2016 City of Federal Way City Center Planned Action Final SEIS









December 2015

Project Title

City of Federal Way City Center Planned Action

Proposed Action and Alternatives

Proposed Action

The action proposed by the City of Federal Way consists of the following by the City of Federal Way City Council:

Adoption of an ordinance renewing the designation of a portion of the City Center subarea as a Planned Action for the purposes of *State Environmental Policy Act* (SEPA) compliance, pursuant to RCW 43.21C.440 and WAC 197-11-164. The Planned Action designation would apply to proposed residential, commercial, office, hotel, and other development within the development envelope analyzed in this SEIS. The Planned Action designation would apply to development that occurs through the end of year 2025.

Action Alternative

Alternative 1, the 2025 Action Alternative, includes an increase in land use in a portion of the City Center subarea in accordance with the amounts listed in the Planned Action Area development envelope.

No Action Alternative

Alternative 2, the 2025 No Action Alternative, includes an increase in land use in the City Center subarea assuming the level of growth established in the *Federal Way Comprehensive Plan*.

City Center Planned Action EIS

The City of Federal Way completed an Environmental Impact Statement (EIS) on the City Center Planned Action in 2006. This 2016 Planned Action Supplemental EIS incorporates by reference and supplements the analysis contained in the 2006 City Center Planned Action EIS and the four Addenda to the 2006 EIS.

Location

The Planned Action project area is located in the City Center subarea of the City of Federal Way, bounded on the north by South 312th Street, on the south by South 324th Street, on the west by Pacific Highway South, and on the east primarily by 23rd Avenue South. Additional area is located east of 23rd Avenue South, bordered on the north by South 317th Street and on the south by South 319th Place.

Proponent

City of Federal Way

Date of Implementation

2016-2025 - With market driven phased development following necessary permit approvals.

Lead Agency

City of Federal Way 33325 8th Avenue South Federal Way, WA 98003-6325

Responsible Official

Michael A. Morales, Director, Community Development Department

Contact Person

Stacey Welsh, AICP, Senior Planner City of Federal Way Community Development Department 33325 8th Avenue South Federal Way, WA 98003-6325 253.835.2634 <u>stacey.welsh@cityoffederalway.com</u>

Required Approvals

Planned Action Ordinance Adoption

SEIS Authors and Principal Contributors

The Final SEIS has been prepared under the direction of the City of Federal Way.

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Public Comment

A public comment period was held between October 16, 2015, and November 16, 2015, during which time written comment on the Draft EIS was invited. A public meeting regarding the DSEIS was held on November 9, 2015, for interested parties to provide verbal comment.

Date of Draft SEIS Issuance

October 16, 2015

Date of Final SEIS Issuance

December 30, 2015

Final SEIS Purchase Price

CD copies may be purchased for \$10.00 at the Federal Way City Hall Permit Center, 33325 8th Avenue South, Federal Way.

Previous Environmental Documents

- City of Federal Way City Center Planned Action Draft Environmental Impact Statement (EIS), issued June 2006
- City of Federal Way City Center Planned Action Final Environmental Impact Statement (EIS), issued September 2006
 - Addendum #1, issued February 2008
 - Addendum #2, issued April 2010
 - Addendum #3, issued November 2010
 - Addendum #4, issued November 2014

Location of Background Information

City of Federal Way Community Development Department See the Lead Agency and Responsible Official address listed above (available Monday-Friday 8:00am-5:00pm).

ADOPTION OF EXISTING ENVIRONMENTAL DOCUMENT

Adoption for (check appropriate box): \Box DNS **EIS** \Box other

Description of current proposal: 2016 City of Federal Way City Center Planned Action SEIS

Adoption of an ordinance renewing the designation of a portion of the City Center subarea as a Planned Action for the purposes of *State Environmental Policy Act* (SEPA) compliance, pursuant to RCW 43.21C.440 and WAC 197-11-164. The Planned Action designation would apply to proposed residential, commercial, office, hotel, and other development within the development envelope analyzed in this SEIS. The Planned Action designation would apply to development that occurs through the end of year 2025. This action also includes procedural text amendments to the *Federal Way Revised Code* (FWRC) Title 14 (Environmental Policy) Section 14.15.130 (City Center Planned Action) related to the Planned Action designation and process.

Proponent: City of Federal Way

Location of current proposal: The Planned Action project area is located in the City Center subarea of the City of Federal Way, bounded on the north by South 312th Street, on the south by South 324th Street, on the west by Pacific Highway South, and on the east primarily by 23rd Avenue South. Additional area is located east of 23rd Avenue South, bordered on the north by South 317th Street and on the south by South 319th Place.

Title of document being adopted: *City of Federal Way City Center Planned Action Draft Environmental Impact Statement* (EIS), issued June 2006; *City of Federal Way City Center Planned Action Final Environmental Impact Statement* (EIS), issued September 2006; Addendum #1, issued February 2008; Addendum #2, issued April 2010; Addendum #3, issued November 2010; and Addendum #4, issued November 2014.

Agency that prepared document being adopted: City of Federal Way

Date adopted document was prepared: 2006, 2008, 2010, and 2014 (see above)

Description of document (or portion) being adopted: 2006 Planned Action EIS and Addenda.

If the document being adopted has been challenged (WAC 197-11-630), please describe: N/A

The document is available to be read at (place/time): City of Federal Way Community Development Department, 33325 8th Avenue South, Federal Way; Monday-Friday 8:00am-5:00pm

We have identified and adopted this document as being appropriate for this proposal after independent review. The document meets our environmental review needs for the current proposal and will accompany the proposal to the decision maker.

Name of agency adopting document: City of Federal WayContact person: Stacey Welsh, AICP, Senior PlannerPhone: 253.835.2634Responsible official: Michael A. MoralesPhone: 253.835.2612Position/title: Community Development DirectorPhone: 253.835.2612Address: 33325 8th Avenue South, Federal Way, WA 98003

 Date:
 October 16, 2015
 Signature:
 (see Draft SEIS)

2016 City of Federal Way City Center Planned Action Final SEIS

Prepared by: City of Federal Way

33325 8th Avenue South Federal Way, Washington 98003

December 2015

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1.1 Introduction

Throughout this document, in reference to the SEIS, the word "draft" has either been removed or replaced with the word "final," as appropriate. Section 3.4, "Transportation," has been replaced in its entirety to reflect several updates made to Appendix 2, "Transportation Impact Analysis." Chapter 4 (previously "References") is a new chapter, "Comments and Responses," while "References" is now Chapter 5 and otherwise remains unchanged.

This chapter summarizes information contained in this Planned Action Supplemental Environmental Impact Statement (SEIS). It contains a summary of the alternatives, significant impacts, mitigation measures, and significant unavoidable adverse impacts. This summary is intentionally brief; the reader should consult individual sections of this SEIS for detailed information concerning the affected environment, impacts, and mitigation measures.

1.2 Proposed Action and Location

Proposed Action

The Proposed Action consists of two related elements:

Adoption of an ordinance renewing the designation of a portion of the City Center subarea as a Planned Action for the purposes of *State Environmental Policy Act* (SEPA) compliance, pursuant to RCW 43.21C.440 and WAC 197-11-164. The Planned Action designation would apply to proposed residential, commercial, office, hotel, and other development within the development envelope analyzed in this SEIS. The Planned Action designation would apply to development that occurs through the end of year 2025.

This action also includes procedural text amendments to the *Federal Way Revised Code* (FWRC) Title 14 (Environmental Policy), 14.15.130 (City Center Planned Action) related to the Planned Action designation and process. These changes are not expected to have an environmental impact.

Location

The Planned Action project area is located in the City Center subarea of the City of Federal Way, bounded on the north by South 312th Street, on the south by South 324th Street, on the west by Pacific Highway South, and on the east primarily by 23rd Avenue South. Additional area is located east of 23rd Avenue South, bordered on the north by South 317th Street and on the south by South 319th Place.

1.3 Description of Alternatives

Alternative 1 (Action)

Alternative 1, the 2025 Action Alternative, includes an increase in land use in a portion of the City Center subarea in accordance with the amounts listed in the Planned Action Area development envelope.

Alternative 2 (No Action)

Alternative 2, the 2025 No Action Alternative, includes an increase in land use in the City Center subarea assuming the level of growth established in the *Federal Way Comprehensive Plan*.

1.4 Summary of Potential Impacts and Mitigation Measures

Table 1-1 provides a summary of the environmental impacts for each element of the environment evaluated in Chapter 3. For a complete discussion of the elements of the environment considered in this SEIS, please refer to Chapter 3.

1.5 Issues to Be Resolved

Adoption of a Planned Action Ordinance supports development and re-development of the area to a more intensive mixed-use downtown consistent with the vision of the *Federal Way Comprehensive Plan.* The key environmental issue facing decision makers is the impact of additional traffic on area roadways and mitigating measures to address such impacts.

1.6 Significant Unavoidable Adverse Impacts

Transportation

Development of the Planned Action area would generate additional traffic volumes on the area's roadways. Increases in traffic congestion at some intersections and/or along some corridors will result in significant, unavoidable, adverse impacts on the area's transportation system. However, the increased capacity associated with improvement projects would adequately mitigate undesired impacts. The proposed mixed-use land use pattern, on-site improvements, and TDM actions, along with high levels of transit service, may further reduce vehicle trips; thereby, further mitigating impacts on the transportation system.

Proposed Action	Alternative 1 Action	Alternative 2 No Action	
3.2 Land Use			
Land Use Patterns			
New development through 2025			
Retail space:	475,000 sf	672,000 sf	
Office space:	400,000 sf	262,000 sf	
Hotel rooms:	600	0	
Residential units:	2,400	1,671	
Impacts Common to All Alternatives	Land use patterns will intensify and the mix of uses will increase. Over time, the scale of buildings may also increase as new development occurs and building heights are maximized along with density consistent with the zoning code.		
Land Use Compatibility			
Impacts Common to All Alternatives	Land use compatibility impacts could result under any of the alternatives. As vacant land is developed and other properties are redeveloped, uses that are currently separated and buffered from each other will be required to co-exist in closer proximity. The potential for conflict between uses with differing activity levels will increase as development results in a diversity and mix of uses in the project area. Neighborhoods around the edges of the project area with lower intensity uses, such as single and multi-family residential areas, could experience impacts.		
Population, Employment Housing			
A greater amount of housing and lodging would result from Alternative 1. The new employment population would have an emphasis on office and retail employment. New office/services jobs would remain the largest employment group.		Compared to the action alternative, Alternative 2 would result in less residential and employment population. Over half of the new employment created under Alternative 2 would be in the retail sector.	
mpacts Common to All Alternatives Under all alternatives future residential and employment populations will increase, though at different amounts.			
Mitigation Measures			
Existing development standards alor However, as development occurs, th development standards for edge are measures.	ng the edges of the Planned Action area appear to be is transition area should be evaluated to confirm that as should be considered. Techniques could include s	adequate to allow for a compatible transition from more intensive to less intensive uses. long-term land use compatibility impacts are not being created. If necessary, new ite and building lighting limits and requirements for landscaping, noise control, and other	

Table 1-1. Summary of Potential Impacts of Proposed Action and No Action Alternative

Proposed Action	Alternative 1 Action		Alternative 2 No Action
3.4 Transportation			
Traffic Operations Impact	For the No Action Alternative, none of the intersections are anticipated to be deficient based on the City's traffic operations standards with programmed improvements. The Action Alternative does not degrade the LOS of any of the study intersections to be worse than the No Action Alternative. Overall, the level of intersection delay is less during the PM peak hour at all but three intersections for the Action Alternative.		
Parking Requirements	At full buildout, the cumulative parking requirement (existing plus new) for the Planned Action area would be approximately 14,593 stalls. The Action Alternative requires 1,641 more stalls than the No Action Alternative.		At full buildout, the cumulative parking requirement (existing plus new) for the Planned Action area would be approximately 12,952 stalls.
Trip Generation	During the AM peak hour, nearly 1,892 trips would be added. Total AM peak hour traffic growth resulting from Alternative 1 would be approximately 3,617 trips. During the PM peak hour, an additional nearly 2,147 trips would be added. Total PM peak hour traffic growth resulting from Alternative 1 would be approximately 6,792 trips.		During the AM peak hour, nearly 1,315 trips would be added. Total AM peak hour traffic growth resulting from Alternative 2 would be approximately 3,040 trips. During the PM peak hour, an additional nearly 2,274 trips would be added. Total PM peak hour traffic growth resulting from Alternative 2 would be approximately 6,919 trips.
Impacts Common to All Alternat	ives		
Traffic Safety	Probability of traffic collisions would increase with additional traffic. The City and WSDOT have made investments in the study area in an on-going effort to reduce the number of preventable accidents that occur.		
Transit Service	Ridership demand at the Federal Way Transit Center may increase with increased development in the project area.		
Pedestrian & Bicycle Mobility	The alternatives along with the proposed bicycle and pedestrian facilities highlighted in the <i>Bicycle and Pedestrian Master Plan</i> will increase safety and encourage walking and bicycling as a mode of transportation in and around the City Center.		
Mitigation Measures (This section summarizes the proposed mitigation anticipated to be required beyond the roadway improvements assumed to be constructed by 2025. These projects are listed on the City Transportation Improvement Plan and Capital Improvement Program.)			
Roadway Network	For all intersections, the level of service (LOS) grade does not degrade between the No Action and Action Alternatives. Because the level of service grade does not change, the transportation impacts of the Action Alternatives are less than significant and no mitigation is proposed under the <i>Transportation Impact Analysis</i> . Development within the Planned Action area will be required to pay the required transportation impact fee.		
Parking	Additional parking spaces will be required on site for both the No Action and Action Alternatives. These spaces may be provided on site or as part of parking garages assumed as part of the Planned Action area development. Parking requirements will be determined as each development is submitted. The number of parking spaces required could be reduced through shared parking arrangements or transportation demand management.		
Additional mitigation	Additional improvements could be required to meet the expected travel demand on area roadways associated with the proposed development in the project area. Development will need to meet the requirements of applicable codes at the time of application. Requirements might include the dedication of right-of-way, installing curbs, gutters and sidewalks, and drainage improvements. Additional mitigation may be required for individual development applications within the project area to reduce area traffic impacts or improve on-site circulation and to meet City and State requirements for Commute Trip Reduction and Transportation Demand Management.		

Proposed Action	Alternative 1 Action		Alternative 2 No Action
3.5 Public Services			
Police Level of Service (LOS)	Expected residential and employment growth will result in an increased need of approximately 13 officers by 2025 to maintain the current LOS.		Expected residential and employment growth will result in an increased need of approximately 9.7 officers by 2025 to maintain the current LOS.
Parks and Recreation LOS	Additional residents will result in an increased demand for 70.6 acres of new parkland in the City to maintain the current LOS.		Additional residents will result in an increased demand for 49.2 acres of new parkland in the City to maintain the current LOS.
Impacts Common to All A	Iternatives		
	Construction activity in the Planned Action area may affect the response	times of e	emergency vehicles.
Fire	Over the long term, future development will result in an incremental incre time. South King Fire & Rescue reports it is positioned to provide service	ase in cal for the gr	ls for emergency service and future traffic growth may impact response owth.
Mitigation Measures			
Reduce public safety impacts thru adherence to crime prevention through environmental design (CPTED) design standards. Provide emergency service providers with advanced notice of construction schedules and any planned street closures or blockages. Avoid or minimize street closures or blockages during construction to avoid potential impact to emergency response times. Coordinate with the Parks, Recreation, & Cultural Services Department to identify opportunities for increased recreational open space for general public use throughout the project area, and within new development proposals.			
Impacts Common to all	Alternatives		
Water and Sanitary Sewer Service	Vater and Sanitary There is adequate water flow available and with the downtown sewer trunk upgrade, there is adequate wastewater collection and treatment capacity at the Lakota Plant for these alternatives.		
Energy	Construction activities could result in disruption of service, with the need to relocate service lines, and other construction related impacts. Over the long term, development under either alternative will increase demand for energy. Puget Sound Energy (PSE) indicates it has planned for growth and reports adequate capacity to serve the increased demand.		
Telecommunication	Increased residential and employment population will increase use of and demand for services. Providers indicate they have adequate capacity.		
Mitigation Measures			
Ensure that all new development. Encourage relocations (equipment p companies on the design	elopment complies with local, state, and federal standards for energy conse e new development to incorporate appropriate water conservation measure procurement times, relocate in advance of construction, etc.). Inform utility on of the new services and connections.	rvation. Ei s into thei ustomers	ncourage drought-tolerant landscaping (xeriscaping) for new r operations. Plan with service providers to minimize impacts of utility of any planned temporary service disruptions. Coordinate with all utility

2.1 Introduction

Overview of the Proposed Action

The 2006 EIS covered analysis of the Planned Action development envelope through the year 2014. In the intervening years, the Great Recession (2007-2009) resulted in significant job loss statewide and across the country. Significant reductions in residential and commercial development have persisted for years. Recovery has been slow and has affected previous development projections considerably. Taking into account development trends in a recovering economy, revisions have been made to the development envelope contained in the 2006 EIS.

In addition, an extended timeline is more realistic for the development envelope to be built. Therefore, the SEIS analyzes a revised development envelope through the end of year 2025. In the 2006 EIS the Planned Action area was divided into three "blocks" for analysis. This SEIS does not utilize that same analysis format, rather the entire Planned Action area is reviewed as a whole unit.

The action proposed by the City of Federal Way consists of the following:

Adoption of an ordinance renewing the designation of a portion of the City Center subarea as a Planned Action for the purposes of *State Environmental Policy Act* (SEPA) compliance, pursuant to RCW 43.21C.440 and WAC 197-11-164. The Planned Action designation would apply to proposed residential, commercial, office, hotel, and other development within the development envelope analyzed in this SEIS. The total development envelope analyzed in this SEIS is summarized in Table 2-1. The project area is shown in Figure 1.

Uses	Development Envelope
Retail	475,000 sf
Office	400,000 sf
Lodging	600 rooms
Residential	2,400 units

Table 2-1. F	Planned Action	Development	Envelope
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Source: City of Federal Way, 2015

The Planned Action designation would apply to development that occurs through the end of year 2025.

This action also includes procedural text amendments to the FWRC Title 14 (Environmental Policy), 14.15.130 (City Center Planned Action) related to the Planned Action designation and process. These changes are not expected to have an environmental impact and are not discussed further in this SEIS.



500

1,000

Feet

as a graphical representation. The City of Federal Way makes no warranty as to its accuracy.

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Although the Planned Action designation would not apply to development proposals outside of the Planned Action area, the environmental analysis conducted in this SEIS could be used to help achieve SEPA compliance for such proposals. WAC 197-11-600 provides the criteria and procedure for use of existing environmental documents for SEPA compliance.

Background

The *Federal Way Comprehensive Plan* lays out a long-range vision for the future of Federal Way. The comprehensive plan went through a major update in 2015, including updates to portions of Chapter 7, which addresses the City Center subarea. The City Center contains approximately 414 acres and is bound by South 312th Street, South 324th Street, Interstate 5, 11th Place South, and 13th Avenue South.

The future vision for the City Center states, "the concept is to redevelop the City Center and create a compact urban community and vibrant center of activity. The crux of the strategy is to promote a compact urban center with connections between where we live, work, and recreate, and to create an urban environment that is amenable to walking, bicycling, and transit."

In support of this vision, the principal purposes of the City Center chapter are to:

- Create an identifiable downtown that is the social and economic focus of the City;
- Strengthen the City as a whole by providing for long-term growth in employment and housing;
- Promote housing opportunities close to employment, shopping, and transit;
- Support development of an extensive regional/high capacity transit system;
- Reduce dependency on automobiles;
- Consume less land with urban development;
- Maximize the benefit of public investment in infrastructure and services;
- Reduce costs of and time required for permitting;
- Provide a central gathering place for the community; and
- Improve the quality of urban design for all developments.

The City Center chapter contains a number of policies intended to help achieve these goals. City Center Policy CCP5 specifically addresses the intent to prepare a Planned Action EIS for the City Center area. The policy states that the City should, "[u]tilize the SEPA Planned Action to provide streamlined permit review in the City Center in order to accelerate progress towards meeting the vision."

This SEIS proposal is intended to support the principal purposes of the City Center Chapter and to specifically implement Policy CCP5.

Objectives of the Proposal

The Proposed Action is intended to achieve the following objectives:

- Support the principal objectives of the City Center Chapter of the comprehensive plan, particularly those that promote a more intensive urban style of development in the City Center and the reduction in costs and time required for permitting.
- Fulfill the direction of City Center Policy CCP5.
- Provide an incentive to development proposals that are consistent with the overall intent of the City Center vision.
- Provide greater certainty to potential developers, City decision-makers, and the general public regarding the future development pattern and likely impacts of future development in the City Center area.

2.2 Planned Action Process

Planned Action Overview

WAC 197-11-164 defines a Planned Action. The City proposes to renew the designation of a portion of the City Center subarea as a Planned Action, pursuant to SEPA and implementing rules. As shown in Figure 1, the project area is bounded on the north by South 312th Street, on the south by South 324th Street, on the west by Pacific Highway South, and on the east primarily by 23rd Avenue South. Additional area is located east of 23rd Avenue South, bordered on the north by South 317th Street and on the south by South 319th Place. Federal Way will follow applicable procedures, described generally below, to review proposed projects within the project area through the land use review process associated with each project to determine their impacts and impose any appropriate development conditions.

Planned Action EIS

The significant environmental impacts of projects designated as Planned Actions must be identified and adequately analyzed in an EIS (WAC 197-11-164). The *City of Federal Way City Center Planned Action Environmental Impact Statement* (EIS) was issued in 2006. Subsequently, four Addenda to the 2006 EIS have been issued. This Planned Action Supplemental EIS features an update to the transportation analysis for the Planned Action area, in addition to updated information in the land use, public services, and utilities sections.

Planned Action Ordinance

According to WAC 197-11-168, the ordinance designating the Planned Action shall:

- ^{1.} Describe the type(s) of project action being designated as a Planned Action;
- ^{2.} Describe how the Planned Action meets the criteria in WAC 197-11-164 (including specific reference to the EIS that addresses any significant environmental impacts of the planned action);

- ^{3.} Include a finding that the environmental impacts of the Planned Action have been identified and adequately addressed in the EIS, subject to project review under WAC 197-11-172; and
- ^{4.} Identify any specific mitigation measures other than applicable development regulations that must be applied to a project for it to qualify as the Planned Action.

A Planned Action Ordinance was adopted in 2007 via Ordinance No. 07-547, which included a Planned Action Mitigation Document as Exhibit B. Following the completion of this SEIS process, the City of Federal Way will renew the Planned Action designation by ordinance in 2016.

2.3 Environmental Review

City Center Planned Action Environmental Impact Statement (EIS)

The City of Federal Way completed the *City of Federal Way City Center Planned Action Environmental Impact Statement (EIS)* in 2006. Elements of the environment that were considered in the EIS include air quality, land use, aesthetics, light and glare, transportation, public services, and utilities. This Planned Action Supplemental EIS incorporates by reference and supplements the analysis contained in the 2006 *City of Federal Way City Center Planned Action Draft & Final Environmental Impact Statements*, along with the four Addenda to the 2006 EIS that have been issued.

2.4 Proposed Action and Alternative

Overview

This SEIS evaluates two alternative land use scenarios for the Planned Action area. Alternative 1 (Action) assumes the maximum development identified in Table 2-2. Alternative 2 (No Action) assumes the level of growth established in the comprehensive plan as detailed in Table 2-3.

Alternative 1

Land Use. The proposed land use pattern would create a dense, mixed-use downtown with a greater distribution of growth among the different types of development (retail, office, lodging, and residential). The emphasis is on more office, lodging, and residential development downtown than in Alternative 2. Parking would be provided on a project-by-project basis in accordance with FWRC requirements. The total amount of new development anticipated for the Planned Action area under the action alternative is shown in Table 2-2.

Uses	Total
Retail	475,000 sf
Office	400,000 sf
Lodging	600 rooms
Residential	2,400 units

Table 2-2.Alternative 1 (Action)New Development Through 2025

Source: City of Federal Way, 2015

Alternative 2

Land Use. As described in the comprehensive plan, the land use pattern in the City Center project area would be characterized by an intensively developed urban core that includes mixed use, office, retail, and residential development. The emphasis is on the continuation of retail development and addition of residential as the primary focus of growth. Parking would be provided on a project-by-project basis in accordance with FWRC requirements. The total amount of new development for the Planned Action area under the no action alternative is shown in Table 2-3.

Overall, anticipated growth under this alternative would be approximately 141 percent of that anticipated for retail development, 65 percent of that anticipated for office development, 0 percent for lodging, and 70 percent of that anticipated for residential development under the action alternative.

Uses	Total
Retail	672,000 sf
Office	262,000 sf
Lodging	0 rooms
Residential	1,671 units

Table 2-3. Alternative 2 (No Action)New Development Through 2025

Source: City of Federal Way and Fehr & Peers, 2015

2.5 Benefits and Disadvantages of Delaying the Proposed Action

The Proposed Action includes adoption of a Planned Action Ordinance for future development in the City Center subarea. There is no benefit to delaying the implementation of the renewal of the Proposed Action. If the growth itself in the Planned Action area is delayed, that would delay the potential impacts identified in this SEIS, including potential land use conflicts, changes to visual character, increased traffic congestion, and increased demand for public services and utilities. This delay could be considered environmentally beneficial in the short-term.

Delay of development would not allow the benefits of establishing a walkable City Center (as discussed in the City's comprehensive plan) to be realized. Delay would not allow new development and associated review processes to benefit from the analysis developed through the Planned Action process. Delaying the extension of the Planned Action impedes permit processing efficiency. Environmental Impact Statements prepared for planned actions more effectively review cumulative effects than individual SEPA reviews.

2.6 Major Issues to be Resolved

Adoption of a Planned Action Ordinance would support development and re-development of the area to a more intensive mixed-use character consistent with the comprehensive plan. The key environmental issue facing decision-makers is the impact of additional traffic on area roadways and mitigating measures to address such impacts.

3.1 Air Quality

The 2006 EIS stated that ambient carbon monoxide (CO) impacts are expected to decrease in the future. No further analysis of air quality is contained within this SEIS. Mitigation measures pertaining to air quality proposed in the EIS are incorporated by reference.

3.2 Land Use

This section describes the project area's existing land use and analyzes potential impacts resulting from the proposed action and alternative.

Affected Environment

Overview

The City Center project area consists of approximately 215 acres located in downtown Federal Way (see Figure 1, page 2-2). The project area contains a variety of uses, including commercial, office, parking, and multi-family residential uses. Table 3-1 summarizes the existing development in the project area.

	Commercial (retail, office, restaurant, services)		Hotel ¹		
Total	1,950,234 sf	254 units	230 rooms		

 Table 3-1. Existing Development Planned Action Project Area

Source: King County Department of Assessments, 2015. ^{1.} Not counted in the commercial sf.

Commercial uses, including freestanding retail stores, hotels, retail centers, and services are the predominant land use. Further description is contained in the 2006 EIS and is not duplicated here.

Surrounding Land Uses

Details on surrounding land uses are contained in the 2006 EIS and are not duplicated here.

Vacant and Redevelopable Land

Vacant Land

Based on a review of the project area and King County Assessor data, approximately seven acres of vacant land exist in the project area. See Figure 2 (next page) for the location of these parcels.

City of Federal Way Supplemental EIS

Figure 2 : Vacant & Redevelopable Land

Map Date: December 2015 City of Federal Way GIS Distaion 33325 din Ave S Federal Way, WA 98003 253-605-7000 www.cityEndersteep.com







This map is intended for use as a graphical representation. The City of Federal Way makes no warranty as to its accuracy.

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Redevelopable Land

The identification of redevelopable land is dependent on a variety of factors, including general and localized economic conditions, perceived market opportunities, and the financial and investment goals of individual property owners. The King County Buildable Lands Report is an analysis, required by the Growth Management Act, which measures capacity to absorb growth in local jurisdictions. For the purpose of this study, jurisdictions in King County were required to establish a methodology for identifying redevelopable land. The approach used by Federal Way compares the value of improvement values compared to property values are assumed to be more likely to be redeveloped. In commercial areas, redevelopable properties are identified as those in which the improvement value is 50 percent or less of the property value.

This approach was used to identify redevelopable properties in the project area. A total of 84 acres are identified as redevelopable in the project area. See Figure 2 for the location of these parcels.

A second measure of the redevelopment potential in the project area would be to consider the potential for development of existing paved surface parking areas. Paved parking is a predominant land use in the Planned Action area. Some portion of these parking areas could be reduced or consolidated into structured parking facilities to allow redevelopment of existing parking areas. If existing paved surface parking areas were considered, the amount of redevelopable land would increase significantly.

Based on King County Assessor data, the project area has a combined total of approximately 91 acres of vacant and redevelopable land in the Planned Action area (see Table 3-2).

Table 3-2. Vacant and Re	developable Land Summary
--------------------------	--------------------------

Vacant Land ¹	Redevelopable Land ²	TOTAL
6.81 acres	83.82 acres	90.63 acres

Source: City of Federal Way, 2015.

¹ Based on King County Assessor's data, 2015.

². King County Buildable Lands Report methodology; using 2015 King County Assessor data.

Land Use Compatibility

Existing Comprehensive Plan Land Use & Zoning Code Designations

Community Design Standards

Details on land use compatibility, comprehensive plan land use and zoning code designations, and community design standards are contained in the 2006 EIS and are not duplicated here.

Population, Employment, Housing

For the purpose of this analysis, population and employment estimates are based on assumptions for persons per household and employment density for various commercial uses. These assumptions are summarized below in Table 3-3 (next page) and used in the analysis that follows.

Land Use Density & Conversion Factors			
Multifamily housing	2.7 persons per household ¹		
Retail	500 sf per employee ²		
Office	250 sf per employee ²		
Lodging	# rooms/2.36=# employees ³		

Table 3-3. Population and Employment Densities

Source: City of Federal Way, 2015

^{5.} Based on City of Federal Way 2015 comprehensive plan.

^{6.} Based on PSRC conversion factors.

^{7.} Based on City of Federal Way conversion factor.

Within the project area, housing and residential population is limited to three multifamily complexes, Steel Lake Apartments, Brightwater Apartments, and Senior City. Based on the estimated population in these three projects, the project area contains approximately 686 residents.

The Planned Action area is primarily an employment center and has an estimated employment population of 4,131 (see Table 3-4). At present, the largest component is in the retail sector with 3,766 employees, or 91 percent of the total employment population.

Table 3-4. Pro	oject Area I	Existing	Employ	yment	(# of	FTEs)	
							_

Retail	Office/Services	Lodging	TOTAL
3,766	268	97	4,131

Source: City of Federal Way, 2015

Impacts

Land Use Patterns & Population, Employment, Housing

Impacts Common to All Alternatives

Under all alternatives, the land use pattern in the Planned Action area will intensify and the mix of uses will increase. Over time, the scale of buildings may also increase as new development occurs and is built in a manner consistent with the standards allowed under the Federal Way zoning code.

As properties within the Planned Action area redevelop, vacant land, redevelopable, and underdeveloped land, including surface parking lots, will be utilized. Uses that may be currently separated and buffered from each other will be required to co-exist in closer proximity. Under these circumstances, the potential for land use conflict increases. Land use conflicts can arise when activity levels differ between uses. For example, when noise levels affect adjoining uses, or when building height, bulk, and scale differ greatly between uses. The potential for such conflict will increase with diversity and mix of uses in the Planned Action area. As time goes on; however, the mix of uses will become the norm.

Within the Planned Action area, land use compatibility impacts may occur where intensive redevelopment occurs next to existing lower intensity land uses within the project area. These contrasts will be incremental and short-term. Over the period of the Planned Action designation, the contrast between the older one story structures and the redeveloped properties will diminish as the Planned Action area fully develops.

Around the edges of the Planned Action area, adjoining lower intensity uses, such as single and multi-family residential areas, could also experience impacts. However, for residential areas north of the project area, the current City Center Frame (CC-F) zoning designation has development standards intended to ensure a transition to lower intensity uses. In this area, these development standards should mitigate potential land use compatibility impacts. To the south, existing multi-family development directly adjoins the project area. Potential land use conflicts could result if it is intensively developed in the area near these multi-family residences.

Alternative 1

As shown in Table 2-1 (page 2-1), new development through 2025 under Alternative 1 (Action) would introduce a total of 475,000 square feet (sq. ft./sf) of new retail space, 400,000 sf of office space, 600 hotel rooms, and 2,400 residential units. Parking would be provided on a project-by-project basis in accordance with FWRC requirements. Existing low scale retail development may be replaced and surface parking areas may be utilized for development.

As shown in Table 3-5, Alternative 1 is expected to generate a total new residential population of 6,480 persons and total new employment population of 2,804. The new employment population would have an emphasis on office and retail employment. New office/services jobs would remain the largest employment group, with 1,600 new employees, or 57 percent of total new employment.

Additional Population	Alt 1 Total	Alt 2 Total
Residential	6,480	4,512
Additional Jobs	Alt 1 Total	Alt 2 Total
Office/Services	1,600	1,048
Retail	950	1,344
Lodging	254	0
Total New Employment	2,804	2,392

 Table 3-5. Alternatives 1 & 2 Population and Employment Projections

Source: City of Federal Way, 2015

Alternative 2

Alternative 2 (No Action) assumes a total increase of 672,000 sf of retail space, 262,000 sf of office space, and 1,671 residential units. Alternative 2 would result in increased development in the project area, but to a lesser degree than Alternative 1.

Table 3-5 identifies the residential and employment population that could result from development under Alternative 2. Compared to the action alternative, Alternative 2 would result in less residential and employment population. Alternative 2 would generate 4,512 new residents and 2,392 new employees, compared to 6,480 new residents and 2,804 new employees under the action alternative. Over half of the new employment created under Alternative 2 would be in the retail sector.

Mitigation Measures

Existing development standards along the edges of the Planned Action area appear to be adequate to allow for a compatible transition from more intensive to less intensive uses. However, as development occurs, this transition area should be evaluated to confirm that long-term land use

compatibility impacts are not being created. If necessary, new development standards for edge areas should be considered. Techniques could include site and building lighting limits, requirements for landscaping, noise control, and other measures.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated.

3.3 Aesthetics, Light, and Glare

The 2006 EIS stated that other than change itself, no significant unavoidable adverse impacts to aesthetics, light, and glare were anticipated. The design standards, guidelines, and mitigation measures, together with the City's development regulations, are adequate to mitigate the significant adverse impacts anticipated with redevelopment. No further analysis of aesthetics, light, and glare is contained within this SEIS. Mitigation measures pertaining to aesthetics, light, and glare proposed in the 2006 EIS are incorporated by reference.

3.4 Transportation

The purpose of this section is to describe the transportation impacts associated with development under the proposed Planned Action designation in Federal Way's City Center. This section assesses the expected impacts on the City's transportation systems, including roadways and intersections, transit, bicycles, and pedestrian facilities, and identifies actions and improvements to mitigate the impacts. The transportation analysis is a summary of the full transportation impact analysis report, included with this document as Appendix 2.

This section summarizes the analysis of the following alternatives:

- 2015 Existing Conditions.
- **2025 No Action Alternative** includes an increase in land use in the City Center area. It assumes the funded Transportation Improvement Projects would be completed in the study area.
- **2025 Action Alternative** includes an increase in land use over the No Action Alternative for Federal Way's City Center and the same funded Transportation Improvement Project projects.

The primary difference between the future No Action and Action alternatives is the land use mix. The Action Alternative provides an increase in the amount of office space, residential, and hotel space, with a lesser emphasis on retail. Table 3-6 displays the land use mix by alternative.

	Retail (sq. ft.)	Office (sq. ft.)	Residential (units)	Hotel (rooms)
Existing	1,833,189	67,045	254	230
No Action	2,505,379	329,427	1,925	230
Action	2,308,190	467,045	2,654	830

Affected Environment

This section summarizes the selection of the study area, existing roadway network, the project area, and existing land use. This section summarizes the findings of the traffic operations of existing intersections and collisions analysis. The existing transit, pedestrian, and bicycle facilities are also described.

Study Area

The study area, which is larger than the Planned Action Area, was developed by using the City's travel demand model to calculate the anticipated vehicle volume increase at intersections. Study intersections were identified for analysis if they met the following conditions:

- *PM Peak Hour:* Intersection is signalized and outside the City Center with an increase of 30 or more vehicle trips and a volume-to-capacity (v/c) ratio over 0.7. All intersections surrounding the City Center area were included in the study area provided they met the City's threshold.
- AM and Saturday Mid-Day Peak Hours: Intersection is anticipated to experience an increase of 100 or more vehicle trips. All intersections surrounding the City Center that were included in the PM analysis were included in AM and Saturday analysis.

The study area intersections are presented in Table 3-7. A percentage of total trips generated from the City Center area was used to determine the intersections potentially impacted by the development. More intersections were analyzed during the PM peak hour because vehicle volumes were greater compared to the AM and Saturday Midday peak hours. Also, this provided a more conservative analysis of the overall study area.

Intersection	PM	AM	Saturday
*S 272 nd St & Military Rd S	Х	Х	
S 288 th St & Pacific Hwy S	Х	Х	
S 288 th St & Military Rd S	Х	Х	
SW 320 th St & 21 st Ave SW	Х	Х	
S 320 th St & 1 st Ave S	Х	Х	Х
S 320th St & I-5 SB Ramp	Х	Х	Х
S 320 th St & I-5 NB Ramp	Х	Х	Х
S 320th St & Military Rd S	Х	Х	Х
SW 336 th St & 21 st Ave SW	Х		
S 336 th St & Pacific Hwy S	Х	Х	Х
SW 340 th St & Hoyt Rd SW	Х		
SW Campus Dr & 1 st Ave S	Х		
S 348 th St & Pacific Hwy S	Х	Х	Х
S 348 th St & SR 161	Х		Х
SW 356 th St & 21 st Ave SW	Х		
S 356 th St & 1 st Ave S	Х		
S 356 th St & Pacific Hwy S	X	Х	X

 Table 3-7. Study Intersections Included in Analyses

Intersection	РМ	AM	Saturday
S 356 th St & Enchanted Pkwy S	Х		Х
**S 312 th St & 28 th Ave S	Х	Х	
S 316 th St & Pacific Hwy S	X - CC	X - CC	X - CC
S 312 th St & Pacific Hwy S	X - CC	X - CC	X - CC
S 320 th St & Pacific Hwy S	X - CC	X - CC	X - CC
S 320 th St & 20 th Ave S	X - CC	X - CC	X - CC
S 320 th St & 23 rd Ave S	X - CC	X - CC	X - CC
S 324 th St & Pacific Hwy S	X - CC	X - CC	X - CC
Number of Intersections Analyzed	25	18	15

X: Study area intersection included in analysis

X-CC: denotes City Center intersection included in analysis

* Intersection is located outside of City of Federal Way limits

** Unsignalized Intersection

Existing Roadway Network

The existing street network around the City Center is mostly grid-like with four legged intersections. Interstate-5 (I-5), Pacific Highway/State Route 99 (SR 99), and State Route 161 (SR 161) are in the study area and provide regional access to the north and south. Access ramps to I-5 are provided at 272nd Street, 320th Street, and 348th Street.

I-5 is a limited access facility that provides four general purpose lanes and a high occupancy vehicle lane in each direction. The posted speed limit is 60 miles per hour. Pacific Highway South (SR 99) is a Principal Arterial with five to seven travel lanes, including HOV lanes and turning lanes at intersections. The posted speed limit on SR 99 is 40 mph south of South 304th Street and 45 mph north of South 304th Street. SR 99 provides access to Seattle and SeaTac International Airport to the north and the City of Tacoma to the south. SR 161 provides access to the City of Puyallup. It is a five lane arterial with a posted speed limit ranging from 40 mph to 45 mph.

South 272nd Street is a Principal Arterial that runs east-west and provides the City limits to the north. South 272nd Street provides access to SR 99 at a signalized intersection, as well as ramps to access I-5 northbound and southbound. The roadway has four travel lanes with additional turn lanes.

South 320th Street is a Principal Arterial that runs east-west. The roadway has seven travel lanes in the City Center and five travel lanes outside of the City Center, with additional turning lanes at intersections. The roadway provides access to SR 99 at a signalized intersection and access ramps to I-5 northbound and southbound. South 320th Street between SR 99 and I-5 carries over 35,000 vehicles per day.

South 348th Street is a Principal Arterial that runs east-west; it becomes SW Campus Drive west of 1st Avenue South and SR 18 east of Pacific Highway South. South 348th Street has five travel lanes. SR 18 is a state owned divided highway with two to four lanes in each direction. The roadway provides regional access continuing east through Auburn and northeast to I-90 in Snoqualmie.

Project Area and Existing Land Use

The City Center project area is bounded by South 324th Street to the south, 23rd Avenue South to the east, South 312th Street to the north, and SR 99 to the west. The City Center area is a mix of

retail, office, senior housing, multi-family households, and hotels. This area provides the greatest concentration of shopping and businesses in the City of Federal Way. There are also businesses located on the west side of SR 99 and the area outside of the City Center is mostly residential. The square footage of the City Center is summarized in Table 3-8.

	Retail (sq ft)	Office (sq ft)	Residential (units)	Hotel (rooms)
2015 Existing Conditions	1,833,189	67,045	254	230

Table 3-8. Existing Land Use

Corridor Right-of-Way

FWRC 1.05.020 defines right-of-way as, "land owned, dedicated, or conveyed to the public or a unit of government, used primarily for the movement of vehicles or pedestrians and providing for access to adjacent parcels, with the secondary purpose of providing space for utility lines and appurtenances and other devices and facilities benefiting the public. Right-of-way includes, but is not limited to, any street, easement, sidewalk, or portion thereof under the jurisdiction of the city."

The *Federal Way Comprehensive Plan* provides a network of "City Center" roadways that meet the higher level of amenities for the City Center planning area. The need for wider sidewalks, bicycle lanes, street lighting, and street trees resulted in the City designating specific standards for City Center roadways. Table 3-9 summarizes the required and the typical amounts of right-of-way found on major roadways within the City Center planning area.

Roadway	Required City Center Right-of-Way	Existing Right-of-Way
Pacific Hwy S (SR 99)	120 ft	100-140 ft
S 324th St	96 ft	66 ft
S 320 th St	100 ft	100-140 ft
S 316 th St	74 ft	60 fe
S 312th St	85 ft	60-85 ft
20 th Ave S	60 ft	60 ft
23 rd Ave S	85 ft	80-82 ft

 Table 3-9. Right-of-Way for Major Area Streets

Source: King County Assessor 2003

As summarized in Table 3-9, Pacific Highway South, South 324th Street, South 316th Street, South 312th Street, and 23rd Avenue South all have inadequate right-of-way. In addition, the City Center plan calls for a number of internal roadways to create smaller blocks that will improve the grid network and improve the access for pedestrians and vehicles. These internal grid roads require 70 feet of right-of-way with two vehicle lanes, 12 feet of sidewalks, and on-street parking. Right-of-way dedication and street improvements shall be a component of the development submittal phase of a proposed project within the City Center. Additional information on ultimate roadway cross-sections can be found in Map III-4 of the transportation chapter of the City's comprehensive plan.

Existing Traffic Operations

Traffic counts were collected in Fall 2014, or July 8, 2015, between 4:00 pm and 6:00 pm, and Wednesday, July 8, 2015, between 6:00 am and 8:00 am. Saturday traffic counts were collected July 11, 2015, between 11:00 am and 1:00 pm. The analysis of intersections was completed for the highest hour of vehicle traffic for the AM, PM, and Saturday midday peak hours.

In 2015, the City of Federal Way revised their level of service (LOS) standard for intersections. This standard is used to determine whether an intersection is operating at an acceptable condition. The standard provides a volume-to-capacity (v/c) ratio compared to the previous intersection average vehicle delay (also known as LOS). The current standard states that signalized intersections should have a v/c ratio less than 1.2 outside of the City Center, or less than 1.0 at any unsignalized intersection. Signalized intersections inside of the City Center should experience an average v/c ratio of 1.1 or less. An intersection with a v/c ratio greater than the standard is considered deficient and would require mitigation to bring the intersection into acceptable conditions.

The traffic analysis software, Synchro 8, was used to calculate the v/c ratios by reporting results using the *Highway Capacity Manual 2000* outputs. The v/c ratio is determined for intersections using this methodology because it provides an overall v/c ratio for signalized intersections. The unsignalized intersection of South 312^{th} Street and 28^{th} Avenue South was analyzed using this methodology, and the approach movement with the highest v/c ratio is reported.

Table 3-10 summarizes the results of the intersection operations analysis, including intersection LOS, average intersection vehicle delay, and v/c ratio. None of the intersections were found to be deficient.

The intersection geometries, existing intersection traffic counts, future turning movement forecasts, and LOS summaries are found in Appendix 2.

	PM Peak Hour		AM Peak Hour			Saturday Midday Peak Hour			
Study Intersections	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
*S 272th St & Military Rd S	D	48.9	0.83	D	44.7	0.73			
S 288th St & Military Rd S	D	51.7	0.74	D	39.8	0.51			
S 288 th St & Pacific Hwy S	D	43.3	0.73	С	24.6	0.48			
**S 312 th Street & 28 th Ave S	D	32.3	0.93	А	8.8	0.29			
S 320 th St & 1 Ave S	D	54.2	0.83	С	32.9	0.62	С	33.9	0.63
S 320th St & I-5 NB Ramp	С	21.6	0.66	В	11.5	0.48	В	14.6	0.58
S 320th St & I-5 SB Ramp	С	30.2	0.70	В	11.9	0.56	В	18.4	0.69
S 320th St & Military Rd S	D	53.2	0.79	С	29.9	0.69	D	48.5	0.67
S 336 th St & Pacific Hwy S	D	53.3	0.86	D	44.4	0.50	С	21.7	0.51
S 348th St & Pacific Hwy S	E	64.4	0.86	С	34.1	0.70	D	52.9	0.89
S 348 th St & SR 161	E	72.6	0.97				Е	78.5	1.08
S 356 th St & 1 st Ave S	D	44.9	0.91						
S 356th St & Enchanted Pkwy S	D	43.6	0.84				С	25.7	0.62
S 356th St & Pacific Hwy S	D	53.6	0.87	D	37.8	0.47	D	53.2	0.80
SW 320th St & 21st Ave SW	D	41.6	0.80	С	31.4	0.52			

 Table 3-10. Existing Conditions Intersection Analysis Results

	PM Peak Hour		AM Peak Hour			Saturday Midday Peak Hour			
Study Intersections	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
SW 336th St & 21st Ave SW	D	49.3	0.72						
SW 340th St & Hoyt Rd SW	С	34.6	0.76						
SW 356th St & 21st Ave SW	E	55.1	0.79						
SW Campus Dr & 1 st Ave S	D	42.5	0.64						
S 312 th St & Pacific Hwy S	D	54.9	0.73	С	20.3	0.39	D	42.3	0.58
S 316 th St & Pacific Hwy S	D	54.7	0.69	А	7.8	0.22	С	28.8	0.59
S 320th St & 20th Ave S	С	34.6	0.74	А	7.7	0.32	D	36.1	0.67
S 320th St & 23rd Ave S	D	48.3	0.81	С	25.3	0.53	С	30.1	0.66
S 320th St & Pacific Hwy S	E	57.1	0.75	С	23.1	0.47	D	37.2	0.74
S 324 th St & Pacific Hwy S	D	48.0	0.82	В	18.1	0.32	D	35.6	0.71
Average V/C City Center			0.76			0.40			0.67

* Intersection is located outside of City of Federal Way limits **Unsignalized Intersection

Parking

The existing number of parking stalls in the City Center area reflects the more auto-oriented development pattern of current land uses. Table 3-11 summarizes the number of parking spaces required by City code for each existing land use.

	Retail	Office	Residential	Hotel	Total Spaces
	(sq ft)	(sq ft)	(units)	(rooms)	Per Code
City Code	1 per 300 sq ft	1 per 300 sq ft	1.7 per unit	1 per room	
Existing Square Footage	1,833,189	67,045	254	230	
Existing Parking Requirement per Code	6,111	223	432	230	6,996

Table 3-11. Existing Parking Requirements

Data provided by the City estimates that there are approximately 8,960 parking stalls provided in the City Center area. As summarized in Table 3-11, nearly 2,000 additional parking stalls are provided above what existing code requires.

Collision Analysis

Review of historical collision data provides an indication of the location and severity of incidents at intersections and along corridors. Historical analysis is useful in understanding the typical types of collisions that occur at a particular location; however, the data may not be indicative of future collision rates or causes. A number of factors can contribute to collisions including:

- Traffic congestion (ability to maneuver)
- Driver skills (driver age and experience)
- Driver behavior (speeding, aggressiveness, driving while intoxicated)
- Roadway geometrics (sight distance)
- Weather conditions (rain, glare, snow)
- Nature (animals, fallen trees)

- Vehicle condition, equipment, and maintenance (brakes, tires)
- Roadway condition (pavement condition)

Five years of collision data, 2010 through 2014, were analyzed to identify collision trends in the study area. The City requires the identification of high collision intersections and roadway corridors defined as follows:

- A collision rate of more than 1.0 collision per million entering vehicles (MEV) at an intersection.
- A collision rate of more than 10.0 collisions per million vehicle miles (MVM) on a roadway segment. Roadway segments are defined as arterials and principal collectors between and including intersections of collectors and arterials.

Table 3-12 provides the calculated collision rates for the study intersections and roadway segments. Results indicate that three of the 23 intersections and one of the 15 roadway segments could be considered to have high collision rates. The City has either improved or planned to improve these locations to address high collision rates.

Intersection ¹	Total Collisions	Collision Rate (MEV) ²	
S 288th St & Military Rd S	60	0.99	
S 288 th St & Pacific Hwy S	47	0.55	
S 312 th St & 28 th Ave S	10	0.45	
S 320 th St & 1 st Ave S	65	0.89	
S 320 th St & I-5 NB Ramp	7	0.09	
S 320 th St & I-5 SB Ramp	25	0.29	
S 336 th St & Pacific Hwy S	62	0.68	
S 348 th St & Pacific Hwy S	36	0.32	
S 348 th St & SR 161	82	0.58	
S 356 th St & 1 st Ave S	21	0.38	
S 356th St & Enchanted Pkwy S	24	0.39	
S 356 th St & Pacific Hwy S	37	0.44	
SW 320 th St & 21 st Ave SW	45	0.66	
SW 336 th St & 21 st Ave SW	79	1.12	
SW 340 th St & Hoyt Rd SW	28	0.65	
SW 356 th St & 21 st Ave SW	25	0.43	
SW Campus Dr & 1 st Ave S	38	0.56	
S 312 th St & Pacific Hwy S	106	1.36	
S 316 th St & Pacific Hwy S	57	0.86	
S 320 th St & 20 th Ave S	45	0.61	
S 320 th St & 23 rd Ave S	73	0.81	
S 320 th St & Pacific Hwy S	125	1.09	
S 324th St & Pacific Hwy S	43	0.57	

Table 3-12. Five-Year Collision Rates (2010 – 2014)

Roadway Segment	Total Collisions	Collision Rate (MVM) ²
21st Ave SW from SR 509 to S 356th St	233	3.03
1^{st} Ave S from S 312th St to S 356th St	191	3.73
SR 99 from S 272 nd St to S 356 th St	1006	3.87
20th Ave S from S 312th St to S 320th St	50	8.94
23 rd Ave S from S 312 th St to S 322 nd St	88	8.52
28^{th} Ave S from S 312^{th} St to S 317^{th} St	8	2.93
S 312th St from SR 99 to 28th Ave S	131	9.76
S 316th St from SR 99 to 23rd Ave S	50	11.85
S 317 th St between 23 rd Ave S and 28 th Ave S	8	2.85
S 320th St from 1st Ave S to Military Rd	555	4.81
SW 320 th St from Hoyt Rd to 1 st Ave S	125	1.34
S 348th St from 1st Ave S to I-5	182	3.12
SW Campus Dr from 21st Ave SW to 1st Ave S	173	2.71
SW 340 th /336 th St from Hoyt Rd to 21 st Ave SW	165	4.66
S 356 th St from 1 st Ave S to 16 th Ave S/Enchanted Pkwy	102	4.29

Source: City of Federal Way Collision Database

¹ The City does not maintain data for the study intersections at S 272nd St & Military Rd S and S 320th St & Military Rd S ² MEV = million entering vehicles: MVM = million vehicle miles

Note: Bold values indicate high collision locations, as defined by City standards.

The City of Federal Way, in general, attributes the majority of collisions to congestion at roadways and intersections. The congestion related delay at intersections can result in driver risk-taking by attempting to reduce wait times. Improving mobility and access to all modes, reducing conflict points, and reducing travel delay may reduce some types of collision along the corridor. The City traffic engineering division monitors collision data and corrects roadway and intersection issues that could contribute to higher collision rates at specific locations.

Transit Services

The Federal Way Transit Center is located within the City Center on South 317th Street between 21st Avenue South and 23rd Avenue South. Within the study area, South 324th Street, South 320th Street, and South 312th Street are used to access the Transit Center. The Transit Center is served by Sound Transit routes 574, 577, and 578; King County Metro routes Rapid Ride A, 179, 181, 182, 183, 187, 193, and 197; and Pierce Transit routes 402, 500, and 501. Bicycle lockers and 1,190 vehicle parking spaces are provided at the Transit Center. The parking lot is heavily used during the weekday. The Transit Center provides direct access to high-occupancy vehicle (HOV) lanes on I-5.

Several bus routes stop in Federal Way, with 3,000 to 3,500 person trips made by public transit service each day. About three percent of peak hour trips within Federal Way are transit trips.

Pedestrian Facilities

The City of Federal Way has pedestrian connectivity with sidewalks on many streets in the study area. The Bonneville Power Administration (BPA) Trail is a paved pedestrian trail that connects

residential areas to parks. Although there are sidewalks connecting the residential area with the City Center, walking is not a popular mode choice to shopping because of the high volume and high speed of vehicles on the roadway network and the relatively long distance between destinations.

Bicycle Facilities

The City's bicycle network consists of a range of facilities including bike lanes, wide shoulders, and the BPA Trail. The BPA Trail provides a connection for cyclists to the City Center. However, cyclists must cross SR 99, which may be a deterrent. Within the City of Federal Way, cyclists can bike on the sidewalk, except in the City Center where it is prohibited by ordinance. When surveyed as part of the comprehensive plan update, residents cited a lack of bicycle infrastructure as the main cycling deterrent.

Future Conditions

This section summarizes the transportation effects within the study area and at the City Center. It includes a summary of the land use assumed for the alternatives and roadway improvement assumptions.

Future Year Land Use

The Action Alternative proposes a mixed use development, which would provide the variety of land uses to create an urban center within Federal Way. The difference between the No Action and Action Alternatives is the land use assumptions in the City Center; the Action Alternative assumes an increase over the No Action Alternative. Table 3-13 summarizes the land use quantities for the alternatives. The land use in the rest of the City and the greater Puget Sound Region is the same for both alternatives.

	Retail (sq ft)	Office (sq ft)	Residential (units)	Hotel (rooms)
Existing	1,833,189	67,045	254	230
No Action	2,505,379	329,427	1,925	230
Action	2,308,189	467,045	2,654	830

Table 3-13. City Center Land Use Future No Action and Action Alternatives

Roadway Improvements Assumptions

The City's *Transportation Improvement Plan* (TIP) highlights funded projects through the year 2040. Ten of the study intersections are expected to have funded planned projects between 2015 and 2025. Table 3-14 summarizes the projects assumed to be constructed by 2025 for both alternatives. Table 3-15 summarizes the specific improvements planned for study intersections.

Table 3-14.	Transportation	Improvement	Projects	through	2025
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Project	Location	Description
А	10 th Ave SW @ SW Campus Dr	Add SB right-turn lane
В	SR 99 @ S 312 th St	Add 2 nd left-turn lane NB
С	S 304 th St @ 28 th Ave S	Add NB right-turn lane, signal
D	SW 320 th St @ 21 st Ave SW	Add 2 nd WB left-turn lane, interconnect to 26 th Ave SW
E	S 312 th St @ 28 th Ave S	Add SB right-turn lane

Project	Location	Description
F	SW 336 th Way/SW 340 th St (26 th PI SW to Hoyt Road SW)	Widen to 5 lanes, add signal at 26 th PI SW
G	SE 509 @ 11 th PI S	Add EB left-turn lane
Н	S 356 th St (SR 99 to SR 161)	Widen to 5 lanes
I	S 356 th St @ SR 161	Add 2 nd NB left to SR 161
J	S 320 th St @ 1 st Ave S	Add EBL, WBL, WBR, NBT, SBR; widen to 5 lanes N to 316 th or Alternative Measure
К	S 320th St @ I-5 Bridge Widening	Add HOV lanes, realign ramps in SE quadrant
L	SW 344 th St (12 th Ave SW to 21 st Ave SW)	Extend 3 lane principal collector
М	S 352 nd St (SR 99 to SR 161)	Extend 3 lane principal collector
Ν	SR 99: S 340 th St to S 356 th St	Construct arterial HOV lanes, both directions
0	Military Rd @ S 342 nd St	Add NB left-turn lane at the intersection and a two way left turn lane between S. 340 th St and S. 342 nd St
Р	SR 99 @ S 348 th St	Add 2 nd SB left turn lane

Table 3-15. Changes to Study Intersection from TIP

Intersection	Improvement Description
SR 99 @ S 312 th St	Add 2 nd left-turn lane NB
SW 320 th St @ 21 st Ave SW	Add 2 nd WB left-turn lane
S 312 th St @ 28 th Ave S	Add SB right-turn lane
SW 340 th St @ Hoyt Rd SW	Add WB lane, separate through and left lane.
S 356 th St @ SR 161	Add 2 nd NB left to SR 161
S 320 th St @ 1 st Ave S	Restrict left turns on all approaches
S 320 th St @ I-5 SB	Add through lane on S 320th St, both directions
S 320 th St @ I-5 NB	Add through lane on S 320th St, both directions
SR 99 @ S 356 th St	Add northbound through lane
SR 99 @ S 348 th St	Add 2 nd southbound left turn lane

Trip Generation

Trip generation rates for the alternatives were developed using a travel demand forecasting model and Fehr & Peers MainStreet tool. A travel demand forecasting model is a computer model developed to project traffic volumes and patterns based upon land use and the characteristics of the transportation system. The roadway network under study, as well as the land use that generates traffic on that network, is coded into the model. The model projects traffic on the roadway system based on observed traffic data and statistical data that associates typical travelers' tendencies with land use. A model of existing conditions is first created and calibrated according to observed existing traffic volumes and patterns. Once a calibrated model is completed, it can be used to project the traffic demand model for this study was created using EMME software. Separate Federal Way travel demand model runs were developed for the 2025 No Action and 2025 Action Alternatives to reflect how their land use assumptions would influence travel behavior in the future. The model assumed the same future roadway improvements for both alternatives. The MainStreet tool was developed to more accurately predict trip generation in mixed use suburban centers such as Federal Way's City Center. MainStreet evaluates whether a reduction rate in new vehicle trips from the Institute of Traffic Engineers (ITE) *Trip Generation Manual* could be applied. This method supplements the travel demand model by recognizing how built environment variables including density, diversity of land uses, destinations (accessibility), development scale, pedestrian and bicycle design, distance to transit services, and demographics affect travel. Places with higher densities, a rich variety of land uses close to one another, and high quality pedestrian, bicycle, and transit environments have lower vehicle trip generation rates. People have more choices in terms of both the travel mode as well as how far they must travel to reach various destinations.

The level of vehicle trip reduction applied to the City Center varied among the two alternatives, based on the land uses assumed. This approach is consistent with best practices in transportation analysis, as documented by the National Cooperative Highway Research Program (Report 684). Table 3-16 summarizes the trip generation for the two alternatives.

		2015 Existing	2025 No Action Alternative	2025 Action Alternative	Change from 2025 No Action to Action Alternative
	Retail	1450	1817	1789	-28
	Office	87	388	466	+78
AM Peak Hour	Hotel	100	93	334	+241
	Residential	88	742	1028	+286
	Total	1,725	3,040	3,617	+577
	Retail	4347	5542	4923	-619
	Office	81	371	401	+30
PM Peak Hour	Hotel	112	105	341	+236
	Residential	105	901	1127	+226
	Total	4,645	6,919	6,792	-127

Table 3-16. Trip Generation by Alternative

Trip Generation Differences Explained

The 2025 Action Alternative is anticipated to have more trips than the No Action Alternative in the AM peak hour (approximately 580 trips), but fewer trips (approximately 130 trips) in the PM peak hour. The increase in AM peak hour trips results from the increase in land use and lower number of trips occurring within the City Center. The decrease in PM peak hour trips is because more trips occur within the City Center area, which is referred to as the internal capture rate. It indicates that more people choose to walk, bike, or drive between land uses that are within the City Center.

Trip Distribution and Assignment

The trip distribution was based on the EMME Federal Way travel demand model; trip distribution provides an assessment of the number of people traveling to and from the site. The Saturday midday peak hour trip distribution was assumed to be the same as the PM peak hour trip distribution. The trip distribution was similar between the No Action and Action alternatives.

Impacts

This section summarizes the transportation effects within the study area. It describes the project's impact on traffic operations, safety, transit service, and pedestrian and bicycle mobility.

Traffic Operations Impact

Common to All Alternatives

For the analysis, each of the signalized study intersections was analyzed using a 140 second cycle length in the PM peak hour and Saturday midday peak hour, and a 120 second cycle length for the AM peak hour. This is consistent with the City of Federal Way's *Guidelines for the Preparation of Transportation Impact Analyses* (September 9, 2014).

No Action Alternative

Table 3-17 provides the operations analysis for the No Action Alternative. As summarized in Table 3-17, none of the intersections are anticipated to be deficient based on the City of Federal Way's traffic operations standards with programmed improvements. However, it is worth noting that some of the intersections exceed the LOS standards defined by the Washington State Department of Transportation (WSDOT) and the Puget Sound Regional Council (PSRC):

- S 288th St & Pacific Hwy S
- S 320th St & Pacific Hwy S
- S 324th St & Pacific Hwy S
- S 336th St & Pacific Hwy S
- S 348th St & Pacific Hwy S
- S 356th St & Pacific Hwy S
- S 348th St & SR 161

To correct the LOS deficiencies at these locations, Federal Way and WSDOT could widen the roads and add capacity. These types of capacity additions were considered as part of the recent comprehensive plan update, but were considered infeasible for the following reasons:

- Roadway expansion projects for drive alone vehicles were inconsistent with City Center Plan goals for a more walkable, accessible, and transit oriented community.
- Extensive right of way impacts.
- Longer traffic signal cycle lengths (because of wider roadways), which would make it more difficult for pedestrians and bicyclists to cross the street and potentially increase driver frustration with longer wait times at the signals.

The objective of the Action Alternative is to create an urban form and development pattern that encourages less auto use and provides for a more walkable and bikeable environment. Therefore, the land use pattern and supporting transportation network investments for the City Center have been developed to reduce overall auto trip generation and driving compared to the No Action Alternative. As shown in the following section, the results of the traffic impact analysis support the notion that a higher density, transit supportive land use plan for City Center has fewer traffic operations impacts than the No Action Alternative during the PM peak hour.

		PM Peak H	our		AM Peak	Hour	Saturd	ay Midday	Peak Hour
Study Intersection	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
*S 272 nd St & Military Rd S	F	91.0	1.11	D	49.9	0.90			
S 288th St & Military Rd S	E	65.4	0.99	С	27.2	0.66			
S 288 th St & Pacific Hwy S	F	124.4	1.01	F	112.4	0.94			
**S 312 th St & 28 th Ave S	E	47.1	0.97	С	18.3	0.74			
S 320th St & 1st Ave S	С	27.3	0.69	С	28.9	0.72	С	22.4	0.61
S 320th St & I-5 NB Ramp	В	16.9	0.61	С	22.5	0.78	В	14.8	0.52
S 320th St & I-5 SB Ramp	D	42.3	0.78	С	31.1	0.55	С	30.8	0.75
S 320th St & Military Rd S	E	65.4	0.97	D	49.8	0.83	D	41.2	0.70
S 336 th St & Pacific Hwy S	E	59.0	1.06	D	42.3	0.73	С	28.7	0.63
S 348 th St & Pacific Hwy S	F	91.5	1.09	E	70.4	0.77	F	93.6	1.13
S 348 th St & SR 161	F	87.8	1.08				F	95.4	1.14
S 356 th St & 1 st Ave S	E	76.7	1.09						
S 356th St & Enchanted Pkwy S	D	49.0	0.87				С	34.7	0.76
S 356th St & Pacific Hwy S	E	67.8	1.07	E	69.8	0.61	D	52.7	0.87
SW 320th St & 21st Ave SW	E	59.0	0.94	D	52.5	0.95			
SW 336 th St & 21 st Ave SW	E	64.4	0.96						
SW 340th St & Hoyt Rd SW	D	44.2	0.82						
SW 356 th St & 21 st Ave SW	F	85.4	0.96						
SW Campus Dr & 1st Ave S	D	54.5	0.83						
S 312th St & Pacific Hwy S	D	51.4	0.86	D	39.1	0.72	D	36.4	0.74
S 316th St & Pacific Hwy S	С	31.0	0.79	В	14.4	0.42	С	36.6	0.72
S 320 th St & 20 th Ave S	С	32.7	0.81	В	19.2	0.46	D	36.5	0.80
S 320th St & 23rd Ave S	E	60.3	1.00	D	39.1	0.80	E	59.1	0.93
S 320th St & Pacific Hwy S	E	61.7	0.94	E	55.2	0.80	E	63.7	0.94
S 324th St & Pacific Hwy S	E	65.1	1.01	С	25.3	0.68	D	50.8	0.90
City Center Average V/C			0.91		0.68				0.85

Table 3-17. 2025 No Action Alternative Operations Analysis

* Intersection is located outside of City of Federal Way limits

**Unsignalized Intersection

Action Alternative

Table 3-18 provides the operations analysis for the Action Alternative. As shown, the Action Alternative does not degrade the LOS of any of the study intersections to be worse than the No Action Alternative. Overall, the level of intersection delay is less during the PM peak hour at all but three intersections for the Action Alternative. In these instances, the delay increase is approximately three seconds and the LOS grade is unchanged. Based on these findings, the Action Alternative does not have a significant impact on traffic operations.

		PM Peak	Hour		AM Peak H	our	Saturd	ay Midday	/ Peak Hour
Study Intersection	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio	LOS	Delay	V/C Ratio
*S 272 nd St & Military Rd S	F	90.6	1.11	D	50.1	0.91			
S 288th St & Military Rd S	E	64.4	0.99	С	27.6	0.67			
S 288 th St & Pacific Hwy S	F	121.3	1.00	F	121.2	0.96			
**S 312 th St & 28 th Ave S	E	47.4	0.97	С	18.7	0.72			
S 320 th St & 1 st Ave S	С	27.2	0.69	С	29.0	0.73	С	24.7	0.61
S 320th St & I-5 NB Ramp	В	17.6	0.60	С	22.4	0.79	В	15.0	0.52
S 320 th St & I-5 SB Ramp	С	33.1	0.79	С	31.4	0.57	D	46.6	0.79
S 320th St & Military Rd S	E	65.8	0.97	D	50.1	0.86	D	45.4	0.70
S 336 th St & Pacific Hwy S	E	57.4	1.03	D	45.3	0.75	С	31.4	0.62
S 348 th St & Pacific Hwy S	F	95.0	1.09	E	66.9	0.78	E	66.7	0.94
S 348 th St & SR 161	F	88.8	1.08				F	96.4	1.14
S 356 th St & 1 st Ave S	E	77.1	1.10						
S 356th St & Enchanted Pkwy S	D	46.7	0.86				D	41.2	0.75
S 356 th St & Pacific Hwy S	E	66.7	1.06	E	62.7	0.60	D	52.5	0.87
SW 320 th St & 21 st Ave SW	E	57.2	0.92	D	54.8	0.99			
SW 336 th St & 21 st Ave SW	E	64.3	0.96						
SW 340th St & Hoyt Rd SW	D	43.7	0.81						
SW 356 th St & 21 st Ave SW	F	83.5	0.95						
SW Campus Dr & 1st Ave S	D	53.7	0.85						
S 312 th St & Pacific Hwy S	D	53.5	0.88	D	38.5	0.75	D	48.2	0.76
S 316 th St & Pacific Hwy S	С	33.7	0.81	В	16.2	0.44	D	35.7	0.73
S 320 th St & 20 th Ave S	С	32.1	0.82	С	22.1	0.48	D	36.4	0.81
S 320th St & 23rd Ave S	E	61.4	1.00	D	41.8	0.83	E	59.2	0.95
S 320th St & Pacific Hwy S	E	60.5	0.95	E	60.8	0.83	E	59.0	0.93
S 324th St & Pacific Hwy S	E	59.3	1.00	С	24.8	0.68	D	50.1	0.89
City Center Average V/C			0.92			0.70			0.86

Table 3-18. 2025 Action Alternative Operations Analysis

* Intersection is located outside of City of Federal Way limits

**Unsignalized Intersection

The operations analysis shows that the Future No Action and Future Action result in very similar impact on the study intersections.

Future Parking Requirements

Common to All Alternatives

As summarized in Table 3-19, both the No Action and Action Alternatives would require additional parking spaces per code requirements for new development. These increases assume full development of the City Center. Almost 15,000 parking spaces would be required to meet the proposed Action Alternative. The number of parking spaces represents the City's parking code requirements. Parking would be provided on a project-by-project basis in accordance with FWRC requirements.

	Retail (sq ft)	Office (sq ft)	Residential (units)	Hotel (rooms)	Total Parking Spaces per Code
City Code Requirement	1 per 300 sq ft	1 per 300 sq ft	1.7 per unit	1 per room	
Action Land Use	2,308,189	467,045	2,654	830	
Action Parking Spaces Needed	7,694	1,557	4,512	830	14,593
No Action Land Use	2,505,379	329,427	1,925	230	
No Action Parking Spaces Needed	8,351	1,098	3,273	230	12,952

Table 3-19. Future Parking Requirements

Traffic Safety Impact

Common to All Alternatives

The *Federal Way Comprehensive Plan* identifies that congestion is a common contributing factor to vehicle collisions. As the amount of traffic increases within the area, the probability of traffic collisions would be expected to increase as well. Congestion is a primary factor in collision rates. However, the City and WSDOT have made investments in the study area in an on-going effort to reduce the number of preventable accidents that occur. It is anticipated that through these investments, the number of serious and preventable accidents would decrease.

Both the Action and No Action Alternatives would increase the total vehicle volume of vehicles at the high collision locations identified in Table 3-12 (page 3-12). Compared to the No Action Alternative, the Action Alternative would result in fewer added trips during the PM peak hour, the period of highest traffic congestion during a typical day. The alternatives also make up only a small portion of the entering trips for the surrounding intersections. In addition, roadway improvements designed to reduce congestion may lower congestion associated collisions.

Transit Service Impact

Common to All Alternatives

In the next ten years, demand for transit service in the City Center is expected to increase with the increase in jobs and households. Transit demand is to be addressed as part of the City's comprehensive plan. The City has identified SR 99 and South 320th Street, along with 21st Avenue SW and 16th Avenue South as transit priority corridors.

Action Alternative

For this alternative, the increase in households and office space compared to the No Action Alternative is anticipated to increase demand for transit service in the City Center.

Pedestrian and Bicycle Mobility Impact

Common to All Alternatives

The land use mix for the No Action and Action Alternatives encourages walking and bicycling in and around the City Center. The City's *Bicycle and Pedestrian Master Plan* adopted in March 2012 highlights planned bicycle and pedestrian facilities in the City. All roads within the City Center either have an existing sidewalk or have been identified as a location for proposed sidewalks.

Some roads around the City Center, including South 324th Street, South 308th Street, and 11th Place South, have been identified as locations for future bicycle facilities.

The alternatives, along with the proposed bicycle and pedestrian facilities highlighted in the *Bicycle and Pedestrian Master Plan*, will increase safety and encourage walking and bicycling as a mode of transportation in and around the City Center.

Mitigation

This section summarizes the proposed mitigation anticipated to be required beyond the roadway improvements assumed to be constructed by 2025. These projects are listed on the City's Transportation Improvement Plan and Capital Improvement Program.

Existing Roadway Network

Both the No Action and Action Alternatives would increase the density and activity within the Federal Way City Center area. The increased density could increase traffic congestion; however, these increases may be offset by reduced vehicle travel demand resulting from mixed-use development, improvements to pedestrian facilities, and improved transit services.

The Action Alternative results in a decrease in average vehicle delay at all study area intersections during the PM peak hour, except for three intersections that experience an increase of approximately three seconds of average vehicle delay. For all intersections, the LOS grade does not degrade between the No Action and Action Alternatives. Because the level of service grade does not change, the transportation impacts of the Action Alternatives are less than significant and no mitigation is proposed under the *Transportation Impact Analysis*.

While there are no impacts, and thus no mitigation required for the Action Alternatives, Federal Way, Sound Transit, and WSDOT are making and planning significant investments in the area's transportation network to increase the capacity of the transportation system. These projects include the following:

- *Interstate 5 SR 161/SR18 Triangle Project:* The reconstruction upgraded ramps and improved connections to and from I-5, SR 18, and SR 161. The benefits of this project are increased travel capacity and safety improvements.
- Pacific Highway (SR 99) Phase V High Occupancy Vehicle (HOV) Lane improvements, which widened the existing five-lane roadway to a seven-lane section, including center median, curb, sidewalk, and streetlight. The project is planned for construction in 2016.
- Federal Way Link Extension project with plans to extend light rail from Downtown Seattle to the Federal Way Transit Center.
- The City's *Bicycle and Pedestrian Master Plan*, which proposes projects to add capacity for walking and bicycling and enhance accessibility in the area. These types of projects also reduce vehicle trip making by making it easier for people to park once and walk to multiple destinations.
- The City's ITS Plan, which when implemented, will provide better traffic signal coordination and operations, improved corridor management during incidents, and increased vehicle capacity.

Parking

Additional parking spaces will be required on site for both the No Action and Action Alternatives. These spaces may be provided on the site or as part of parking garages assumed as part of the City Center development. The number of parking spaces required could be reduced through shared parking arrangements or transportation demand management programs. This reduction could vary from 10 to 20 percent based on the effectiveness and robustness of the programs implemented.

Additional Mitigation

The mitigation identified in this section is focused on additional improvements that could be required to meet the expected travel demand on area roadways associated with the proposed development in the project area.

Development will need to meet the requirements of applicable codes at the time of application. Such requirements might include the dedication of right-of-way; installing curbs, gutters, and sidewalks; drainage improvements; and other requirements of the City. Additional mitigation may be required for individual development applications within the project area to reduce area traffic impacts, or improve on-site circulation and to meet City and state requirements for Commute Trip Reduction and Transportation Demand Management. Actions to be considered include:

On-Site Improvements – Driveway and circulation action/improvements to minimize impact on area roadways. Actions may include management of access points, traffic control measures, construction of internal roadways, pedestrian and bicycle improvements, and connections to adjacent developments.

Non-Motorized Mode Improvements – Mitigation may be required per site specific and land use development proposals to address pedestrian, bicycle, and transit improvements to support the plans, policies, and goals as noted within the City's comprehensive plan transportation chapter.

Grid Roadway Development – Part of the City Center Plan is to develop a number of internal roadways to create smaller blocks that will improve the grid network and improve the access for pedestrians and vehicles. Right-of-way dedication and street improvements shall be a component of the development submittal phase of a proposed project within the project area. Roadways within the project area must meet specific "City Center" design standards as specified in the City's comprehensive plan transportation chapter.

Right-of-Way Dedication – Right-of-way dedication and frontage improvements may be required in conjunction with proposed developments. Roadways within the project area must meet specific "City Center" design standards as specified in the City's comprehensive plan transportation chapter.

Transportation Demand Management (TDM) – TDM actions can be used to reduce the impact of the project and as a mitigation action. These actions may include provision of transit passes to tenants and employees, ridesharing programs, priority carpool parking, and guaranteed ride home programs. TDM actions are designed to primarily address commute trips and may not be applicable as mitigation for all developments. The *Federal Way Comprehensive Plan* summarizes TDM alternatives by their functional grouping and potential effectiveness, implementation difficulties, and expected cost effectiveness. These strategies include: Telecommuting; Parking Management and Pricing; Flexible Work Schedule; Rideshare programs; Traveler Information; Public Relations; and Marketing.

Following is a list of recommended mitigation measures that can be considered in conjunction with individual development projects within the project area:

- 1. Encourage voluntary expansion of the CTR Program to employers of less than 100 employees. The encouragement by employers may be as diverse as subsidized bus passes, car pool space priority, bike racks, shower facilities, van pools, car pool information access, telecommuting, variable work hours, etc.
- 2. Encourage the formation and expansion of area-wide ride-sharing programs. Such programs operate with little direct cost to the City and are highly cost effective.
- 3. Support the enhancement of Park & Ride facilities and transit centers to supplement the regional system, either directly through physical development or enhancements, or indirectly through development conditions where employer vans are required to shuttle employees to Park & Ride facilities or transit centers.
- 4. Facilitate enhancements to the HOV system. This may include the dedication of property for HOV lanes, construction of arterial HOV lanes within existing City right-of-way, and priority treatments for buses at traffic signals. At the very least, where feasible, opportunities to enhance access to the state system of HOV lanes should be considered.
- 5. Achieve increased densities and mix of uses to support public transportation, decrease trip generation and parking impacts.
- 6. Encourage facilities (shelters, loading spaces, etc.) to accommodate City Center shuttle service in association with development projects, together with enhanced pedestrian and bicycle access and security.
- 7. Improve pedestrian and bicycle access to bus routes and transit centers. This can be a requirement of subdivision, development, and redevelopment. The City may need to acquire easements and construct trail connections. Development incentives could be granted for providing such amenities that are pedestrian, bike, and transit friendly. While bicycle, pedestrian, and bus transit services and facilities may be desirable for other reasons; they should not be looked on as highly cost-effective strategies to the exclusion of those actions listed above.

Neighborhood Traffic Control – Development within the project area may be required to include actions to reduce the impact of cut through traffic on residential areas. Examples of neighborhood traffic control actions include: turn restrictions, speed controls, traffic enforcement, and parking restrictions.

Parking – Mitigation actions that reduce the parking requirements within the project area should be encouraged. Examples include shared parking, employee parking programs, parking time restrictions, and paid parking programs. Shared parking strategies focus on looking at opportunities where adjacent uses have parking demand profiles that can support the sharing of a smaller amount of parking spaces. For example, an office building with an 8 am to 5 pm demand could share its parking with evening dominated uses, such as restaurants or a cinema. A parking demand study, which shows the hourly parking demand profiles for adjacent uses and the potential for joint parking opportunities within a mixed-use development, can be used to reduce the number of parking spaces.

In addition, contained in the above TDM mitigation are strategies that overlap with parking mitigation plans for development. A development may propose a plan and management system to the City for approval upon submittal of the development permit. Those items may contain the following in support of the City of Federal Way and state Commute Trip Reduction (CTR) requirements:

Alternative Mode Support Measures

Public education and promotion may increase the effectiveness of these other strategies up to three percent.

Area-Wide Ride Matching Services – May result in a 0.1-3.6% reduction in vehicle miles traveled (VMT) and an up to 2.5% VMT reduction in transit services. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

Vanpool Service – May result in an up to 8.3% in commute VMT, as well as a reduction in transit and vanpool fares up to 2.5%. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

Non-Motorized Modes Plan and Implementation – May result in an up to 0-2% regional VMT reduction. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

HOV Facilities – May result in an up to 1.5% VMT reduction and 0.2% vehicle trip reduction. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

On Site Development of Park and Ride Program – May result in up to 0-0.5% VMT reduction. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

Employer-Based TDM Measures

Parking Mitigation – Monetary incentives may result in an up to 8-18% trip reduction at site. Reductions in parking required may be calculated on the basis of these lower tripgeneration rates.

Alternative Work Schedules – May result in as much as a 1% regional VMT reduction. Reductions in parking required may be calculated on the basis of these lower trip generation rates.

Commute Support Programs – May result in up to 0.1-2.0% regional VMT reduction. Reductions in parking required may be calculated on the basis of these lower trip generation rates.

Parking Management – May result in up to a 20 to 30% reduction in SOV trips to/from the site. Reductions in parking required may be calculated on the basis of these lower tripgeneration rates.

Telecommuting – Up to 10% commute VMT reduction. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

Other Strategies

Parking Tax – May result in up to a 1 to 5% reduction in regional VMT and trip generation, but requires City Council and/or legislative action. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

Development Parking Impact Mitigation – Requires City Council approval to allow for payment of parking-mitigation funds towards long term investments in structured parking solutions in lieu of full parking requirement. Reductions in parking required may be calculated on the basis of these lower trip-generation rates.

Mixed Land Use/Jobs Housing Balance – May result in VMT reductions up to 10%. Parking stall credit is given based on overlapping shared usage of mixed facility, per City code provisions.

Transit-Oriented and Pedestrian-Friendly Design – Site and building design that encourages transit usage and/or walking may reduce overall parking requirement. Requires design review and staff approval.

Employment Center Density – Achievement of sufficient density within the City Center to constitute a regional employment center may reduce SOV work trips to individual development projects by up to 50%. Parking stall reductions may also apply to developments.

Other Parking Management Plans – May mitigate 1 to 5% region-wide VMT, provided enforcement issues are addressed in the mitigation plan.

Transportation Impact Fee

Under 2006 EIS Addendum #3 (November 2010), the transportation impact fee (TIF) program (adopted by Council under Ordinance 09-627 and codified into code under FWRC 19.91), was to replace the established pro-rata mitigation fee per PM vehicle trip identified in Exhibit B to Ordinance 07-547, the Planned Action adoption ordinance.

Development within the Planned Action area will be required to pay the required transportation impact fee as prescribed in FWRC 19.91 and the adopted City fee schedule. This practice complies with the state's *Growth Management Act* (GMA) intent that new growth would pay a proportionate share of the cost of new facilities needed to serve the new growth, and also mitigate the adverse impact of future development within the Planned Action area. The transportation impact fee is collected and spent for system improvements included within the list of transportation capital facilities in the City's comprehensive plan transportation chapter.

Significant Unavoidable Adverse Impacts

Development of the Planned Action area would generate additional traffic volumes on the area's roadways. Increases in traffic congestion at some intersections, and/or along some corridors, will result in significant, unavoidable, adverse impacts on the area's transportation system. However, the increased capacity associated with improvement projects would adequately mitigate undesired impacts. The proposed mixed-use land use pattern, on-site improvements, and TDM actions, along with high levels of transit service, may further reduce vehicle trips; thereby, further mitigating impacts on the transportation system.

3.5 Public Services

This section of the SEIS describes existing conditions, potential impacts, mitigating measures, and impacts that the proposal and alternative may have on public services. The public services analyzed in this chapter include police, fire, emergency medical service (EMS), and parks and recreation.

Affected Environment

Police

In September 2015, the Federal Way Police Department had 152 full-time employees consisting of 123 sworn officers and 29 civilian positions. Police coverage for each 24-hour period is divided into three shifts. The City of Federal Way is divided into four patrol sectors. Sector 4 serves the Planned Action project area. Minimum staffing levels are seven officers and one supervisor per shift from 0000 hours (midnight) to 1400 hours, and nine officers and one supervisor from 1400 hours to 0000 hours (Commander Arbuthnot, 2015). Three officers are assigned to The Commons at Federal Way full-time.

Call data for the first six months of 2015 showed a total of 35,658 calls for service Citywide, with 2,108 calls originating from the City Center, approximately 6 percent of total calls.

The goal for the Federal Way Police Department is to respond to Emergency and Priority 1 calls in 3-5 minutes, Priority 2 calls in 7-10 minutes, Priority 3 calls in 15-17 minutes, and Priority 4 calls in 28-30 minutes.¹ Data shows that throughout Federal Way in 2014 response time goals were being achieved or exceeded for emergency calls: Emergency calls, 3.62 minutes; Priority 1 calls, 6.18 minutes; Priority 2 calls, 14.88 minutes; Priority 3 calls, 23.02 minutes; and Priority 4 calls, 39.64 minutes.

Uniform Crime Reporting (UCR)/National Incident Base Reporting System (NIBRS) crimes are reported to both the FBI and State of Washington. These crimes include murder/manslaughter, rape, robbery, felony assaults, burglaries, auto theft, felony theft, and arson. In 2014, larceny was the most prevalent crime citywide and within the City Center, followed by auto theft, burglary, and robbery.

Calls for Service (CFS) data is compiled according to reporting districts (RDs). The RDs do not correspond exactly to boundaries in the project area. However, the project area is primarily served by RD 48, RD 74, and RD 76.

¹ *Priority* E - Emergency: Highest priority-confirmed hazard that could result in extensive loss of life and/or property. It represents the greatest danger for officers responding to an immediate danger (e.g. bank robbery in progress, shooting, carjacking with weapon).

Priority 1: Represents a potential hazard that could result in the loss of life and/or property. Officers responding may be at risk or seriously jeopardized (e.g. bank holdup alarm, assault with weapon, bomb or explosive devise found, robbery or assault in progress).

Priority 2: Represents minimal hazard with considerably less potential for loss of life and/or property. Minimal risk to responding officers (e.g. injury accident, auto theft or burglary in progress).

Priority 3: Represents low hazard, non-life threatening situation with minimal risk of property loss (e.g. non-injury vehicle accident, verbal dispute, drug activity, signal malfunction, suspicious person or vehicle).

Priority 4: Represents cold calls (e.g. abandoned vehicle, animal complaint, firework complaints, illegal dumping, lost/found property, traffic complaints).

The top 5 categories of calls for Reporting District (RD) 48 in for the first six months of 2015 include: shoplifting, traffic stop, theft report, extra patrol, and suspicious subject. The top 5 categories of calls for RD 74 in the first six months of 2015 include: traffic stop, shoplift in progress, unwanted subject, welfare check, and commercial alarm. The top 5 categories of calls for RD 76 in the first six months of 2015 include: shoplift in progress, extra patrol, follow-up request, subject stop, and welfare check. Table 3-20 (next page) shows the breakdown of the major crime reported for the project area: RD48, RD74, and RD76.

	201	10	20 ⁻	11	201	2*	201	3*	201	4*
Crime Type	City Center	City	City Center	City	City Center	City	City Center	City	City Center	City
Homicide	0	5	1	3	0	3	0	6	0	4
Rape	0	50	3	35	0	43	0	38	2	62
Robbery	8	152	5	111	3	107	6	108	13	135
Felony Assault	3	118	4	96	3	152	2	134	4	148
Burglary	13	828	9	700	11	932	11	884	13	838
Auto Theft	48	741	50	669	37	811	45	786	45	866
Larceny	699	3,141	638	2,884	545	3,420	682	3,593	887	3,912
Arson	0	11	0	11	0	9	0	7	0	13
Total	771	5,046	710	4,509	599	5,477	746	5,556	964	5,978
% in City Center	1	5.30%	1	5.75%	1	0.94%	1	3.42%	10	6.13%

Table 3-20. Crime Statistics in City Center Project Area

*NIBRS: National Incident Base Reporting System Source: Federal Way Police Department, 2015

Table 3-21 compares the citywide data for the three main reporting districts in the project area. As shown, 10.8 percent of collisions, 2.5 percent of traffic stops, and 1.1 percent of DUI arrests occurred within the City Center project area.

	Citywide	RD	76	RD)74	RD48	
Type of Activity	# of calls	# of ca	lls %	# of ca	lls %	# of ca	lls %
Collisions	1,089	14	1.3	9	0.8	95	8.7
Traffic Stops	7,540	19	0.3	40	0.5	128	1.7
DUI Arrests	91	0	0	0	0	1	1.1

 Table 3-21. Traffic Enforcement Activity 1/1/15-6/30/15

Source: Federal Way Police Department, 2015.

Fire and EMS

The Planned Action area is served by South King Fire & Rescue, which is governed by an elected board of five Fire Commissioners. SKF&R's services include:

- Emergency response for fire, emergency medical, rescue, marine, and hazardous materials incidents.
- Fire prevention services include public education, engineering, code enforcement, and fire investigation.
- Support divisions include administration; finance; fleet and facilities maintenance and repair; information technology; and firefighter training.

Parks and Recreation

When the City of Federal Way incorporated in 1990, there were approximately eight acres of parkland available per 1,000 population. Since that time, the City has purchased additional property and developed new facilities. As of 2012, the City was providing 12.52 acres of parkland per 1,000 population, compared to an adopted level of service of 10.9 acres of parkland per 1,000 population. The City currently provides 1,141.13 acres of parkland, with 601.7 acres developed for recreational use areas and 539.43 acres undeveloped.

Parks near the Planned Action area include Steel Lake and Celebration Park. Steel Lake Park is located just to the northeast. Celebration Park is located just southwest, at 11th Place South and South 324th Street. These parks are within walking distance of the City Center and they serve as regional facilities in addition to serving local needs.

Town Square Park is located within the Planned Action area. Opened in July 2014, Town Square Park is Federal Way's first downtown park. Town Square is Federal Way's gathering space for special events, movies in the park, concerts, and a wide range of recreational activities. Phase I of the park featured a large open lawn area for play activities; full and half-size basketball courts; large-size and regular chess board play; and barbecues and picnic tables.

Phase II improvements include installation of a larger lawn, a children's play area, spray park, restrooms, basketball courts, and a walking path. Construction began in summer 2015, with the park re-opening scheduled for summer 2016. The Performing Arts and Event Center will be constructed to the north of Town Square Park.

Impacts

Impacts Common to All Alternatives

Police

During construction phases of future development, construction activity in the City Center project area may affect the response times of emergency vehicles. Currently, the Federal Way Police Department staffs 1.4 officers per 1,000 population. Future development will result in an incremental increase in calls for emergency service. Under Alternative 2 (No Action) approximately 4,512 additional residents and 2,392 additional employees can be expected in the area by 2025. Based on the residential population alone, this will result in an increased need of approximately 6.4 officers by 2025 to maintain the current LOS. If employment population is also considered, Alternative 2 would result in a need for a total of approximately 9.7 officers by 2025.

Under Alternative 1 development projections, an additional 6,480 residents and 2,804 additional employees can be expected in the project area by 2025. Based on the additional residential population alone, this will result in an increased need of approximately 9 officers by 2025 to maintain the current LOS. If employment population is also considered, a total of approximately 13 officers would be required. Therefore, Alternative 1 results in the greatest need for additional officers between 2015-2025.

Alternative 1 will generate the greatest demand for police services and will also generate the greatest amount of development and supportive tax base to provide revenues to support increased police staffing. Assuming that some of these additional revenues are provided for police protection, the Federal Way Police Department concludes that it will have adequate existing and planned capacity to meet the increased demand under either of the alternatives (Andy J. Hwang, Federal Way Police Department, 2015). With coordination and planning, no significant impacts are expected to result from the proposal or alternative.

Fire and EMS

During construction phases of future development, construction activity in the Planned Action area may affect the response times of emergency vehicles.

Over the long term, future development will result in an incremental increase in calls for emergency service and future traffic growth may impact the response time of emergency vehicles. The magnitude of the increment would depend on the type and rate of the development and related transportation system improvements. South King Fire & Rescue is positioned to provide service for this growth, and it is expected that future development will provide the funding necessary for SKF&R to meet the increased service demands. SKF&R does not anticipate any significant impacts to result from the proposal or alternatives.

Parks and Recreation

Development of the action alternative will result in an additional 6,480 new residents in the City Center project area. The additional residents will result in an increased demand for 70.6 acres of new parkland according to the City's 2012 level of service goal of 10.9 acres per 1,000 population. Under Alternative 2, the 4,512 new residents would result in an increased demand for approximately 49.2 acres of parkland.

Mitigation Measures

Impacts to public services from development under the Planned Action designation would not be significant. However, measures can be taken to prevent or further minimize environmental consequences to public services and utilities. Recommended mitigating measures include:

- Coordinate with the Police Department and South King Fire & Rescue during final design, construction, and operation of future development to ensure reliable emergency access is maintained.
- Coordinate with the Parks, Recreation, & Cultural Services Department to identify opportunities for increased recreational open space for general public use throughout the project area, and within new development proposals.
- Reduce public safety impacts thru adherence to crime prevention through environmental design (CPTED) design standards.
- Provide emergency service providers with advanced notice of construction schedules and any planned street closures or blockages.
- Avoid or minimize street closures or blockages during construction to avoid potential impact to emergency response times.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to public services are anticipated.

3.6 Utilities

This section of the SEIS describes existing conditions, potential impacts, mitigating measures, and impacts that the proposal and alternative may have on utilities: water and sewer, energy (electricity, natural gas), and telecommunications.

Affected Environment

Water

Lakehaven Utility District provides domestic water for most of the City, including the Planned Action area. The primary sources of domestic water include treated surface water from the Second Supply Project (SSP) and four aquifer systems that underlie the City. The water system includes 450 miles of mainline, 3 SSP flow control facilities, 25 production wells, 3 booster pump stations, 9 interties with adjacent water purveyors, and 12 water storage tanks with a storage capacity of 31.35 million gallons. The average daily demand is approximately 10 million gallons per day (MGD).

The *Lakehaven 2014-2020 Water System Plan Update* (WSPU) sets forth projected facility needs and standards. It is based on growth projections developed by the local governments served by the District. In the case of Federal Way, the WSPU is based on growth projections contained in the City's comprehensive plan. The WSPU meets or exceeds South King Fire & Rescue's fire flow requirements for new development. Water service is extended to new development through one of four methods: connection to existing mains; utility local improvement districts (ULID); developer extension agreement; or temporary water service agreement.

Table 3-22 shows estimated usage demands per land use activity type. Long-term water and sewer use averages for equivalent residential unit demands are trending downward from 255 gpd and 220 gpd respectively. Lakehaven Development Engineering uses 255 gpd (water) and 220 gpd (sewer) for connection charge calculations.

Type of Use	Estimated Usage Units (Residential Equivalent)	Equivalent Peak Water Demand (per day)	Equivalent Sewer Discharge (per day)
Residential	1 residential equivalent (2.45 persons)	255 gallons per day (gpd)	220
Restaurant	3 per 1,000 sf	765 gpd per 1,000 sf	660 per 1,000 sf
Retail	0.2 per 1,000 sf	51 gpd per 1,000 sf	44 per 1,000 sf
Office	0.3 per 1,000 sf	77 gpd per 1,000 sf	66 per 1,000 sf

Table 3-22. Water and Sewer Service Demand Estimates

Source: Lakehaven Utility District, 2015

The City Center is divided by two water pressure zones. Pressure Zone 578, located primarily north of South 320th Street, provides pressures at the ground level of between 33 and 74 psi. Pressure Zone 538, located mostly south of South 320th Street, ranges between 42 and 53 psi. Depending on building height, building booster pumps should be considered. Water flow to the City Center is supported by large 12 inch and 16 inch mains, and each pressure zone has a storage tank within the City Center area. The water distribution system is ample for a typical urban commercial center. The pressure boundary allows large water consumption in one area (i.e., north of 320th) not to affect water pressure to other areas (i.e., south of 320th).

A portion of the District's water supply and storage program includes development of Aquifer Storage and Recovery (ASR). This program includes the use of the District's largest groundwater source (Redondo Milton Channel Aquifer – "RMC") and treated SSP water for artificial recharge of the Mirror Lake Aquifer (MLA) during the winter months. This seasonal recharge would allow increased groundwater pumping during the peak summer months. Approximately 9.4 billion gallons of water could be recovered from the MLA when the aquifer is full. In addition, the District's proposed water reclamation program includes enhancing groundwater recharge by infiltrating reclaimed water to maintain groundwater levels in the RMC and mitigate potential impacts of ASR.

Lakehaven has identified goals and objectives to: maintain their water systems and water quality to the highest level of service and at the least level required by applicable regulations; participate in conservation efforts to maximize existing water supply resources and develop new water resources; and install new water distribution systems as necessary to serve the existing and future population within the District.

Sewer

The Lakehaven Utility District also provides sewer service to the City of Federal Way, including the City Center project area. The sanitary sewer system is comprised of three major components: the trunk and collection system; the pump station system; and the wastewater treatment plants. The trunk and collection system collects wastewater from drainage basins and conveys it to the treatment plant primarily by gravity flow. In areas where use of gravity flow is not possible, pump stations and force mains, and low-pressure sewer mains are used to pump the sewage to a location where gravity flow can be used.

The 2009 District's Comprehensive Wastewater System Plan is currently being updated. The sewer system includes approximately 350 miles of mainline, 28 pump stations, and two secondary wastewater treatment plants. The system is divided into 2 primary basins (Lakota and Redondo) and 57 sub-basins. The wastewater generated within the City Center area is within the largest basin known as Lakota. Wastewater from the City Center area flows directly to the Lakota Plant, designed for a peak month flow of 10 million gallons per day (MGD). Currently flows are averaging 5.37 MGD and no expansions are expected until 2021 (Lakehaven, 2015).

Demand for sanitary sewer service is based on future population and employment forecasts. Population forecasts are presented by drainage basin and are based on the adopted land use plans of the various jurisdictions within which the District operates. In the case of Federal Way, forecasts are based on the City's comprehensive plan. In the Federal Way area, approximately 220 gallons per day is equal to one equivalent residential unit (ERU) of sewer flow discharged into the system.

The District develops a capital improvement projects (CIP) summary as a part of the annual District budget process. The CIP lists individual capital projects for the succeeding 10-year time frame and prioritizes projects according to the system needs. The District has started upgrading its existing 12 inch sewer trunk line within the City Center to 30 inch to handle future increased flows within the City Center area.

Electricity

Federal Way is served mostly by Puget Sound Energy (PSE), a private electric utility. Electricity is produced elsewhere and transported to switching stations in Kent and Renton through high-voltage transmission lines. PSE provides electrical service to approximately 39,700 electric

customers in Federal Way. Also within the City are several 115 kV transmission lines and a number of neighborhood distribution substations.

PSE's Integrated Resource Plan (IRP) is updated and filed with the Washington Utilities and Transportation Commission every two years. The current plan, which was submitted in May of 2013, details the energy resources needed to reliably meet customers' wintertime, peak-hour electric demand over the next 20 years. The plan, which will be updated in the fall of 2015, forecasted that PSE would have to acquire approximately 4,900 megawatts of new power-supply capacity by 2033. This resource need is driven mainly by expiring purchased-power contracts and expected population and economic growth in the Puget Sound region. The IRP suggests that roughly half of the utility's long-term electric resource need can be met by energy efficiency and the renewal of transmission contracts. The IPR stated that the rest of PSE's gap in long-term power resources is likely to be met most economically with added natural gas-fired resources.

The capacity of individual electric lines depends on voltage, diameter of the wire, and the clearance to objects below the line. To meet this demand, some new transmission lines and substations will need to be constructed, as well as existing ones rebuilt and/or maintained. Utility work is sometimes needed to comply with federal system reliability regulations. Specific construction that is anticipated includes the following:

- Expand Marine View substation to accommodate a new 115kV line that will improve reliability through an automatic switching scheme.
- As electric loads increase, a new 115kV transmission line will be necessary from the Christopher substation to the 115kV line that serves the Weyerhaeuser substation. This line would continue to the intersection of Enchanted Parkway South and Military Road South.

Increases in the electric demand on the Weyerhaeuser campus and surrounding area may require additional substations in any combination of the Five Mile Lake, Enchanted Parkway, or Weyerhaeuser substation areas.

Natural Gas

It is estimated that Puget Sound Energy (PSE) currently serves over 18,880 natural gas customers within the City of Federal Way.

PSE Gas System Integrity-Maintenance Planning has several DuPont manufactured main and service piping and STW main replacements planned for 2015. There are not any major projects planned in 2015 at this time, but new projects can be developed in the future at any time due to:

- 1. New or replacement of existing facilities to increase capacity requirements due to new building construction and conversion from alternate fuels.
- 2. Main replacement to facilitate improved maintenance of facilities.
- 3. Replacement or relocation of facilities due to municipal and state projects.

Telecommunications

Telecommunications in Federal Way include both land based and wireless telephone services, internet service, and cable and satellite TV. CenturyLink and Comcast provide land-based telephone, cable TV service, and internet service. There are also several wireless telephone providers and voice over internet providers (VoIP). Direct TV and Dish Network provide satellite television services.

Telephone System

CenturyLink and Comcast deliver land based telephone service throughout the City. Comcast also provides digital phone service (VoIP), while CenturyLink provides digital phone service only to its business customers. Their facilities are constructed overhead and in some cases underground.

Every telecommunications company operating in this state is required by law to provide adequate telecommunications services on demand in compliance with RCW 80.36.090 and Washington Utilities and Transportation Commission (WUTC) regulations. Accordingly, CenturyLink will provide facilities, upon reasonable notice, to accommodate whatever growth pattern occurs within the City. Due to advances in technology, additional capacity is easily and quickly added to the system.

Wireless Networks

Federal Way is currently served with a number of wireless service providers including AT&T, Sprint, T-Mobile, and Verizon. Wireless technologies use a line-of-sight radio signal transmitted and received by antennas. Therefore, it is not possible to underground the antennas or structures on which the antennas are mounted. Antennas and ancillary equipment are located on freestanding poles and towers and on existing structures and buildings. City code regulates their siting.

The Federal Communications Commission (FCC) regulates the cellular telephone industry to ensure that their operation does not interfere with AM/FM radio and cable television transmissions. Capacity is a function of frequency of use, the number of sites in a geographic area, and the number of customers. Cellular facilities are located throughout the City.

Like the non-cellular telephone companies, wireless companies expand services in response to growth. For this reason, companies closely analyze market demand to determine expansions into new service areas. Cellular technology is constantly advancing so capacity is frequently expanded through technological advances at existing sites.

Internet Service

Various companies provide internet service by telephone, cable, wireless, and satellite. As the City constructs or reconstructs streets, it is providing conduits to assist in the installation of fiber optic communication systems.

Cable Television

Cable television service in the City is provided by Comcast, CenturyLink, Direct TV, and Dish Network. Comcast and CenturyLink utilize cable and fiber optic technologies and Direct TV and Dish Network utilize satellite technologies.

Cable television installations are made to new subscribers (either to new dwelling units, or to a much smaller degree, to residences who have not opted for cable before) at published rates; provided they are less than 125 feet from a distribution or feeder line.

Connections requiring longer runs are charged on a time and material basis. Most public work considerations, such as tree trimming, work in the right-of-way, restoration of property, and so on, are covered in the City of Federal Way Master Cable Television Ordinance and Franchise Agreements with cable television providers.

Impacts

Impacts Common to All Alternatives

Water and Sanitary Sewer Service

According to Lakehaven, there is adequate water flow available for either alternative, and with the downtown sewer trunk upgrade, there is adequate wastewater collection and treatment capacity at the Lakota Plant for these alternatives.

Ongoing maintenance of conveyance and distribution lines will be necessary. No conflicts with proposed plans, policies, or regulations are expected. Other than completion of the downtown sewer trunk upgrade, no additional capacity would be required.

Energy

Electricity – During construction phases of the proposal and alternatives, construction activity could result in disruption of service, the need to relocate service lines, and other construction related impacts. These impacts will occur over a short time period and are not anticipated to result in significant impacts to the area.

Over the long term, development will increase demand for energy. Future residential demand is likely to increase significantly as residential development increases from the current 254 units to the planned 2,400 units.

Natural Gas – Under the action alternative, future residential development could increase to 2,400 new units. Commercial use varies widely, but could be expected to increase significantly if all new development under the proposal were to occur.

As noted previously, PSE has planned for growth and reports adequate capacity to serve increased demand. Significant impacts are not anticipated.

Telecommunication

Over the long term, the increased residential and employment population will increase the use of and demand for telecommunication products. Service providers have adequate capacity and do not anticipate significant impacts in the provision of service.

Mitigation Measures

Water and Sanitary Sewer Service

- Ensure that all new development complies with local, state, and federal standards for energy conservation.
- Encourage drought-tolerant landscaping (xeriscaping) for new development.
- Encourage new development to incorporate appropriate water conservation measures into their operations.

Utilities

- Plan with service providers to minimize impacts of utility relocations (equipment procurement times, relocate in advance of construction, etc.).
- Inform utility customers of any planned temporary service disruptions.
- Coordinate with all utility companies on the design of the new services and connections.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated.

This chapter contains written comments provided on the Draft SEIS during the SEIS comment period, which ranged from October 16 to November 16, 2015. The written comments received during this period are presented verbatim. All comments were received by email. No comments were received at the public meeting held on November 9, 2015. Responses to comments follow the comments section.

4.1 Public Comments

Number	Date	Author
1	October 22, 2015	Roberta Anderson, Siena Engineering Group on behalf of AT&T
2	November 3, 2015	Tina Vaslet, Pierce Transit
3	November 16, 2015	Leah Bolotin, AICP, Washington State Department of Transportation (WSDOT)
4	November 20, 2015	Leah Bolotin, AICP, Washington State Department of Transportation (WSDOT)

Comments received include the following:

COMMENT #1:

From:Roberta Anderson <Roberta.Anderson@sienaengineeringgroup.com>Sent:Thursday, October 22, 2015 11:38 AMTo:Stacey WelshSubject:2016 City Center Planned Action Draft Impact

AT&T is not involved-Thank you

Roberta Roberta Anderson Siena Engineering Group 11241 Willows Rd N.E., Suite 130 Redmond, WA 98052 Phone: 425-896-9839 Email: <u>Roberta.Anderson@SienaEngineeringGroup.com</u>

COMMENT #2:

From:	Tina Vaslet [mailto:tvaslet@piercetransit.org]
Sent:	Tuesday, November 03, 2015 12:04 PM
To:	Tina Piety
Subject:	RE: Federal Way 2016 City Center Planned Action Draft Supplemental
-	Environmental Impact Statement

Good Afternoon Tina,

Pierce Transit is excited about the future plans for the City Center and look forward to hearing more about it as the project gets nearer. Pierce Transit has no comment at this time.

Thank You, Tina Vaslet Planner II – Bus Stops Pierce Transit 253-983-2706

COMMENT #3:

From:	Bolotin, Leah <bolotil@wsdot.wa.gov></bolotil@wsdot.wa.gov>
Sent:	Monday, November 16, 2015 4:13 PM
To:	Stacey Welsh
Cc:	Prestrud, Charles; Pazooki, Ramin; Brown, Rob
Subject:	draft WSDOT comments on DSEIS for Federal Way City Center

Stacy,

I had a chance to review the DSEIS-PA for the Federal Way City Center development envelope of increased land use denisty. I would like to congratulate Federal Way on planning for moving ahead with plans to create a vibrant, mixed use, walkable City Center. Sounds like it will be something to travel to Federal Way for!

As discussed, WSDOT has a few questions/concerns regarding the adoption of a V/C of 1.1 as the transportation LOS standard, as well as the forecasted increase in collisions. Please consider this email a draft until Federal Way has a chance to review and request any desired edits. After your review, we will forward a formal letter of comment; this draft is to ensure that our comments are received by the deadline which is today, Nov 16th.

Level of Service

Federal Way has adopted a V/C of 1.1 as an overall LOS standard for intersections. The DSEIS states

"None of the intersections are anticipated to be deficient in the Action Alternative based on Federal Way's traffic operations standards," meaning above a V/C of 1.1.

Level of service standards have traditionally been developed as an average intersection delay of between A and F. Many jurisidictions are beginning to utilize a V/C ratio rather than traditional A-F measure of delay. Although a specific crosswalk between A-F LOS and V/C ratios has not been widely accepted, a V/C ratio greater than 1.0 is generally considered equivalent to a traditional intersection delay LOS of F.

Local jurisdictions set the LOS standard for their local transportation network. However, WSDOT sets LOS standards for Highways of Statewide Significance <http://www.wsdot.wa.gov/NR/rdonlyres/6AF72388-2455-47B9-B72D-2BE9A89A0E19/0/LOSStandardsforWAHwys.pdf>, (also available in Appendix G of the Highway System Plan<http://wsdot.wa.gov/planning/HSP>) and PSRC sets LOS standards for non-HSS highways, or Highways of Regional Significance <http://www.psrc.org/transportation/t2040/los/>. Ramp intersections with local arterials are included in the WSDOT/PSRC purview for setting LOS standards. The adoption of a V/C standard of 1.1 therefore does not apply to intersections on state facilities.

State highways in and adjacent to the City Center are:

Highway ID	Highway Category	Adopted LOS
I-5	HSS	D
SR 18	HSS	D
SR 99	HSS	D
SR 161	HRS	E/mitigated
SR 509	HRS	E/mitigated

The TIA and SDEIS show forecast PM peak hour LOS operations below the WSDOT LOS standard at six intersections on SR 99, and below the PSRC LOS standard at one intersection on SR 161, for both the No Action and Action Alternatives:

Federal Way City Center

Planned Action Development Envelope for Higher Density Land Use PM Peak Hour LOS

Intersection	Existing	2025 No Action	2025 Action	Adopted Standard
SR 99				
S 288th Stree	t D	F	F	D
S 320th Street	t E	E	E	D*
S 324th Street	t D	E	E	D
S 336th Stree	t D	E	E	D
S 348th Stree	t E	F	F	D*
S 356th Stree	t D	E	E	D
SR 161				
S 348th Stree	t E	F	F	E/Mitigated

*When a development affects a segment or intersection where the existing LOS is already below the adopted standard, the pre-development LOS is to be used instead of the otherwise applicable deficiency level. This would apply to the SR 99 intersections with S 320th and S 348th Streets, i.e., their LOS should not be degraded any lower than it already is, which is LOS E.

WSDOT understands and supports the concept of compact, walkable centers, and that the proposed mixed-use land use pattern, on-site improvements, and TDM actions and high levels of

transit service are expected to reduce vehicle trips. It is also stated in the SDEIS that the increased capacity associated with improvement projects will help to mitigate impacts. We assume, however, that both the anticipated higher mode splits and funded improvement projects are included in the future baseline modeling for the TIA that resulted in the above forecasts. If not, then please provide the analysis showing how the non-motorized and transit amentities, and/or funded capital improvements are expected to mitigate the expected increase in peak hour trips.

Since the SDEIS is being proposed as a planned action, this will be WSDOT's only opportunity to request mitigation on state facilities for the additional 2150-2275 pm peak hour trips forecast for the Action and No Action alternatives. The development envelope of the City Center subarea being proposed for high density land use is directly adjacent to five state facilities. The increase is being proposed as a SEPA action. Under SEPA, when proposed development would degrade state facilities below the adopted LOS threshold, the facilities are considered deficient to support the development, and WSDOT and its partners may seek reasonable and proportionate mitigation of traffic impacts.

We therefore disagree with the statement that "based on the level of service (LOS) analysis, no additional roadway capacity improvements are needed." Please provide the analysis showing how proposed improvements will mitigate the transportation impacts on state facilities to an approximation of their adopted LOS standards. Otherwise, the impacts to state facilities from the increased land use density will require more mitigation than what is proposed to bring those intersections into compliance with the adopted LOS standard.

For specific mitigation approaches, please contact Ramin Pazooki, NW Region Development Office Manager, at 206-440-4710 or ramin.pazooki@wsdot.wa.gov.

Collisions

The SDEIS states that there is a probability of traffic collisions increasing with additional traffic. It is additionally stated that "Both the Action and No Action Alternatives would increase the total vehicle volume of vehicles at the high collision locations identified in Table 3-12." (p 3-19)

Target Zero<http://www.wsdot.wa.gov/planning/SHSP.htm>, the state's Strategic Highway Safety Plan, is the adopted plan to help guide investments to achieve zero fatal and serious injury collisions on all public roads by 2030. We are therefore also wondering if Federal Way has adopted the Target Zero goals, and what the City proposes to do about the anticipated increase in collision rates.

For assistance with specific safety improvements, please contact Rob Brown, WSDOT Traffic Engineer for Federal Way, at 206-440-4413 or <u>rob.brown@wsdot.wa.gov</u>.

Thank you for the opportunity to review the DSEIS for your City Center. Please let me know if Federal Way wishes to edit this draft comment letter prior to its finalization. We can discuss changes, or Federal Way can submit comments or edits via email. We would also be glad to come down to discuss face-to-face.

Sincerely,

Leah

Leah Bolotin, AICP Senior Planner WSDOT Sno-King Planning Office Phone: 206-440-5057 Comprehensive Planning Resources <u>http://www.wsdot.wa.gov/planning/community/GMA.htm</u>

COMMENT #4:

From:	Bolotin, Leah [mailto:BolotiL@wsdot.wa.gov]
Sent:	Friday, November 20, 2015 7:01 PM
To:	Sarady Long
Cc:	Brown, Rob; Pazooki, Ramin; Palisoc, Felixberto; Prestrud, Charles
Subject:	mitigation resources

Hi Sarady,

Thank you for the phone call yesterday regarding LOS standards, safety, and mitigation for the City Center high-density development envelope DSEIS.

Here is a link to the Development Services webpage:

http://www.wsdot.wa.gov/Northwest/DevelopmentServices/. A link to the Development Services Manual is provided in the left sidebar under "General Information - Manuals". There is a discussion of different mitigation approaches in Chapter 4. Although this is the reference I was thinking of when we spoke, the discussion in the manual seems largely about funding for mitigation rather than the mitigation itself. Section 4.1.06 discusses LOS mitigation in particular.

Note that on page 4-4, the first paragraph clarifies the application of WSDOT LOS standards in situations where the existing LOS is already poorer than the standard. In those situations, the existing LOS becomes the new standard below which the jurisdiction is required to mitigate the traffic impacts. This would apply to the SR 99 intersections with S 320th and S 348th Streets.

Note also the following paragraph, which states that the methodology used for LOS evaluation must be from the latest version of the Highway Capacity Manual. I believe this to be incorrect. Per WAC 365-196-430 http://apps.leg.wa.gov/wac/default.aspx?cite=365-196-430<(2)(e)(vi)and (vii), any appropriate methodology may be used:

The [LOS] measurement methodology and standards should vary based on the urban or rural character of the surrounding area. The county or city should also balance the desired community character, funding capacity, and traveler expectations when selecting level of service methodologies and standards. A county or city may select different ways to measure travel performance depending on how a county or city balances these factors and the characteristics of travel in their community. For example, counties and cities may measure performance at different times of day, week, or month (peak versus off-peak, weekday versus weekend, summer versus winter). Counties and cities may also measure performance at different sequences (intersections, road or route segments, travel corridors, or travel zones), or in terms of the supply of multimodal capacity available in a corridor.

In urban areas RCW 36.70A.108

<http://app.leg.wa.gov/RCW/default.aspx?cite=36.70A.108> encourages the use of methodologies analyzing the transportation system from a comprehensive, multimodal perspective. Multimodal levels of service methodologies and standards should consider the needs of travelers using the four major travel modes (motor vehicle, public transportation, bicycle, and pedestrian), their impacts on each other as they share the street, and their mode specific requirements for street design and operation. For example, bicycle and pedestrian level of service standards should emphasize the availability of facilities and safety levels for users.

As discussed, a crosswalk between methodologies that will allow us to easily determine if an operating LOS meets the standard should also be provided. V/C is fine with me as long as that crosswalk is provided. Rob, Ramin, Felix, if any of you disagree with this please let Sarady know.

For actual mitigation approaches, I would suggest utilizing some of the resources available on our Growth Management webpage

<http://www.wsdot.wa.gov/planning/community/GMA.htm>, such as How can Cities and Counties Plan for all Transportation Modes? or the Commerce publication Your Community's Transportation System.

Please let me know if I can be of any further assistance.

Happy Holidays!

Leah

Leah Bolotin, AICP Senior Planner WSDOT Sno-King Planning Office Phone: 206-440-5057 Comprehensive Planning Resources <u>http://www.wsdot.wa.gov/planning/community/GMA.htm</u>

4.2 Responses to Comments

No response is required to Comment #1 from Roberta Anderson, Siena Engineering Group, on behalf of AT&T.

No response is required to Comment #2 from Tina Vaslet, Pierce Transit.

Responses to Comments #3 and #4 from Leah Bolotin, AICP, WSDOT are listed below by issue.

Level of Service (LOS)

In 2015, as part of the comprehensive plan update, the level of service (LOS) standard was revised and adopted by the Federal Way City Council. The City's comprehensive plan has been accepted by the Department of Commerce and Puget Sound Regional Council. The City Center Planned Action SEIS does not change the adopted LOS standard. Please see pages 9 (Existing Traffic Operations), 31 (Traffic Operations Impact), and 46 (Mitigation) of Appendix 2 (TIA), and companion segments of Section 3.4 (Transportation) in the SEIS for further discussion of LOS.

Mitigation

The Action Alternative results in a decrease in average vehicle delay at all study area intersections during the PM peak hour, except for three intersections that experience an increase of approximately three seconds of average vehicle delay. For all intersections, the LOS grade does not degrade between the No Action and Action Alternatives. Because the LOS grade does not change, the transportation impacts of the Action Alternatives are less significant and no mitigation is proposed under the *Transportation Impact Analysis*. Please see page 46 (Mitigation) of Appendix 2 (TIA), and the companion segment of Section 3.4 (Transportation) in the SEIS for an updated discussion of mitigation measures.

Collisions

The City and WSDOT have made investments in the study area in an on-going effort to reduce the number of preventable accidents that occur. It is anticipated that through these investments, the number of serious and preventable accidents will decrease. Please see pages 15 (Collision Analysis) and 40 (Traffic Safety Impact) of Appendix 2 (TIA), and companion segments of Section 3.4 (Transportation) in the SEIS for an updated discussion of collisions.

5.1 Printed References

Federal Way, City of. 2006. City of Federal Way City Center Planned Action Draft Environmental Impact Statement.

- ———. 2006. City of Federal Way City Center Planned Action Final Environmental Impact Statement.
- ------. 2015. City of Federal Way Comprehensive Plan. http://www.ci.federal-way.wa.us/
- ------. 2015. City of Federal Way Website. http://www.ci.federal-way.wa.us/index.aspx
- ------. 2015. Federal Way Revised Code. http://www.codepublishing.com/WA/FederalWay/
- King County. July 2014. The King County Buildable Lands Report 2014. http://www.kingcounty.gov/property/permits/codes/2014%20KC%20Buildable%20Lands%20Report.aspx
- King County. 2015. Parcel Viewer 2.0. http://gismaps.kingcounty.gov/parcelviewer2/

5.2 Personal Communications

- Goodsell, Gordon, Assistant Fire Marshal. South King Fire and Rescue. Personal communication with Stacey Welsh, Senior Planner, City of Federal Way Community Development Department, 2015. Email transmittal September 23, 2015.
- Hwang, Andy J., Chief of Police. Federal Way Police Department. Personal communication with Stacey Welsh, Senior Planner, City of Federal Way Community Development Department, 2015. Email transmittal September 9, 2015.
- Osborne, Tim, Development Engineering Manager. Lakehaven Utility District. Personal communication with Stacey Welsh, Senior Planner, City of Federal Way Community Development Department, 2015. Email transmittal September 24, 2015.
- Roy, Michelle, Crime Analyst Program Coordinator. Federal Way Police Department. Personal communication with Stacey Welsh, Senior Planner, City of Federal Way Community Development Department, 2015. Email transmittal September 8, 2015.