is envision with the
 Alternatives, then additional study and mitigation may be needed.



Highway Capacity Manual 2010

Signalized intersection level of service (LOS) is defined in terms of a weighted average control delay for the entire intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control as well as provides a surrogate measure for driver discomfort and fuel consumption. Signalized intersection LOS is stated in terms of average control delay per vehicle (in seconds) during a specified time period (e.g., weekday PM peak hour). Control delay is a complex measure based on many variables, including signal phasing and coordination (i.e., progression of movements through the intersection and along the corridor), signal cycle length, and traffic volumes with respect to intersection capacity and resulting queues. Table 1 summarizes the LOS criteria for signalized intersections, as described in the *Highway Capacity Manual 2010* (Transportation Research Board, 2010).

Table 1. Level of	Service Criteria for Signa	lized Intersections
Level of Service	Average Control Delay (seconds/vehicle)	General Description
A	≤10	Free Flow
В	>10 – 20	Stable Flow (slight delays)
С	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F ¹	>80	Forced flow (congested and queues fail to clear)

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

Unsignalized intersection LOS criteria can be further reduced into two intersection types: all-way stop and two-way stop control. All-way stop control intersection LOS is expressed in terms of the weighted average control delay of the overall intersection or by approach. Two-way stop-controlled intersection LOS is defined in terms of the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns. This approach is because major-street through vehicles are assumed to experience zero delay, a weighted average of all movements results in very low overall average delay, and this calculated low delay could mask deficiencies of minor movements. Table 2 shows LOS criteria for unsignalized intersections.

ole 2. Level of Service Criteria for Unsignalized Intersections					
Level of Service	Average Control Delay (seconds/vehicle)				
A	0 – 10				
В	>10 – 15				
С	>15 – 25				
D	>25 – 35				
E	>35 – 50				
F ¹	>50				

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

^{1.} If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0 LOS F is assigned to the individual lane group. LOS for overall approach or intersection is determined solely by the control delay.

If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.

Highway Capacity Manual, 2000

Signalized intersection level of service (LOS) is defined in terms of the average total vehicle delay of all movements through an intersection. Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time. Specifically, LOS criteria are stated in terms of average delay per vehicle during a specified time period (for example, the PM peak hour). Vehicle delay is a complex measure based on many variables, including signal phasing (i.e., progression of movements through the intersection), signal cycle length, and traffic volumes with respect to intersection capacity. Table 1 shows LOS criteria for signalized intersections, as described in the *Highway Capacity Manual* (Transportation Research Board, Special Report 209, 2000).

Table 1. Le	vel of Service Criteria fo	r Signalized Intersections
Level of Service	Average Control Delay (sec/veh)	General Description (Signalized Intersections)
А	≤10	Free Flow
В	>10 - 20	Stable Flow (slight delays)
С	>20 - 35	Stable flow (acceptable delays)
D	>35 - 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 - 80	Unstable flow (intolerable delay)
F	>80	Forced flow (jammed)
Source: Highway Cap	pacity Manual, Transportation Res	search Board, Special Report 209, 2000.

Unsignalized intersection LOS criteria can be further reduced into two intersection types: all-way stop-controlled and two-way stop-controlled. All-way, stop-controlled intersection LOS is expressed in terms of the average vehicle delay of all of the movements, much like that of a signalized intersection. Two-way, stop-controlled intersection LOS is defined in terms of the average vehicle delay of an individual movement(s). This is because the performance of a two-way, stop-controlled intersection is more closely reflected in terms of its individual movements, rather than its performance overall. For this reason, LOS for a two-way, stop-controlled intersection is defined in terms of its individual movements. With this in mind, total average vehicle delay (i.e., average delay of all movements) for a two-way, stop-controlled intersection should be viewed with discretion. Table 2 shows LOS criteria for unsignalized intersections (both all-way and two-way, stop-controlled).

Table 2.		teria for Unsignalized Intersections
	Level of Service	Average Control Delay (sec/veh)
	Α	0 - 10
	В	>10 - 15
	С	>15 - 25
	D	>25 - 35
	E	>35 - 50
	F	>50
Source: High	hway Capacity Manual, Transpor	rtation Research Board, Special Report 209, 2000.

HCM 2010 Signalized Intersection Summary Summary 17: Traffic Avenue/Fryar Avenue & Bridge Street/Main Street Future (2035) Alternative 1 - Density Option B

	۶	→	•	•	←	•	1	†	/	/	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	•	7	ሻ	₽		7	+	7	7	∱ ⊅	
Traffic Volume (veh/h)	890	935	285	170	580	95	380	1770	75	100	1625	305
Future Volume (veh/h)	890	935	285	170	580	95	380	1770	75	100	1625	305
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	918	964	294	175	598	98	392	1825	77	103	1675	314
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	3	3	3	2	2	2
Cap, veh/h	315	629	529	130	363	59	176	706	706	104	1019	185
Arrive On Green	0.18	0.33	0.33	0.07	0.23	0.23	0.10	0.38	0.38	0.06	0.34	0.34
Sat Flow, veh/h	1792	1881	1580	1792	1570	257	1757	1845	1547	1774	2986	541
Grp Volume(v), veh/h	918	964	294	175	0	696	392	1825	77	103	969	1020
Grp Sat Flow(s),veh/h/ln	1792	1881	1580	1792	0	1827	1757	1845	1547	1774	1770	1758
Q Serve(g_s), s	25.5	48.5	22.1	10.5	0.0	33.5	14.5	55.5	2.8	8.4	49.5	49.5
Cycle Q Clear(g_c), s	25.5	48.5	22.1	10.5	0.0	33.5	14.5	55.5	2.8	8.4	49.5	49.5
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	315	629	529	130	0	422	176	706	706	104	604	600
V/C Ratio(X)	2.91	1.53	0.56	1.35	0.00	1.65	2.23	2.58	0.11	0.99	1.60	1.70
Avail Cap(c_a), veh/h	315	629	529	130	0	422	176	706	706	104	604	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.8	48.3	39.5	67.3	0.0	55.8	65.2	44.8	11.3	68.2	47.8	47.8
Incr Delay (d2), s/veh	869.7	247.4	1.3	199.3	0.0	302.5	572.1	717.3	0.1	85.0	279.5	322.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	88.7	68.4	9.8	12.4	0.0	52.3	34.9	168.9	1.2	6.6	71.1	77.7
LnGrp Delay(d),s/veh	929.5	295.6	40.7	266.5	0.0	358.2	637.3	762.0	11.4	153.3	327.3	369.8
LnGrp LOS	F	F	D	F		F	F	F	В	F	F	F
Approach Vol, veh/h		2176			871			2294			2092	
Approach Delay, s/veh		528.6			339.8			715.5			339.4	
Approach LOS		F			F			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	39.0	14.0	61.0	16.0	54.0	20.0	55.0				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	25.5	33.5	8.5	55.5	10.5	48.5	14.5	49.5				
Max Q Clear Time (g_c+l1), s	27.5	35.5	10.4	57.5	12.5	50.5	16.5	51.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			510.9									
HCM 2010 Cm Delay			510.9 F									
Notes												

Transpo Group Synchro 9 Report

Intersection						
Int Delay, s/veh	0.5					
	WBL	WBR	NBT	NBR	SBL	SBT
	WDL				ODL	
Lane Configurations	0	7	^	7	40	414
Traffic Vol, veh/h	0	45	2190	45		2015
Future Vol, veh/h	0	45	2190	45	40	2015
Conflicting Peds, #/hr	0	14	0	9	9	0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	-	0	-	150	-	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	5	5	3	3
Mvmt Flow	0	46	2258	46	41	2077
Major/Minor M	inor1	_	Major1		Major2	
Conflicting Flow All	-	1152	0	0	2267	0
Stage 1		- 1152	-	U	2201	-
Stage 2	-	-	-	-		-
	_	6.9	-	-	4.16	
Critical Hdwy	-		-	-	4.10	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	2.23	-
Pot Cap-1 Maneuver	0	194	-	-	219	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		4	-	-		-
Mov Cap-1 Maneuver	-	190	-	-	216	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB		NB		SB	
	30		0		0.5	
HCM LOS	30 D		U		0.5	
HCM LOS	U					
Minor Lane/Major Mvmt		NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		_	-	190	216	-
HCM Lane V/C Ratio		-	-		0.191	-
HCM Control Delay (s)		-	-	30	25.6	0
HCM Lane LOS		-	-	D	D	Α
HCM 95th %tile Q(veh)		-	-	0.9	0.7	-
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						

Transpo Group Synchro 9 Report

Number 3 8 18 7 4 14 1 6 16 5 2 12		۶	-	•	•	←	•	•	†	<i>></i>	\	ļ	✓
Traffic Volume (velvhr) 210 40 205 270 130 20 610 2040 755 10 960 1135 Number 3 8 18 7 4 14 1 6 16 16 5 2 12 Initial Q (2b), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (velvih) 210 40 205 270 130 20 610 2040 755 10 960 1135 Number 3 8 18 7 4 14 1 6 16 16 5 2 12 11 initial Q (2b), velvih 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Configurations	ň	†	7	Ţ	£		ħ	ħβ		ň	∱ ∱	
Number 3 8 18 7 4 14 1 6 6 16 5 2 112 Initial Q (Qb), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Traffic Volume (veh/h)	210	40	205	270		20	610		755	10		1135
Initial Q (Ob), veh	Future Volume (veh/h)	210	40	205	270	130	20	610	2040	755	10	960	1135
Ped-Bike Adji(A_pbT)	Number	3	8	18	7	4	14	1	6	16	5	2	12
Parking Bus, Aci	Initial Q (Qb), veh	0	0	0	0	0		0	0	0	0	0	0
Adj Sat Flow, vehi/hin 1845 1845 1845 1845 1863 1863 1976 1810 1882 1976 1845 1845 1900 Adj Flow Rate, vehi/h 219 42 0 281 135 0 635 2125 0 10 1000 1182 Adj No. of Lanes 1 1 1 1 1 1 0 1 1 2 0 1 1 2 0 1 2 0 Peak Hour Factor 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96	Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Adj Flow Rate, veh/h Adj Flow Rate, veh/h Adj Roo of Lanes 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Parking Bus, Adj		1.00		1.00	1.00		1.00				1.00	
Adj No. of Lanes	Adj Sat Flow, veh/h/ln			1845	1863	1863	1976	1810		1976			1900
Peak Hour Factor	Adj Flow Rate, veh/h	219	42	0	281	135	0	635	2125	0	10		
Percent Heavy Veh, % 3 3 3 2 2 2 2 5 5 5 3 3 3 3 Cap, veh/h 182 91 443 255 129 0 450 2599 0 125 881 787 Arrive On Green 0.08 0.05 0.00 0.10 0.07 0.00 0.23 0.73 0.00 0.01 0.50 0.50 0.50 0.50 0.50 0.50	Adj No. of Lanes												
Cap, veh/h Arrive On Green 182 91 443 255 129 0 450 2599 0 125 881 787 Arrive On Green 0.08 0.05 0.00 0.10 0.07 0.00 0.23 0.73 0.00 0.01 0.50 0.05 0.55 Sat Flow, veh/h 1757 1845 1568 1774 1863 0 1723 3670 0 1757 1752 1565 Grp Volume(v), veh/h 1757 1845 1568 1774 1863 0 1723 1788 0 1752 1788 0 1757 1752 1565 Grp Volume(v), veh/h 1757 1845 1568 1774 1863 0 1723 1788 0 1757 1752 1752 1752 1752 1752 1752 1752	Peak Hour Factor		0.96				0.96	0.96	0.96	0.96	0.96	0.96	
Arrive On Green	Percent Heavy Veh, %						2			5	3		
Sat Flow, veh/h 1757 1845 1568 1774 1863 0 1723 3670 0 1757 1752 1565 Grp Volume(v), veh/h 219 42 0 281 135 0 635 2125 0 10 1000 1182 Grp Sat Flow(s), veh/h/hn 1757 1845 1568 1774 1863 0 1723 1788 0 1757 1752 1565 Q Serve(g. s), s 11.4 3.3 0.0 14.4 10.4 0.0 35.0 60.0 0.0 0.4 75.4 75.4 Cycle Q Clear(g. c), s 11.4 3.3 0.0 14.4 10.4 0.0 35.0 60.0 0.0 0.4 75.4 75.4 Prop In Lane 1.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Cap, veh/h		91		255			450		0		881	
Grp Volume(v), veh/h Grp Sat Flow(s), veh/h/ln 1757 1845 1568 1774 1863 0 1773 1788 0 1757 1752 1565 Q Serve(g_s), s 11.4 3.3 0.0 14.4 10.4 0.0 35.0 60.0 0.0 0.0 0.4 75.4 75.4 Cycle Q Clear(g_c), s 11.4 3.3 0.0 14.4 10.4 0.0 35.0 60.0 0.0 0.0 0.4 75.4 75.4 Prop In Lane 1.00 1.00 1.00 1.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 1	Arrive On Green	0.08	0.05	0.00	0.10	0.07	0.00	0.23	0.73	0.00	0.01	0.50	0.50
Grp Sat Flow(s), veh/h/ln	Sat Flow, veh/h	1757	1845	1568	1774	1863	0	1723	3670	0	1757	1752	1565
Q Serve(g_s), s	Grp Volume(v), veh/h	219	42	0	281	135	0	635	2125	0	10	1000	1182
Cycle Q Člear(g_c), s 11.4 3.3 0.0 14.4 10.4 0.0 35.0 60.0 0.0 0.4 75.4 75.4 Prop In Lane 1.00 1.00 1.00 0.00 1.00 0.00 1.00	Grp Sat Flow(s), veh/h/ln	1757	1845	1568	1774	1863	0	1723	1788	0	1757	1752	1565
Cycle Q Clear(g_c), s	Q Serve(g_s), s	11.4	3.3	0.0	14.4	10.4	0.0	35.0	60.0	0.0	0.4	75.4	75.4
Prop In Lane 1.00		11.4	3.3	0.0	14.4	10.4	0.0	35.0	60.0	0.0	0.4	75.4	75.4
V/C Ratio(X) 1.21 0.46 0.00 1.10 1.05 0.00 1.41 0.82 0.00 0.08 1.14 1.50 Avail Cap(c_a), veh/h 182 91 443 255 129 0 450 2599 0 156 881 787 HCM Platoon Ratio 1.00<		1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Avail Cap(c_a), veh/h	Lane Grp Cap(c), veh/h	182	91	443	255	129	0	450	2599	0	125	881	787
HCM Platoon Ratio		1.21	0.46	0.00	1.10	1.05	0.00	1.41	0.82	0.00	0.08	1.14	1.50
Upstream Filter(I) 1.00 1.00 0.00 1.00 1.00 0.00 1.00 0.00 0.09 0.09 0.00 1.00 1.00 1.00 Uniform Delay (d), s/veh 65.4 69.4 0.0 64.7 69.8 0.0 51.6 13.8 0.0 20.4 37.3 37.3 Incr Delay (d2), s/veh 133.3 3.6 0.0 86.0 91.8 0.0 186.1 0.3 0.0 0.3 74.8 232.9 Initial Q Delay(d3),s/veh 0.0	Avail Cap(c_a), veh/h	182	91	443	255	129	0	450	2599	0	156	881	787
Uniform Delay (d), s/veh 65.4 69.4 0.0 64.7 69.8 0.0 51.6 13.8 0.0 20.4 37.3 37.3 lncr Delay (d2), s/veh 133.3 3.6 0.0 86.0 91.8 0.0 186.1 0.3 0.0 0.3 74.8 232.9 lnitial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incr Delay (d2), s/veh	Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.09	0.09	0.00	1.00	1.00	1.00
Initial Q Delay(d3),s/veh 0.0 <td>Uniform Delay (d), s/veh</td> <td>65.4</td> <td>69.4</td> <td>0.0</td> <td>64.7</td> <td>69.8</td> <td>0.0</td> <td>51.6</td> <td>13.8</td> <td>0.0</td> <td>20.4</td> <td>37.3</td> <td>37.3</td>	Uniform Delay (d), s/veh	65.4	69.4	0.0	64.7	69.8	0.0	51.6	13.8	0.0	20.4	37.3	37.3
%ile BackOfQ(55%),veh/ln 8.7 1.8 0.0 16.1 8.6 0.0 41.9 29.3 0.0 0.2 54.5 83.2 LnGrp Delay(d),s/veh 198.7 73.0 0.0 150.7 162.0 0.0 237.7 14.1 0.0 20.7 112.1 270.2 LnGrp LOS F E F F F F F B C F B C F F F F Approach Vol, veh/h 261 416 2760 2192 Approach Delay, s/veh 178.4 154.4 65.5 196.9 Approach LOS F F F F F F F F F F F F F F F F F F F	Incr Delay (d2), s/veh	133.3	3.6	0.0	86.0	91.8	0.0	186.1	0.3	0.0	0.3	74.8	232.9
LnGrp Delay(d),s/veh 198.7 73.0 0.0 150.7 162.0 0.0 237.7 14.1 0.0 20.7 112.1 270.2 LnGrp LOS F E F F F B C F F Approach Vol, veh/h 261 416 2760 2192 Approach Delay, s/veh 178.4 154.4 65.5 196.9 Approach LOS F F E E F Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.6 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 5.3	Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS F E F F F B C F F Approach Vol, veh/h 261 416 2760 2192 Approach Delay, s/veh 178.4 154.4 65.5 196.9 Approach LOS F F E F Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.6 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 14.4 7.4 Max Q Clear Time (g_c+I1), s 37.0 77.4 13.4 12.4 2.4 62.0 16.4 5.3 Green Ext Time (p_c), s 0.0 0.0	%ile BackOfQ(50%),veh/ln	8.7	1.8	0.0	16.1	8.6	0.0	41.9		0.0	0.2		83.2
Approach Vol, veh/h 261 416 2760 2192 Approach Delay, s/veh 178.4 154.4 65.5 196.9 Approach LOS F F E F F F E F F Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.0 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 14.4 7.4 Max Q Clear Time (g_c+I1), s 37.0 77.4 13.4 12.4 2.4 62.0 16.4 5.3 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 41.3 0.0 0.1 Intersection Summary HCM 201		198.7	73.0	0.0	150.7	162.0	0.0	237.7	14.1	0.0	20.7	112.1	270.2
Approach Delay, s/veh Approach LOS F F F E F F F F F F F F F	LnGrp LOS	F	Е		F	F		F	В		С	F	F
Approach Delay, s/veh 178.4 154.4 65.5 196.9 Approach LOS F F E F Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.0 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 14.4 7.4 Max Q Clear Time (g_c+I1), s 37.0 77.4 13.4 12.4 2.4 62.0 16.4 5.3 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 41.3 0.0 0.1 Intersection Summary HCM 2010 Ctrl Delay 128.5	Approach Vol, veh/h		261			416			2760			2192	
Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.6 4.0 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 14.4 7.4 Max Q Clear Time (g_c+I1), s 37.0 77.4 13.4 12.4 2.4 62.0 16.4 5.3 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 0.0 41.3 0.0 0.1 Intersection Summary HCM 2010 Ctrl Delay 128.5			178.4			154.4			65.5			196.9	
Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.6 4.0 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 14.4 7.4 Max Q Clear Time (g_c+I1), s 37.0 77.4 13.4 12.4 2.4 62.0 16.4 5.3 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 41.3 0.0 0.1 Intersection Summary HCM 2010 Ctrl Delay 128.5	Approach LOS		F			F			Е			F	
Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 14.4 7.4 Max Q Clear Time (g_c+I1), s 37.0 77.4 13.4 12.4 2.4 62.0 16.4 5.3 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 0.0 41.3 0.0 0.1 Intersection Summary HCM 2010 Ctrl Delay 128.5	Timer	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s 39.0 80.0 16.0 15.0 5.4 113.6 19.0 12.0 Change Period (Y+Rc), s 4.0 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 Max Green Setting (Gmax), s 35.0 75.4 11.4 10.4 4.0 106.4 14.4 7.4 Max Q Clear Time (g_c+I1), s 37.0 77.4 13.4 12.4 2.4 62.0 16.4 5.3 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 0.0 41.3 0.0 0.1 Intersection Summary HCM 2010 Ctrl Delay 128.5	Assigned Phs	1	2	3	4	5	6	7	8				
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Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 41.3 0.0 0.1 Intersection Summary HCM 2010 Ctrl Delay 128.5				13.4		2.4	62.0	16.4	5.3				
HCM 2010 Ctrl Delay 128.5				0.0	0.0	0.0	41.3						
,	Intersection Summary												
HCM 2010 LOS F	HCM 2010 Ctrl Delay			128.5		 _			 _				
	HCM 2010 LOS			F									

Transpo Group Synchro 9 Report

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻሻ	7	ች	^	∱ }	
Traffic Volume (veh/h)	310	565	1165	3095	1200	235
Future Volume (veh/h)	310	565	1165	3095	1200	235
Number	7	14	1	6	2	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	U	U	0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1863	1900
Adj Flow Rate, veh/h	301	603	1201	3191	1237	242
Adj No. of Lanes	1	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	2	2
Cap, veh/h	293	523	798	2687	904	175
Arrive On Green	0.17	0.17	0.43	0.77	0.10	0.10
Sat Flow, veh/h	1757	3136	1757	3597	3040	571
Grp Volume(v), veh/h	301	603	1201	3191	738	741
Grp Sat Flow(s), veh/h/lr		1568	1757	1752	1770	1747
Q Serve(g_s), s	25.0	25.0	64.0	115.0	46.0	46.0
Cycle Q Clear(g_c), s	25.0	25.0		115.0	46.0	46.0
				115.0	40.0	
Prop In Lane	1.00	1.00	1.00	0007	540	0.33
Lane Grp Cap(c), veh/h		523	798	2687	543	536
V/C Ratio(X)	1.03	1.15	1.51	1.19	1.36	1.38
Avail Cap(c_a), veh/h	293	523	798	2687	543	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.09	0.09
Uniform Delay (d), s/veh	h 62.5	62.5	41.1	17.5	67.4	67.4
Incr Delay (d2), s/veh	60.0	89.2		88.4	163.0	173.4
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0
• ,		17.3	84.9	87.5	47.1	48.1
%ile BackOfQ(50%),veh						
LnGrp Delay(d),s/veh			275.2	105.9	230.4	240.8
LnGrp LOS	F	F	F	<u> </u>	<u> </u>	F
Approach Vol, veh/h	904			4392	1479	
Approach Delay, s/veh	142.0			152.2	235.6	
Approach LOS	F			F	F	
Timer	1	2	3	4	5	6
	1		J		5	
Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc)		51.0		30.0		120.0
Change Period (Y+Rc),		5.0		5.0		5.0
Max Green Setting (Gm		46.0		25.0		115.0
Max Q Clear Time (g_c-	+166,0s	48.0		27.0		117.0
Green Ext Time (p_c), s	s 0.0	0.0		0.0		0.0
Internación Curanan						
Intersection Summary			100 1			
HCM 2010 Ctrl Delay			169.1			
HCM 2010 LOS			F			
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0' 73' Stc 42 11 30 43 0.79 8.30 Ye	% 9 50 10 10 10 10 10 10 10 10 10 10 10 10 10	92% 8% Stop 1105 0 1020 85 1139 1 .031 .186 Yes 513	19% 81% 0% Stop 800 155 645 0 825 1 1.49 7.909 Yes 470		
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Transpo Group Synchro 9 Report

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nitial Q (Qb), veh	Number												
Ped-Bike Adj(A_pbT) 1.00													
Parking Bus, Adj													
Adj Sat Flow, vehi/h/ln 1881 1881 1900 1881 1881 1900 1900 1900			1.00			1.00			1.00			1.00	
Adj Row Rate, veh/h 280 866 204 5 548 102 113 129 27 280 269 134 Adj No of Lanes 1 1 0 0 1 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 0 1													
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Change Period (Y+Rc), s 4.0 4.0 4.0 4.0 4.0 4.0 4.0 Max Green Setting (Gmax), s 59.0 4.0 75.0 59.0 23.0 56.0 Max Q Clear Time (g_c+l1), s 61.0 2.4 79.6 61.0 25.0 54.9 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 0.0 0.4 Max Green Summary HCM 2010 Ctrl Delay 224.9	Phs Duration (G+Y+Rc), s												
Max Green Setting (Gmax), s 59.0 4.0 75.0 59.0 23.0 56.0 Max Q Clear Time (g_c+l1), s 61.0 2.4 79.6 61.0 25.0 54.9 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 0.4 Intersection Summary HCM 2010 Ctrl Delay 224.9													
Max Q Clear Time (g_c+I1), s 61.0 2.4 79.6 61.0 25.0 54.9 Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 0.4 Intersection Summary HCM 2010 Ctrl Delay 224.9), s											
Green Ext Time (p_c), s 0.0 0.0 0.0 0.0 0.4 Intersection Summary HCM 2010 Ctrl Delay 224.9	• • • • • • • • • • • • • • • • • • • •												
ntersection Summary HCM 2010 Ctrl Delay 224.9		,, 5											
HCM 2010 Ctrl Delay 224.9			3.0	3.0	3.0		3.0	3.0	J				
•													
HCM 2010 LOS F													
	HCM 2010 LOS			F									

	1	•	†	/	/	↓			
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations	*/		1		ሻ	↑			
Traffic Volume (veh/h)	280	35	2130	330	300	1570			
Future Volume (veh/h)	280	35	2130	330	300	1570			
Number	3	18	2	12	1	6			
Initial Q (Qb), veh	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1900	1776	1900	1845	1845			
Adj Flow Rate, veh/h	301	38	2290	355	323	1688			
Adj No. of Lanes	0	0	1	0	1	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %		0.00	7	7	3	3			
Cap, veh/h	225	28	1174	182	65	1442			
Arrive On Green	0.15	0.15	0.78	0.78	0.78	0.78			
Sat Flow, veh/h	1549	196	1502	233	112	1845			
Grp Volume(v), veh/h	340	0	0	2645	323	1688			
Grp Sat Flow(s), veh/h/l		0	0	1734	112	1845			
	16.0	0.0	0.0	86.0	0.0	86.0			
Q Serve(g_s), s		0.0	0.0		86.0	86.0			
Cycle Q Clear(g_c), s	16.0		0.0	86.0		0.00			
Prop In Lane	0.89	0.11	^	0.13	1.00	1440			
Lane Grp Cap(c), veh/h		0	0	1356	65	1442			
V/C Ratio(X)	1.34	0.00	0.00	1.95	4.93	1.17			
Avail Cap(c_a), veh/h	255	0	0	1356	65	1442			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/ve		0.0	0.0	12.0	55.0	12.0			
Incr Delay (d2), s/veh		0.0	0.0	430.51		84.5			
Initial Q Delay(d3),s/ve		0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),ve		0.0	0.0	202.1	34.8	76.3			
LnGrp Delay(d),s/veh		0.0	0.0	442.51		96.5			
LnGrp LOS	F			F	F	F			
Approach Vol, veh/h	340		2645			2011			
Approach Delay, s/veh	222.3		442.5			379.6			
Approach LOS	F		F			F			
Timer	1	2	3	4	5	6	7	8	
Assigned Phs		2				6		8	
Phs Duration (G+Y+Ro	e), s	90.0				90.0		20.0	
Change Period (Y+Rc)	, .	4.0				4.0		4.0	
Max Green Setting (Gr		86.0				86.0		16.0	
Max Q Clear Time (g_c		88.0				88.0		18.0	
Green Ext Time (p_c),		0.0				0.0		0.0	
Intersection Summary									
HCM 2010 Ctrl Delay			402.2						
HCM 2010 Cur Delay			402.2						
Notes									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	↑	7	ሻ	₽		ሻ	∱ ∱		ሻ	^	7
Traffic Volume (veh/h)	890	935	285	170	580	95	380	1770	75	100	1625	305
Future Volume (veh/h)	890	935	285	170	580	95	380	1770	75	100	1625	305
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	918	964	294	175	598	98	392	1825	77	103	1675	314
Adj No. of Lanes	2	1	1	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	3	3	3	2	2	2
Cap, veh/h	467	694	777	117	472	77	212	1264	53	80	1037	669
Arrive On Green	0.13	0.37	0.37	0.07	0.30	0.30	0.12	0.37	0.37	0.04	0.29	0.29
Sat Flow, veh/h	3476	1881	1582	1792	1574	258	1757	3426	144	1774	3539	1556
Grp Volume(v), veh/h	918	964	294	175	0	696	392	927	975	103	1675	314
Grp Sat Flow(s),veh/h/ln	1738	1881	1582	1792	0	1832	1757	1752	1817	1774	1770	1556
Q Serve(g_s), s	19.5	53.5	16.9	9.5	0.0	43.5	17.5	53.5	53.5	6.5	42.5	21.0
Cycle Q Clear(g_c), s	19.5	53.5	16.9	9.5	0.0	43.5	17.5	53.5	53.5	6.5	42.5	21.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	467	694	777	117	0	550	212	647	670	80	1037	669
V/C Ratio(X)	1.96	1.39	0.38	1.49	0.00	1.27	1.85	1.43	1.45	1.30	1.61	0.47
Avail Cap(c_a), veh/h	467	694	777	117	0	550	212	647	670	80	1037	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.8	45.7	23.2	67.8	0.0	50.8	63.8	45.7	45.8	69.3	51.3	29.8
Incr Delay (d2), s/veh	441.5	183.8	0.3	260.4	0.0	133.9	399.6	204.1	212.5	199.1	281.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	38.0	63.2	7.4	13.2	0.0	42.4	32.0	62.5	66.4	7.6	61.2	9.1
LnGrp Delay(d),s/veh	504.2	229.6	23.5	328.1	0.0	184.7	463.4	249.9	258.3	268.3	332.3	30.3
LnGrp LOS	F	F	С	F		F	F	F	F	F	F	С
Approach Vol, veh/h		2176			871			2294			2092	
Approach Delay, s/veh		317.6			213.5			289.9			283.9	
Approach LOS		F			F			F			F	
•			2	_		0	7					
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	49.0	12.0	59.0	15.0	59.0	23.0	48.0				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	19.5	43.5	6.5	53.5	9.5	53.5	17.5	42.5				
Max Q Clear Time (g_c+l1), s	21.5	45.5	8.5	55.5	11.5	55.5	19.5	44.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			287.4									
HCM 2010 LOS			F									
Notes												

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WRI	W/RP	NRT	NRP	SRI	SBT
VVDL				ODL	
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WB		NB		SB	
WB 30		NB 0		SB 0.5	
30		NB 0		0.5	
30	NDT	0	MDI 4	0.5	ODT
30	NBT	0 NBRV	VBLn1	0.5 SBL	SBT
30	-	0 NBRV	190	0.5 SBL 216	-
30	-	0 NBRV	190 0.244	0.5 SBL 216 0.191	-
30	- - -	NBRV - -	190 0.244 30	0.5 SBL 216 0.191 25.6	- - 0
30	-	0 NBRV	190 0.244	0.5 SBL 216 0.191	-
#	WBL	WBL WBR 0 45 0 45 0 14 Stop Stop - None - 0 97 97 0 0 - 97 97 - 1152 6.9 3.3 0 194 0 190	WBL WBR NBT 0 45 2190 0 45 2190 0 14 0 Stop Stop Free - None - 0 - 0 0 - 0 97 97 97 0 0 5 0 46 2258 - -	WBL WBR NBT NBR	WBL WBR NBT NBR SBL Image: Control of the co

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	†	7	ሻ	₽		7	ተ ኈ		ሻ	†	77
Traffic Volume (veh/h)	210	40	205	270	130	20	610	2040	755	10	960	1135
Future Volume (veh/h)	210	40	205	270	130	20	610	2040	755	10	960	1135
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1863	1863	1976	1810	1882	1976	1845	1845	1845
Adj Flow Rate, veh/h	219	42	0	281	135	0	635	2125	0	10	1000	1182
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	2	2	2	5	5	5	3	3	3
Cap, veh/h	228	79	650	277	129	0	689	2990	0	98	866	1576
Arrive On Green	0.10	0.04	0.00	0.13	0.07	0.00	0.37	0.84	0.00	0.01	0.47	0.47
Sat Flow, veh/h	1757	1845	1568	1774	1863	0	1723	3670	0	1757	1845	2754
Grp Volume(v), veh/h	219	42	0	281	135	0	635	2125	0	10	1000	1182
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1774	1863	0	1723	1788	0	1757	1845	1377
Q Serve(g_s), s	14.5	3.3	0.0	19.4	10.4	0.0	48.3	36.0	0.0	0.5	70.4	32.8
Cycle Q Clear(g_c), s	14.5	3.3	0.0	19.4	10.4	0.0	48.3	36.0	0.0	0.5	70.4	32.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	79	650	277	129	0	689	2990	0	98	866	1576
V/C Ratio(X)	0.96	0.53	0.00	1.01	1.05	0.00	0.92	0.71	0.00	0.10	1.16	0.75
Avail Cap(c_a), veh/h	228	79	650	277	129	0	689	2990	0	129	866	1576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.09	0.09	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.3	70.3	0.0	66.9	69.8	0.0	42.9	5.0	0.0	27.9	39.8	24.1
Incr Delay (d2), s/veh	47.9	6.8	0.0	57.3	91.8	0.0	2.3	0.1	0.0	0.4	82.8	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	1.9	0.0	15.8	8.6	0.0	25.3	17.5	0.0	0.2	55.8	13.1
LnGrp Delay(d),s/veh	113.2	77.2	0.0	124.3	162.0	0.0	45.2	5.1	0.0	28.3	122.6	27.4
LnGrp LOS	F	E		F	F		D	A		С	F 0400	С
Approach Vol, veh/h		261			416			2760			2192	
Approach Delay, s/veh		107.4			136.5			14.3			70.8	
Approach LOS		F			F			В			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	61.0	75.0	20.0	15.0	5.4	130.6	24.0	11.0				
Change Period (Y+Rc), s	4.6	* 4.6	4.6	4.6	4.0	4.6	4.6	4.6				
Max Green Setting (Gmax), s	36.0	* 70	15.4	10.4	4.0	102.4	19.4	6.4				
Max Q Clear Time (g_c+I1), s	50.3	72.4	16.5	12.4	2.5	38.0	21.4	5.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	32.0	0.0	0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			49.7									
HCM 2010 LOS			D									
Notes												

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Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	ሻሻ	77	ሻሻ	^	†		
Traffic Volume (veh/h)	310	565	1165	3095	1200	235	
Future Volume (veh/h)	310	565	1165	3095	1200	235	
Number	7	14	1	6	2	12	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	U	U	0.98	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
	1845	1845	1845	1845	1863	1900	
-						242	
Adj Flow Rate, veh/h	320	582	1201	3191	1237		
Adj No. of Lanes	2	2	2	2	2	0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	
Percent Heavy Veh, %	3	3	3	3	2	2	
Cap, veh/h	432	1288	1255	2827	1277	247	
Arrive On Green	0.13	0.13	0.34	0.81	0.14	0.14	
Sat Flow, veh/h	3408	2760	3408	3597	3040	571	
Grp Volume(v), veh/h	320	582	1201	3191	738	741	
Grp Sat Flow(s),veh/h/ln		1380	1704	1752	1770	1748	
Q Serve(g_s), s	13.6	0.0	47.3	121.0	62.2	63.4	
Cycle Q Clear(g_c), s	13.6	0.0	47.3	121.0	62.2	63.4	
Prop In Lane	1.00	1.00	1.00	121.0	02.2	0.33	
Lane Grp Cap(c), veh/h		1288	1255	2827	767	757	
		0.45					
V/C Ratio(X)	0.74		0.96	1.13	0.96	0.98	
Avail Cap(c_a), veh/h	568	1398	1255	2827	767	757	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.09	0.09	
Uniform Delay (d), s/veh	63.1	27.0	46.4	14.5	63.1	63.6	
Incr Delay (d2), s/veh	3.7	0.2	16.2	63.0	4.3	6.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh		12.1	27.0	81.7	31.4	32.0	
LnGrp Delay(d),s/veh	66.8	27.3	62.6	77.5	67.4	69.6	
LnGrp LOS	E	C	E	F	E	E	
Approach Vol, veh/h	902	<u> </u>		4392	1479		
					68.5		
Approach Delay, s/veh	41.3			73.4	_		
Approach LOS	D			E	E		
Timer	1	2	3	4	5	6	
Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc)		70.0		24.0		126.0	
Change Period (Y+Rc),		5.0		5.0		5.0	
Max Green Setting (Gma		65.0		25.0		115.0	
Max Q Clear Time (g_c+		65.4		15.6		123.0	
Green Ext Time (p_c), s	0.0	0.0		3.4		0.0	
Intersection Summary							
HCM 2010 Ctrl Delay			68.1				
HCM 2010 LOS			E				
1.0111 2010 200			_				

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Movement E	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	₽.			†	ሻ	7		
	020	85	155	645	115	305		
	020	85	155	645	115	305		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	- U	0.95	1.00	J	1.00	1.00		
2	1.00	1.00	1.00	1.00	0.90	1.00		
	881	1900	1881	1881	1900	1900		
•								
	052	88	160	665	119	314		
Adj No. of Lanes	1	0	1	1	1	1		
	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	1	1	1	1	0	0		
1 /	133	95	222	1419	267	343		
Arrive On Green 0	0.66	0.66	0.05	0.75	0.16	0.16		
Sat Flow, veh/h 17	704	143	1792	1881	1629	1615		
Grp Volume(v), veh/h	0	1140	160	665	119	314	ĺ	
Grp Sat Flow(s),veh/h/ln	0	1847	1792	1881	1629	1615		
	0.0	52.8	2.5	13.1	6.4	16.0		
10— //	0.0	52.8	2.5	13.1	6.4	16.0		
Prop In Lane	0.0	0.08	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1228	222	1419	267	343		
	0.00	0.93	0.72	0.47	0.45	0.92		
\ /		1362	319	1657	267	343		
Avail Cap(c_a), veh/h	0							
	1.00	1.00	1.00	1.00	1.00	1.00		
1 (7	0.00	1.00	1.00	1.00	1.00	1.00		
• ():	0.0	14.3	24.4	4.6	36.8	37.6		
J (),	0.0	10.7	4.4	0.2	1.2	28.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/lr	r0.0	30.2	3.2	6.7	3.0	11.0		
LnGrp Delay(d),s/veh	0.0	25.0	28.8	4.8	38.0	65.9		
LnGrp LOS		С	С	Α	D	Е		
	140			825	433			
• •	25.0			9.5	58.2			
Approach LOS	C C			Α.	50.2 E			
Apploacifico	U			Α				
Timer	1	2	3	4	5	6		7
Assigned Phs		2	3	4				
Phs Duration (G+Y+Rc), s	S	20.0	8.7	68.9				
Change Period (Y+Rc), s		4.0	4.0	4.0				
Max Green Setting (Gmax		16.0	10.0	72.0				
Max Q Clear Time (g_c+I1		18.0	4.5	54.8				
Green Ext Time (p_c), s	. ,, 5	0.0	0.2	10.1				
		0.0	٥.۷	10.1				
Intersection Summary								
HCM 2010 Ctrl Delay			25.7					
HCM 2010 LOS			С					
= = •								

		→	•	•	←	•	•	†	<u> </u>	/		4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ĵ.		ሻ	1>		ሻ	î,		ሻ		7
Traffic Volume (veh/h)	260	805	190	5	510	95	105	120	25	260	250	125
Future Volume (veh/h)	260	805	190	5	510	95	105	120	25	260	250	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.93	0.97	Ū	0.78	0.91		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1827	1900	1900	1881	1881	1881
Adj Flow Rate, veh/h	280	866	204	5	548	102	113	129	27	280	269	134
Adj No. of Lanes	1	1	0	1	1	0	1	123	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	4	4	4	1	1	1
Cap, veh/h	425	895	211	9	586	109	204	190	40	318	371	675
Arrive On Green	0.24	0.62	0.62	0.01	0.38	0.38	0.05	0.13	0.13	0.11	0.20	0.20
Sat Flow, veh/h	1792	1451	342	1792	1522	283	1740	1446	303	1792	1881	1497
Grp Volume(v), veh/h	280	0	1070	5	0	650	113	0	156	280	269	134
Grp Sat Flow(s),veh/h/lr		0	1793	1792	0	1805	1740	0	1748	1792	1881	1497
Q Serve(g_s), s	17.2	0.0	69.1	0.3	0.0	42.2	6.0	0.0	10.4	14.0	16.3	1.0
Cycle Q Clear(g_c), s	17.2	0.0	69.1	0.3	0.0	42.2	6.0	0.0	10.4	14.0	16.3	1.0
Prop In Lane	1.00	^	0.19	1.00	^	0.16	1.00	_	0.17	1.00	074	1.00
Lane Grp Cap(c), veh/h		0	1106	9	0	695	204	0	230	318	371	675
V/C Ratio(X)	0.66	0.00	0.97	0.55	0.00	0.94	0.55	0.00	0.68	0.88	0.73	0.20
Avail Cap(c_a), veh/h	425	0	1163	59	0	845	204	0	244	318	386	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/vel		0.0	22.2	60.4	0.0	36.0	45.1	0.0	50.4	42.0	45.8	12.0
Incr Delay (d2), s/veh	3.7	0.0	18.6	42.3	0.0	15.6	3.3	0.0	6.9	23.8	6.4	0.1
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),vel		0.0	39.6	0.3	0.0	24.0	0.9	0.0	5.5	4.6	9.1	2.0
LnGrp Delay(d),s/veh	45.7	0.0	40.8	102.8	0.0	51.7	48.4	0.0	57.3	65.7	52.2	12.2
LnGrp LOS	D		D	F		D	D		E	<u>E</u>	D	В
Approach Vol, veh/h		1350			655			269			683	
Approach Delay, s/veh		41.8			52.1			53.5			49.9	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc)	. \$8.0	20.0	4.6	79.1	10.0	28.0	32.9	50.9				
Change Period (Y+Rc),		4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gm		17.0	4.0	79.0	6.0	25.0	26.0	57.0				
Max Q Clear Time (g_c-		12.4	2.3	71.1	8.0	18.3	19.2	44.2				
Green Ext Time (p_c), s		1.1	0.0	4.1	0.0	1.4	4.1	2.7				
Intersection Summary												
HCM 2010 Ctrl Delay			47.0									
HCM 2010 Cur Delay			47.0 D									
1101VI 2010 LOS			U									

	_	•	†	<u> </u>	_	1		_	
Mayamant	₩DI.	WDD	I NDT	•	CDI	CDT			
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations Traffic Volume (veh/h)	2 80	7 35	†† 2130	330	ሻሻ 300	↑ ↑ 1570			
Future Volume (veh/h)	280	35	2130	330	300	1570			
Number	3	18	2130	12	1	6			
Initial Q (Qb), veh	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00	1.00	J	1.00	1.00	J			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1776	1776	1845	1845			
Adj Flow Rate, veh/h	301	38	2290	355	323	1688			
Adj No. of Lanes	1	1	2	1	2	2			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	7	7	3	3			
Cap, veh/h	279	249	2241	1002	316	2754			
Arrive On Green	0.16	0.16	0.66	0.66	0.09	0.79			
Sat Flow, veh/h	1774	1583	3463	1508	3408	3597			
Grp Volume(v), veh/h	301	38	2290	355	323	1688			
Grp Sat Flow(s), veh/h/lr		1583	1687	1508	1704	1752			
Q Serve(g_s), s	22.0	2.9	93.0	14.5	13.0	27.9			
Cycle Q Clear(g_c), s	22.0	2.9	93.0	14.5	13.0	27.9			
Prop In Lane	1.00	1.00		1.00	1.00				
Lane Grp Cap(c), veh/h		249	2241	1002	316	2754			
V/C Ratio(X)	1.08	0.15	1.02	0.35	1.02	0.61			
Avail Cap(c_a), veh/h	279	249	2241	1002	316	2754			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	า 59.0	51.0	23.5	10.3	63.5	6.2			
Incr Delay (d2), s/veh	76.7	0.3	24.7	0.2	56.0	0.4			
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.1	0.0			
%ile BackOfQ(50%),veh		1.3	50.7	6.1	8.6	13.3			
LnGrp Delay(d),s/veh		51.2	48.2	10.5	119.5	6.6			
LnGrp LOS	F	D	F	В	F	Α			
Approach Vol, veh/h	339		2645			2011			
Approach Delay, s/veh	126.3		43.2			24.7			
Approach LOS	F		D			С			
Timer	1	2	3	4	5	6	7	8	
Assigned Phs	1	2				6		8	
Phs Duration (G+Y+Rc)	, \$7.0	97.0				114.0		26.0	
Change Period (Y+Rc),		4.0				4.0		4.0	
Max Green Setting (Gm		93.0				110.0		22.0	
Max Q Clear Time (g_c-		95.0				29.9		24.0	
Green Ext Time (p_c), s		0.0				70.2		0.0	
Intersection Summary									
HCM 2010 Ctrl Delay			41.4						
HCM 2010 Cm Delay			41.4 D						
TION ZUTU LUG			U						