



**LYNNWOOD CITY CENTER  
LYNNWOOD, WASHINGTON**

**CITY CENTER STREET MASTER PLAN**

*Prepared for:*

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# City Center Street Master Plan Executive Summary

The draft City Center Sub-Area Plan (City Center Plan) was formulated in January 2003. The plan envisioned additional density and a mix of land-uses within the City Center Sub-Area Boundary. An Environmental Impact Statement (EIS) of the Lynnwood City Center Sub-Area Plan was prepared and adopted in September 2004. This EIS and Supplemental EIS (SEIS) identified environmental impacts and mitigation related to the proposed City Center Plan. Adoption of the City Center Plan occurred in March 2005. Zoning implementing the City Center Plan was subsequently adopted March 2005, and amended in September 2007.

In 2006, the City of Lynnwood began the preparation of technical analysis to implement the City Center Plan. The ultimate goal is the completion of a planned-action ordinance to guide development of the City Center. Various “seed money” projects were initiated to complete the technical analysis regarding the proposed parks, street infrastructure, and transit. The City Center Street Master Plan was undertaken to verify the sufficiency of the City Center street network established in the City Center Plan, and provide recommendations for implementation. The Street Master Plan documents specific street improvements required from new development, and provide recommendations for implementing actions including project prioritization and funding. The following summarizes the findings regarding the sufficiency of the proposed City Center street network. This analysis is the basis for final recommendations within the City Center Street Master Plan.

## **Traffic Operations of Street Master Plan**

The boulevards are forecast (per the City’s 2025 VISUM travel forecasting model and 2025 Land Use scenario) to operate near or at capacity, Level of Service (LOS) E, in 2025 representing conditions similar, although potentially somewhat improved over today’s operations (per the City’s baseline VISUM travel forecasting model and baseline Land Use scenario). Critical intersections are forecast to operate under conditions similar to those of 2008. The LOS E standard recommended in the SEIS drives the recommended intersection improvements typically calling for additional turn lanes. These lanes can be accommodated; however, the resulting roadway widths and crosswalk lengths become undesirable from a pedestrian perspective. Applying an LOS E averaging methodology throughout the City Center will allow some intersections to experience greater congestion (LOS F) while maintaining an overall LOS of E or better for the entire Subarea. This approach could also reduce the size of some critical intersections such as the intersection of 196<sup>th</sup> Street SW and 44<sup>th</sup> Avenue W while not impacting area-wide service levels.

## **Compatibility of Street Master Plan with Land Use Plan**

The City Center Master Street Plan is compatible with the City Center Subarea Plan. The City Center Access study recommendation to extend 40<sup>th</sup> Avenue W south under Interstate 5 changes the nature of that roadway and may affect the roadway’s compatibility with the desired streetscape and function in City Center. The land use implications of 40<sup>th</sup> Avenue W north of 194<sup>th</sup> Street SW will require further analysis of impacts.

## **Compatibility of Street Master Plan with Parks Plan**

The City Center Master Street Plan establishes the location of the Central Park to some extent. There is flexibility in the location of the new local streets to the west and south of the park. The park is not particularly affected by the operation of the streets adjacent to it. The park is not anticipated to be a significant generator of vehicle traffic. It will be an attraction to pedestrians and bicyclists and those modes should be considered adjacent to the park.

## **City Center Street Master Plan Compatibility with Transit**

The location of proposed bus Super Stop and the Sound Transit Phase 2 (ST2) Light Rail Station are critical to the achievement of the mode split (Single Occupancy Vehicle (SOV) reduction) planned for the City Center. The location of Super Stop could affect vehicle traffic operations if not sited correctly. The location of the ST2 Light Rail Station in City Center above grade would have limited impact on the operation of City Center Streets, but will increase pedestrian and bicycle volumes in the vicinity of the station.

## **Street Master Plan Costs**

The 2007 cost estimate for the combined boulevards (principle arterial and minor), collector streets and new local streets identified in the City Center Master Street Plan is \$174,062,000.

The 2007 cost estimate for the combined boulevards and collector streets excluding the new local streets identified in the City Center Master Street Plan is \$128,922,000. The cost to construct the new local streets as private streets could be substantially less than the cost to construct them as public streets. The costs of the additional sidewalk width and planting areas associated with the Promenade Street are included in the estimate.

The need for pedestrian and vehicular access within the City Center may be accommodated through other means to achieve the intent of the plan while providing flexibility for development.

## **Street Master Plan Funding Options**

The city has a wide variety of funding sources to choose from to fund the City Center Master Street Plan. These include various public sources and developer exactions.

The analysis of the 2007 real estate market determined that near term special benefits to the City Center Subarea were in the range of \$35,000,000 to \$45,000,000. This represents an increase in the underlying real estate value of approximately \$4.25 to \$5.50 per square foot resulting from the benefit received through the provision of the City Center Plan, City Center Zoning, and associated roadway and parks infrastructure proposed for the City Center Subarea Plan. A Local improvement district (LID) may assess this “benefit” to private property to fund associated infrastructure. Market conditions have declined since 2007 and the revenues available through the local LID process may have also declined.

The need to balance the allocation of costs to the developers of City Center with incentives to achieve new development in Lynnwood is a policy decision. Comparable communities in the region have pursued incentives for this purpose. Local, State and Federal funding sources will also be needed to support costs of the City Center Street Master Plan, and finance infrastructure requirements for streets that are not attributable to development in the City Center. To be eligible for State and Federal grant funding, local funds for grant match or design are typically required.

The City is currently considering a traffic concurrency ordinance and city-wide traffic impact fee system. This approach provides the city with a long term revenue stream to fund traffic infrastructure that has greater flexibility than direct SEPA mitigation or voluntary SEPA mitigation payments from development. The City Center is integral to the city-wide traffic system and should be included in such a concurrency and impact fee approach.

## **Allocation of Street Master Plan Costs**

The 2007 cost estimate for the combined boulevard streets (principle and minor arterials), collector streets, and new local streets identified in the City Center Master Street Plan is \$174,062,000. Of this amount 70 percent can be attributed to traffic generated in the City Center,

28 percent city-wide to other growth, and 2 percent to growth outside the current city limits based upon the relative origins and destinations of modeled traffic using each of the various streets.

The 2007 cost estimate for the combined *boulevards, collector streets* (principle and minor arterials) excluding the new local street network identified in the City Center Master Street Plan is \$128,922,000. Of this amount 65 percent can be attributed to City Center Traffic, 33 percent city-wide to other growth, and 2 percent to growth outside the current city limits.

The analysis of the new local streets indicates that their implementation is clearly supported as a project improvement related to the City Center. Implementing the new local streets through the development approval process offers design flexibility to implement the concept of local circulation through a project specific strategy that is more cost effective.

### **Phasing of City Center Street Master Plan**

The likelihood of phased development supports a phased approach to the implementation of the City Center Street Master Plan. Not all of the improvements outlined in the City Center Street Master Plan are needed at once to accommodate the lot by lot or even block by block redevelopment that will likely occur. Infrastructure could be phased pursuant to the level of development that occurs over time. This approach will provide a cost effective provision of infrastructure based upon development as it occurs.

### **High Priority Actions**

The following street projects are identified as the most important to initiated phased development.

- 196<sup>th</sup> Street SW widening to provide added capacity near term and create an identity for the corridor. This project includes completing 44<sup>th</sup> Avenue W by widening the northbound lanes south of 196<sup>th</sup> Street SW. The City should consider transit enhancements such as a Business Access and Transit Lane (BAT) along 196<sup>th</sup> Street SW for the widening project which will reduce congestion and facilitate transit usage. While not specifically analyzed, a BAT lane is consistent with the function of the curb lane of 196<sup>th</sup> Street SW due to the high volume of business access that now occurs.
- 194<sup>th</sup> Street SW: Extend this street to 33<sup>rd</sup> Avenue W to provide relief to 196<sup>th</sup> Street SW, and to connect the City Center to the City Center / Alderwood transition area to the northeast.
- 42<sup>nd</sup> Avenue W extension: Provide the initial access to the City Center Core and establish a new collector arterial street. This project provides a system improvement eligible for a wide range of funding sources. If included in an impact fee program, the cost to construct it could be recovered by future impact fees.
- 198<sup>th</sup> Street SW / Promenade: This street has sufficient vehicle capacity, and could be enhanced to implement the pedestrian circulation system envisioned in the City Center.
- Level of Service: The City adopted level of Service E for the City Center which is a more stringent standard than applied elsewhere city-wide. Consider a more flexible LOS standard for the City Center that uses LOS averaging to allow improvements to be phased over time, either in advance of or following development to provide additional development flexibility while addressing traffic mitigation.

## Introduction

This report is intended to provide the user with background information related to the City Center Street Master Plan issues and a summary of transportation improvements and implementation strategies necessary to support the City Center Master Plan including recommended roadway alignments, intersection controls, cost estimates, funding sources, and potential phasing of improvements.

## Background

Several studies, reports and plans have been prepared that relate to the City Center Street Master Plan. These studies and reports were considered in the development of the City Center Street Master Plan. A brief summary of each report and how it was used in the City Center Street Master Plan follows. Copies of most of the documents are available on the City of Lynnwood website at [www.ci.lynnwood.wa.us/citycenter](http://www.ci.lynnwood.wa.us/citycenter) several documents more directly related to the City Center Street Master Plan are included as appendices to this report.

### **Lynnwood City Center Sub-Area Plan, (LMN Architects, Adopted March 15, 2005, Amended September 2007)**

The City Center Subarea Plan sets the overall vision, goals and policy for redevelopment of the City Center area. The Plan calls for creation of a high-intensity, mixed use and pedestrian-friendly downtown area for Lynnwood. Existing single-story commercial buildings and extensive surface parking lots are to be replaced by mid- and high-rise buildings that directly adjoin the sidewalk and parking either underground or in structures at the rear of properties. Street design would balance vehicle access with use by pedestrians and (expanded) transit services.

### **Draft and Final Supplemental Environmental Impact Statements (SEIS) (Huckell/Weinman Associates, Inc., Adopted September 9, 2004)**

These documents provide the initial concept evaluation and baseline assumptions for the City Center project including land use, transportation, parks, utilities and public services impacts and potential mitigations. The land use scenario identified in the preferred alternative was used in the City of Lynnwood VISUM traffic model to analyze traffic operations for all following traffic related studies. In the SEIS under Section H - Transportation, the baseline street improvements requirements and offsite mitigation recommendations to support the plan were developed.

### **Initial City Center Traffic Analysis (David Evans and Associates, Inc. 2006)**

The roadway network shown in the SEIS included two major signalized access points on 196<sup>th</sup> Street SW between 40<sup>th</sup> Avenue W and 44<sup>th</sup> Avenue W. Subsequent traffic analysis (DEA 2006) found this configuration created operational problems due to the close spacing of the proposed signalized intersections.

A modified street system that included one new major signalized access at approximately 42<sup>nd</sup> Avenue W with a new un-signalized local access streets to the east and west on 196<sup>th</sup> Street SW was determined to provide improved operations. The revised block spacing resulted in some blocks becoming less than 200 feet in length. There were concerns that this block spacing would not support the high rise development and underground parking envisioned in the SEIS. An independent analysis by Mark Ludtka, (Callison Architecture 2007) confirmed that the resulting block spacing could still support the development types envisioned in the EIS.

This analysis also confirmed that the proposed block spacing in increments of 60 feet could allow the development of parking structures only if the building footprints were extended below the public right-of-way. This configuration will provide a building foot print with two rows of

parking and a drive aisle in a typical parking structure. This approach was considered most applicable beneath the new local streets, and requires access easements for the private parking facilities.

### **City Center Ordinances, Adopted**

Ordinances relating to the adoption of the City Center Subarea Zoning, Interim Voluntary Mitigation Program, and Street Right of Way Preservation were considered in the development of the Street Master Plan. The intent of these ordinances is to preserve access and circulation as established in the SEIS for the City Center. Copies of the Ordinances are included in Appendix 1 for reference.

### **City Center Park Master Plan (The Berger Partnership 2007)**

This document provides locations and descriptions for Parks improvements related to the City Center Subarea Plan, and the conceptual design of streetscape improvements within the City Center. Key elements considered in the development of the City Center Street Master Plan include the location and function of the Promenade generally located in the 198<sup>th</sup> Street SW corridor. The Promenade is intended to be a more pedestrian oriented street linking the parks associated with the Subarea and the residential and commercial uses. The extension of the Promenade from the City Center core north across 196<sup>th</sup> Street SW was envisioned as both an at-grade or grade separated crossing.

### **City Center Market Analysis and Absorption Study (Johnson - Gardner 2007)**

This report analyzed market trends and potential absorption (development) rates for the City Center Subarea. The report supported the vision for the City Center Plan but found that market conditions in 2006 - 2007 were insufficient at that time to achieve the intense development scenario of 9.3 million square feet envisioned. The report concluded that City actions relative to the provision of infrastructure and subsequent costs to developers would positively influence the rate and intensity of development in the subarea, and that the development should be phased. Therefore the application of development regulations should be flexible so as not to preclude future development intensification. This relates to transportation in that the rate of development will directly affect the timing and need for additional transportation infrastructure. A phased development scenario and the use of “shadow platting” as described in the study would provide for 5 to 8 story developments occurring near term, and high rise development following later based upon market demand. Flexibility allows for phased development of transportation infrastructure needed for the full build-out scenarios.

### **City Center Local Improvement District Feasibility Study (Macaulay and Associates 2008)**

This study collected property data and developed a range of potential special benefits that could be used to estimate the potential for Local Improvement District (LID) funding for transportation infrastructure in the City Center subarea. The findings were similar to those of the Market Analysis and Absorption Study Completed by Johnson Gardner. The special benefit potential of an LID are more related to near term development potential, thereby limiting LID funding that may accrue in the near term. At this time the special benefit potential to the existing development pattern is insufficient to finance improvements necessary to provide the ultimate level of transportation infrastructure necessary for the realization of the City Center Plan at the maximum square footage of 9.1 million square feet. This circumstance may change over time, and the provision of infrastructure and the approval of near term development should be closely coordinated to support future development opportunities. The range of special benefit and thus maximum LID assessment value is currently estimated at \$35 to \$45 Million. This is the near term special benefit to property in the City Center Subarea resulting from the provision of additional transportation and parks infrastructure and could be used to fund projects. The property assessment and valuation data is included in Appendix 2 for reference.

### **Lynnwood City Center Access Study (Perteet 2008)**

This document provides an analysis of Interstate 5 operations near term and in the future, and local transportation improvements to support access, egress, and through traffic for the City of Lynnwood and the City Center Subarea to and from Interstate 5. This study considered the City Center Master Plan land use and traffic improvements proposed through 2025 and PSRC regional growth forecasts through 2032. Improvements were identified that had benefit to the City Center and achieved the development scenario identified in the SEIS, including: a proposed extension of 33<sup>rd</sup> Avenue W south from Alderwood Mall Boulevard to Poplar Way across Interstate 5, extension of 40<sup>th</sup> Avenue W south from Alderwood Mall Boulevard to 204<sup>th</sup> Street SW, and the extension of 194<sup>th</sup> Street SW to 33<sup>rd</sup> Avenue W. This study originally anticipated the need for access improvements to Interstate 5 at Alderwood Mall Parkway / Alderwood Mall Boulevard to accommodate the City Center Subarea Plan. The study instead found that improvements to the city-wide arterial system beyond City Center limits could accommodate the plan in the near term. In the long term, Federal action in the Interstate 5 corridor would be required to provide capacity for additional City Center expansions, including construction of a full interchange at 44<sup>th</sup> Avenue W.

### **Lynnwood Functional Classification Update (DEA 2008)**

This study included a series of technical memoranda to provide technical analysis and supporting information to enable the City of Lynnwood to separately complete an application to WSDOT for reclassification of certain streets for the purpose of enabling state and federal funding eligibility. The City of Lynnwood requested detailed analysis of three routes:

- 33<sup>rd</sup> Avenue W, existing and proposed extensions, from SR 525 NB ramps at Alderwood Mall Parkway to Interstate 5 NB ramps at Poplar Way
- Alderwood Mall Parkway, from Maple Road to Poplar Way
- 204<sup>th</sup> Street SW, from 68<sup>th</sup> Avenue W to Highway 99

In addition to the specified roadways above, the City of Lynnwood requested a brief analysis of the entire city street network pursuant to developing a city-wide Transportation Business Plan. This resulted in documentation regarding the role of City Center new local streets, and a recommendation to classify some of the newly proposed City Center access streets as collector streets to identify their significance and allow them to be eligible for future grant funding. This document is included in Appendix 3.

### **City Center Transit Study Draft - (Perteet 2007)**

A preliminary Transit Report was prepared during the development of the City Center Street Master Plan. This report discussed the ability of existing transit systems to provide the nearly 100 percent increase in transit service necessary to support the model split assumed in the City Center SEIS. The mode split percentage is 13.8 percent for City Center oriented trips. The report was still in draft form when the regional transit authority (Sound Transit) decided to move forward with its Phase 2 proposal (ST2) in spring of 2008, resulting in voter approval in the November 2008 election. A subsequent report, also prepared by Perteet was analyzed the affects of the proposed ST2 projects on City Center. This document is superseded by the City of Lynnwood Mode Split for City Center Street Master Plan (Perteet 2009).

### **City of Lynnwood Final Report Mode Split for City Center Master Street Plan (Perteet 2009)**

This report was prepared to include an analysis of the affects of the proposed ST2 projects, including Light Rail Transit extensions into City Center, station placements within the City Center, and the opportunities for station placement to serve as a catalyst for transit oriented development. This document superseded the 2007 Transit Study Draft (Perteet 2007). The report

expanded the draft bus oriented transit service study prepared in 2007 to include an analysis of the ST2 proposed Light Rail Transit (LRT) station and evaluation of alternative station locations from the perspective of general transit guidelines and the City of Lynnwood. This document provided guidance for responding to ST2 projects. This study offered a limited analysis of street level of service changes as a result of the various LRT station locations. The report found no significant difference in intersection level of service as a result of various LRT station locations or track alignments. The intersection analysis in this report was prepared using different methodology than the comprehensive city-wide method developed in the Transportation Business Plan.

### **Lynnwood Transportation Business Plan (David Evans and Associates 2008)**

This report documents applications of the Lynnwood Traffic Model to evaluate future transportation needs to the years 2011 and 2025 and to demonstrate the use of the model to evaluate developments for concurrency in the short term. The analysis identifies the interrelationship of the City Center to the city-wide and regional transportation network, and the mutual benefits of coordinating traffic improvements through a comprehensive approach. Key elements of this study include:

- Traffic Forecasting Model Versions for 2011 and 2025 - New versions of the traffic model have been developed for 2011 and 2025, with various changes to the road network and the land use forecasts. The foundation of each of these models is the 2005 road network model, plus specified improvements added. Those future road networks were used in combination with land use forecasts to future years to develop travel demand forecasts and assignments to the road system.
- Traffic Mitigation System Outline - This document describes a range of approaches that could be used by the City of Lynnwood to implement a combination of concurrency management and impact fees to regulate development under the state's Growth Management Act. Based on the preliminary decisions of the City staff, a particular version of these options is implemented in Chapter 3.
- Concurrency Monitoring System - This document presents in detail the methodology for operating the concurrency monitoring system, using a combination of EXCEL, VISUM, and SYNCHRO software for analysis, and documenting all in a WORD report. Macro procedures are used from the EXCEL file to transfer data to and from the other software applications.
- Example Concurrency Report - This document presents a hypothetical example of a concurrency report that could be developed from the information in the concurrency monitoring system. This report could be used as the template for future test cases on actual developments.
- Land Use Forecasts - This document presents a summary of the land use growth forecasts used for 2011 and 2025, with reference to the 2005 base model. The land use projections for each future year are derived from the 2032 growth forecast of future land use that was developed in the recent City Center Access Study. By interpolation between those extremes, short-range interpolations to 2011 and to 2025 were developed that include the City Center Subarea Plan Land Use.
- 2025 Needs Assessment - This document presents a comprehensive assessment of future road improvements that will be needed by 2025 to satisfy concurrency on a city-wide basis. A range of results is presented assuming different level of service criteria from LOS D to LOS F.

This document analyzes the City Center to the city-wide transportation system, and provides methods for establishing future phasing of the City Center Street Master Plan. The procedures developed allow for analysis of incremental development and incremental mitigation to allow development while maintaining concurrency under various phasing scenarios.

### **City of Lynnwood Comprehensive Plan Transportation Element (2008 Update)**

The City adopted revisions to the Transportation Element of the Comprehensive Plan in 2008 that including supporting policy for the concurrency management systems methodology developed in the Transportation Business Plan (DEA 2008). The Transportation Element describes the City Center Master Street Plan in general terms relying upon the specific work completed for the City Center Street Master Plan for guidance.

## **City Center Street Master Plan Traffic Operations and Level of Service Analysis**

### **Methodology**

The traffic operations and Level of Service (LOS) analysis for the City Center Street Master Plan was completed using the City's VISUM travel demand forecasting model to develop traffic forecasts for future conditions and road network alternatives, and SYNCHRO/SimTraffic software using Highway Capacity Manual (HCM) methodology for intersection LOS analysis.

### **Analysis Methodology**

The analysis began with the development of trip generation forecasts (new traffic created by the development of City Center) for the land use scenarios described in the SEIS. The initial trip generation was calculated for Single Occupant Vehicle (SOV) traffic only. The 2032 SOV trip generation developed for the City Center Access Study of Interstate 5 was reduced 13.8 percent in City Center 2025 model to reflect other modes including transit, carpool, and non-motorized modes. The traffic analysis for the City Center Street Master Plan was developed for a 2025 planning horizon. The resulting trip generation from the proposed City Center Subarea was then compared to existing trip generation in the subarea. This methodology enabled future traffic forecasts to reflect the net increase in traffic resulting from the redevelopment of the City Center Subarea consistent with the land use in the SEIS. The projected new traffic was then assigned to the proposed street network to determine the forecast traffic volumes for the assumed 2025 build-out year for the City Center Master Plan so that operational LOS analysis could be completed.

### **Trip Generation**

The planning horizon for the trip generation and traffic analysis was 2025. The source information is taken from the City Center Access Study land use files for 2005 and 2032, with trends and assumptions for intervening years according to Snohomish County and Puget Sound Regional Council, as well as for City of Lynnwood. The 2025 horizon assumed the 9.1 million square foot development scenario for City Center. Development in the City Center in excess of 9.1 million square feet was considered beyond the 2025 horizon.

The general concept was to interpolate linearly between regional and Snohomish County 2020 and 2032 data sets, to obtain 2025 numbers. This took different forms for different areas of Lynnwood and the surrounding region, depending on the origins of the 2032 projections.

- **Lynnwood CBD (City Business District) Area** - Totals for 2020 and 2032 were balanced with regional control totals from PSRC, and for 2020 with the Lynnwood CBD

Subarea Master Plan. The 2025 numbers were calculated by linear interpolation between those years.

- **Lynnwood non-CBD Areas (All Other)** - The City of Lynnwood believes that its buildout potential outside the CBD would be substantially realized by the year 2020 and has used that assumption for previous 2020 planning. The 2020 buildout assumptions were used in the 2032 scenario for the City Center Access Study. Since there was no projected increase between those years, the same data would be used for 2025 as well, in all parts of Lynnwood outside the CBD. Therefore, the 2032 land use data was reused for 2025 in those zones.
- **Areas Outside Lynnwood** - The City Center Access Study data was used to obtain 2020 and 2030 land use data for all zones outside Lynnwood. A simple linear interpolation between those years was produced for 2025 and placed in the final 2025.
- **Balance of trip generation** - The relative balance of trip generation at the regional total level was checked and found to be similar to the relative balance for the 2032 model. The final balancing of trip ends is accomplished in VISUM, using fixed assumptions regarding priority of balancing of trip productions to attractions, or attractions to productions, according to the trip purpose in question. These balancing assumptions were retained for 2025.
- **Trip Rate Reductions for Mode Choice and Peak Spreading** - The City Center Access Study developed trip rate reduction factors for 2032 conditions, to account for CBD transit trip generation and other factors that would reduce trip generation in the future. For 2025, the assumption was made that approximately 80 percent of these trip reduction benefits would apply, resulting in an 11 percent single occupant vehicles (SOV) trip generation reduction since the CBD densities would not be as well developed as in 2032. A trip adjustment matrix was developed to account for this adjustment and applied in VISUM. Additional detail regarding the mode split development is provided in the following section

### **City Center Street Master Plan PM Peak Mode Split Development**

Mode split is a term that describes the proportion of travel using various modes of travel including SOV, car pools, busses, and high capacity transit, bicycling, and walking. The fundamental calculation necessary for the City Center Street Master Plan was the effective reduction in SOV's that could be applied to the vehicle trip generation in the model so that roadway and intersection operations would be tested for the forecast SOV volumes.

The targeted mode split was not explicitly modeled in the Draft or Final SEIS nor was it coordinated with Puget Sound Regional Council (PSRC) mode split assumptions for Lynnwood and the project vicinity. However, the mode split projections were in keeping with policy objectives of the City Center Plan.

The City's traffic model was used to develop traffic forecasts for various scenarios for the Lynnwood City Center Access Study (Perteet 2008), the City Center Street Master Plan DEA 2009, and the City of Lynnwood Transportation Business Plan, (DEA 2008). This model is also the basis of the Transportation Element of the City's Comprehensive Plan.

The 2005 model is calibrated to 2005 SOV volumes. There are no adjustments for transit mode splits, peak spreading, or other modifications to overall travel demand. The calibrated vehicular trip generation rates indirectly represent the 2005 net result of multi-modal person trip generation, deductions for alternative mode choices, average car occupancy, and current preferences for

peak-hour travel versus adjacent hours. In other words, it models the 2005 mode split that occurred in Lynnwood and the region.

In the updated versions of the model developed for 2032 and other future years, adjustments were developed to account for several future travel demands management changes:

- High level of transit service to the new high-density Lynnwood CBD
- Parking charges in the Lynnwood CBD
- Internalization of trips within the Lynnwood CBD due to mixed use
- Pedestrian and bicycle travel within the Lynnwood CBD due to mixed use
- Increased transit service throughout the region
- Shifting travel time patterns, leading to a more uniform peak period of two to three hours compared to existing patterns

Multi-modal demand information from the PSRC regional traffic model, Bellevue and other suburban CBD areas was considered, and an estimate of transit mode shifting potential was developed for the Lynnwood CBD. The projected demand was a significant departure from existing conditions but not as high as Bellevue’s future in the PSRC model.

The following adjustments were applied to the No-Action 2032 forecast trip tables used for the City Center Access Study using a manual trip matrix factoring step.

- Vehicle Trips with origin and destination both within the Lynnwood CBD Subarea reduced 33 percent
- Vehicle Trips from the Lynnwood CBD to all other areas reduced 15 percent
- Vehicle Trips from all other areas outside the Lynnwood CBD (to other areas or to the CBD): reduced 10 percent

The 10 percent reduction applied to all other areas outside the CBD represents a regionally uniform baseline adjustment of 9 percent for peak spreading plus 1 percent for shifts to other modes. The higher adjustments for the Lynnwood CBD account for the transit-oriented mixed use effects in that area.

The 2032 base trip table was adjusted as shown in **Table 1**.

**Table 1.**  
**2032 SOV Trip Reductions included in the Traffic Model**

<b>Location of Trip Generation</b>	<b>Base Model SOV Trips</b>	<b>Reduced Model SOV Trips</b>	<b>Estimated Non-SOV Trips</b>	<b>Percent Change in SOV</b>
Lynnwood CBD	24072	20764	3,308	-13.8
All other areas	142506	128255	14,251	-10.0
Total	166578	149019	17,559	-10.5

Non-SOV Trips include Walk, Bike, Carpool, Bus, and Light Rail

For 2025, the assumption was made that approximately 80 percent of these trip reduction benefits would apply, resulting in an 11 percent SOV trip generation reduction since the CBD densities would not be as well developed as in 2032. A trip adjustment matrix was developed to account for this adjustment and applied in VISUM. These reductions were carried through the trip distribution and operational analysis.

## **Transit Service Requirements to Achieve Mode Split Assumptions**

The City of Lynnwood Mode Split for City Center Street Master Plan (Perteet 2009) provides an analysis of the transit enhancements recommended to achieve the reduced SOV trips in City Center. The study provides suggestions for enhanced bus service and stops, providing Bus Rapid Transit (BRT) from Highway 99 to City Center potentially along 196<sup>th</sup> Street SW, alternative locations for the ST2 Light Rail Transit Stations, and the development of two ST2 stations in the City Center to best accommodate the needs of commuters from Snohomish County and the development of transit oriented development within the City Center. A combination of all modes, including adequate walking and biking facilities will be necessary to achieve the target mode split. For reference, the City of Bellevue downtown core has archived a similar mode split without light rail, so the mode split projected for Lynnwood is achievable with significant improvements in existing transit service.

## **Trip Distribution and Assignment**

Trip distribution is the traffic modeling step that determines the connections between the beginning and end of each peak hour trip in the model. Work trips are generally connected to home destinations with some work trips destined to retail destinations. In general employment based land uses send trips out, residential based land uses attract trips and retail land uses both attract and send trips out during the PM peak hour. The distribution process connects these and other trip types based upon a distribution of average trip lengths in the region. This step results in the trip table that links the trip ends in the form of a “from-to” trip matrix.

The trips in the traffic model generated by the development of City Center and the regional growth around City Center were assigned to the arterial system using an equilibrium assignment. In essence, the traffic model attempted to assign traffic to all possible routes to and from City Center based upon a shortest travel time path, sensitive to congestion, so that all available capacity was used proportionately. This assumes that all development and all infrastructure planned for 2025 is in place and operational. Including the principle, collector and new local streets (or equivalent access points)

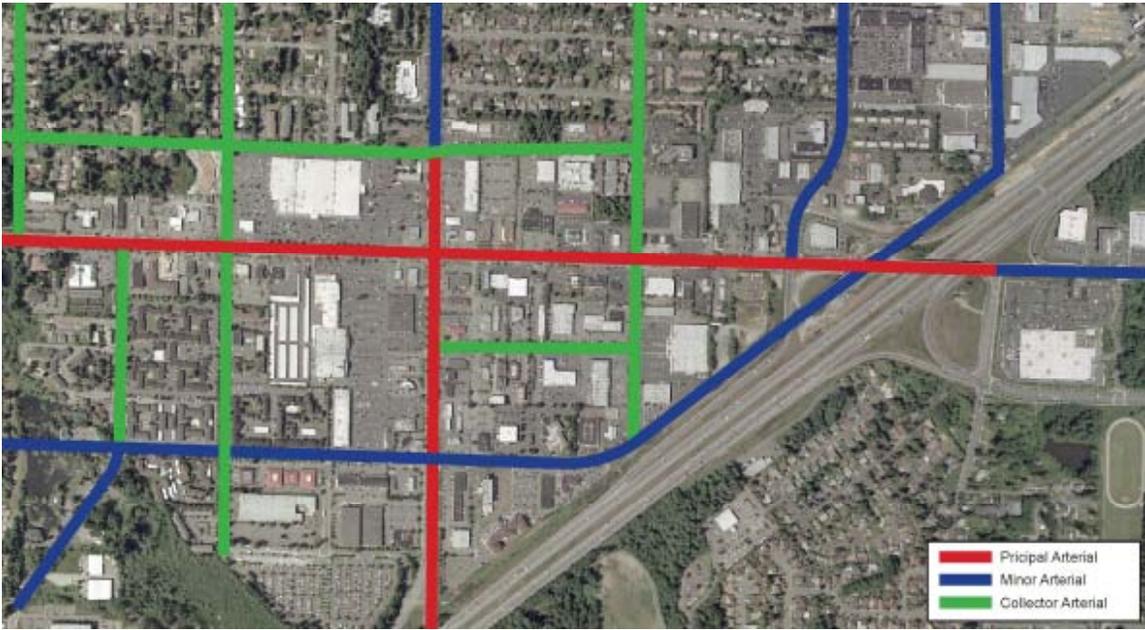
This is important, in that it only describes a condition of full build out of the City Center development and corresponding transportation system. For instance, interim periods between the present and the 2025 time horizon were not analyzed to determine how much development could be supported by incremental development of the street system, what street improvements would be necessary for a specific parcel to redevelop in City Center, or what specific projects were necessary to meet intersection LOS E standards. This issue is further addressed in the City Center Master Street Plan Phasing section of this report.

## **Functional Classifications and Urban Design Designations**

The Federal Highway Administration (FHWA) requires that cities classify their arterial streets as principle, minor and collector arterials for the purposes of identifying the transportation functions of streets in urban areas. Principle arterials are intended to move high volumes of traffic with little emphasis on adjacent local access. Minor arterials provide connections to principle arterials and allow more adjacent local access. Collector arterials provide a more balanced function of moving traffic towards minor and principle arterials, while allowing more local access. The functional classification of streets also determines their eligibility for certain federal and state grant programs. Most grants available in the State of Washington require a street to be classified as a principle, minor or collector arterial.

Figure 1 depicts the arterial classifications of existing and proposed streets in the City Center Subarea as shown in the Transportation Element of the 2008 Updated Comprehensive Plan.

**Figure 1.  
City of Lynnwood Arterial Functional Classifications**



The appearance and form of streets often vary by area and the City Center Subarea Plan identified several urban design designations to require enhanced sidewalk widths, median treatments, parking lanes and landscaped areas for all streets in the City Center Subarea. These designations include: Major Boulevards, generally principle and minor arterials, Promenade Streets, generally unclassified and new local streets, generally unclassified and possibly private.

Figure 2 depicts the urban design designations of existing and proposed streets in the City Center Subarea as modified from the original City Center Subarea Plan.

**Figure 2.  
City Center Urban Design Designations**



# City Center Street Improvements Summary

The following table provides a cross reference between FHWA Arterial Classifications and City Center Subarea Urban Design Designations. All streets generally include 12 foot pedestrian corridors comprised of 7 foot sidewalks and 5 foot landscape strips or 12 foot sidewalks and tree pits. The Promenade Designation for 194<sup>th</sup> includes enhanced amenities as described in the City Center Subarea Plan.

**Table 2.**  
**City Center Street Master Plan Street Designations**

Street	Limits	Arterial Functional Classification	Urban Design Designation	Planned Lanes	Parking
44 <sup>th</sup>	I-5 to 196 <sup>th</sup>	Principle Arterial	Major Boulevard	7 plus	No
44 <sup>th</sup>	196 <sup>th</sup> to 194 <sup>th</sup>	Minor Arterial	Major Boulevard	5 plus	No
42 <sup>nd</sup>	200 <sup>th</sup> to 194 <sup>th</sup>	Unclassified	City Center Stds	3 plus	Yes
196 <sup>th</sup>	48 <sup>th</sup> to 36 <sup>th</sup>	Principle Arterial	Major Boulevard	7 plus	No
198 <sup>th</sup>	45 <sup>th</sup> to 40 <sup>th</sup>	Unclassified	Promenade Street	3	Yes
194 <sup>th</sup>	48 <sup>th</sup> to 40 <sup>th</sup>	Unclassified	City Center Stds	2/3	varies
194 <sup>th</sup>	40 <sup>th</sup> to 36 <sup>th</sup>	Unclassified	City Center Stds	2/3	varies
194 <sup>th</sup>	36 <sup>th</sup> to 33 <sup>rd</sup>	Unclassified	City Center Stds	3	varies
200 <sup>th</sup>	48 <sup>th</sup> to 40 <sup>th</sup>	Minor Arterial	City Center Stds	5 plus	No
201 <sup>st</sup>	44 <sup>th</sup> to 200 <sup>th</sup>	Unclassified	City Center Stds	2	Yes
36 <sup>th</sup>	196 <sup>th</sup> to 194 <sup>th</sup>	Minor Arterial	Major Boulevard	3	No
199 <sup>th</sup>	44 <sup>th</sup> to 40 <sup>th</sup>	Unclassified	City Center Stds	2	Yes
197 <sup>th</sup>	44 <sup>th</sup> to 40 <sup>th</sup>	Unclassified	City Center Stds	2	Yes
45 <sup>th</sup>	200 <sup>th</sup> to 194 <sup>th</sup>	Unclassified	City Center Stds	2	Yes
43 <sup>rd</sup>	200 <sup>th</sup> to 194 <sup>th</sup>	Unclassified	City Center Stds	2	Yes
41 <sup>st</sup>	200 <sup>th</sup> to 195 <sup>th</sup>	Unclassified	City Center Stds	2	Yes
40 <sup>th</sup>	200 <sup>th</sup> to 194 <sup>th</sup>	Collector Arterial	City Center Stds	2	Yes
195 <sup>th</sup>	45 <sup>th</sup> to 40 <sup>th</sup>	Unclassified	City Center Stds	2	Yes

## Arterial Operational Analysis

The arterials are forecast to operate near or at capacity, LOS E, in 2025 representing conditions similar, although potentially somewhat improved over today's operations. Critical intersections are similar to those of today. The LOS E standard recommended in the SEIS results in the need for intersection improvements typically calling for additional turn lanes. These lanes can be accommodated; however, the resulting roadway widths and crosswalk lengths become undesirable from a pedestrian perspective.

Current City policy that requires LOS E at all City Center intersections while allowing a LOS F city-wide appears counter to achieving a high density, mixed use, multi-modal city center. Based upon the intricate relationship of the City Center to the rest of the community, including the City Center within the parameters of a city-wide Transportation Business Plan, concurrency analysis, and impact fee structure is justified. In addition applying an LOS E averaging methodology within the City Center is in keeping with the proposed city-wide concurrency approach that considers the transportation network as a system, allowing some intersections to experience greater congestion while maintaining an overall LOS of E or better for traffic circulation. This approach within the City Center Subarea could reduce the size of some critical intersections such as 196<sup>th</sup> Street SW and 44<sup>th</sup> Avenue W, improve overall traffic circulation, and achieve the policy objective of a pedestrian environment.

The Lynnwood City Center Access Study (Perteet 2008) recommended two arterial improvements outside the City Center that impact the operation of the City Center Street Master Plan boulevards.

The 33<sup>rd</sup> Avenue W extension to Poplar Way creates a new north south connector that removes some traffic from the 44<sup>th</sup> Avenue W corridor to Interstate 5, and the intersection of 196<sup>th</sup> Street SW and 44<sup>th</sup> Avenue W. This project improves LOS slightly and reduces the need for additional turn lanes. This improvement does not eliminate the need for any of the City Center Street Plan Master Plan arterial improvements, but allows circulation in the City Center to operate at an improved LOS, and accommodates development beyond the 2025 horizon of this analysis.

The 40<sup>th</sup> Avenue W extension to Larch/204<sup>th</sup> Street SW has similar and slightly greater positive affects on the City Center Master Street Plan boulevards. It also provides new north south arterial connection to relieve the principle arterials. It does this by creating a minor arterial out of 40<sup>th</sup> Avenue SW south of 196<sup>th</sup> Street SW and beneath Interstate 5 to 204<sup>th</sup> Street SW. Currently, this street is identified as a collector street in the City Center Street Master Plan, requiring additional widening to accommodate the additional traffic flow.

### **Unclassified Street Operational Analysis**

The unclassified streets are forecast to operate below LOS E in 2025 representing conditions similar, although potentially somewhat improved over today's operations. Critical intersection capacity is similar to those of today. Requiring a LOS E standard in the City Center as analyzed in the SEIS will require intersection improvements such as additional turn lanes at the intersections of the collector streets and the boulevards (principle arterials). This situation has implications on pedestrian circulation. New local street intersections internal to the City Center subarea do not typically require additional turn lanes.

The Lynnwood City Center Access Study (Perteet 2008) recommended two arterial improvements that positively impact the operation of the City Center Street Master Plan principle arterials.

The 33<sup>rd</sup> Avenue W extension to Poplar Way creates a new north south connector that removes some traffic from the 44<sup>th</sup> Avenue W corridor and the intersection of 196<sup>th</sup> Street SW and 44<sup>th</sup> Avenue W improving the LOS slightly and reducing the need for additional turn lanes. This improvement does not affect the collector system operations in the City Center subarea.

The 40<sup>th</sup> Avenue W extension to Larch/204<sup>th</sup> Street SW has significant positive affect on traffic flow for the City Center Master Street Plan collector streets. It also provides new north south arterial connection to relieve the principle arterials. It does this by creating a minor arterial out of 40<sup>th</sup> Avenue W that is anticipated to be a collector street in the City Center Street Master Plan requiring additional widening of 40<sup>th</sup> Avenue W to accommodate the additional traffic flow. This has some negative affects as well, changing the character of 40<sup>th</sup> Avenue W south of 196<sup>th</sup> Street SW, making on-street parking more difficult if not impossible and making pedestrian crossings more challenging.

### **New Local Street Operational Analysis**

The new local streets proposed to provide access to parcels internal to the City Center Subarea are forecast to operate well below capacity, better than LOS E. The LOS E standard recommended in the SEIS requires intersection improvements typically calling for additional turn lanes at the

intersections of the new local streets and the principle arterials. Intersections internal to the City Center subarea do not typically require additional turn lanes. The new local streets are effectively providing access to adjacent parcels and vehicles and non-motorized mobility. The operation of the new local streets for vehicles is anticipated to be right-in-right-out only at the intersections with the principle arterials. Left-turns into or out of the new local streets will be effectively impossible at principle arterials given the high traffic volumes on the principle arterial system.

### **Non-motorized Operational Analysis**

A vibrant pedestrian friendly urban core is a key element of the City Center Subarea Plan. The City Center Street Master Plan provides a hierarchal grid of boulevards, collector streets and new local streets consistent with urban transportation planning principles.

Pedestrians are typically most comfortable when vehicles are separated from the sidewalk by a buffer of some kind be it a parking lane, landscape strip or wide sidewalk. Pedestrians are less comfortable when these features are lacking. The City Center Street Master Plan road sections include various combinations of all these design strategies.

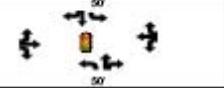
Bicyclists prefer separated facilities as traffic volumes increase. The current City Center Street Master Plan does not include bike lanes in the roadway sections. The local street volumes are low enough to accommodate mixed bicycles and vehicles while the principle arterial volumes are so high that bike lanes may not be advisable. The collector streets including the Promenade should be considered for bike lanes.

The biggest challenge to pedestrians and bicycles in the City Center Subarea will be crossing the principle arterials. The principle arterials are wide (5-8 lanes) and are expected to carry near capacity volumes. Non-motorized crossings at principle arterials will require signalization (creating added vehicle delay) or grade separation for safety. The connection of the Promenade across 196<sup>th</sup> Street SW at the Convention Center is an area of likely demand that should be accommodated in safe and efficient manner.

## **City Center Street Master Plan Street Intersection Control**

Initial intersection control and signal phasing if applicable have been developed for all intersections of the proposed City Center Streets. Figure 3 is an excerpt from the complete intersection control table provided in Appendix 4.

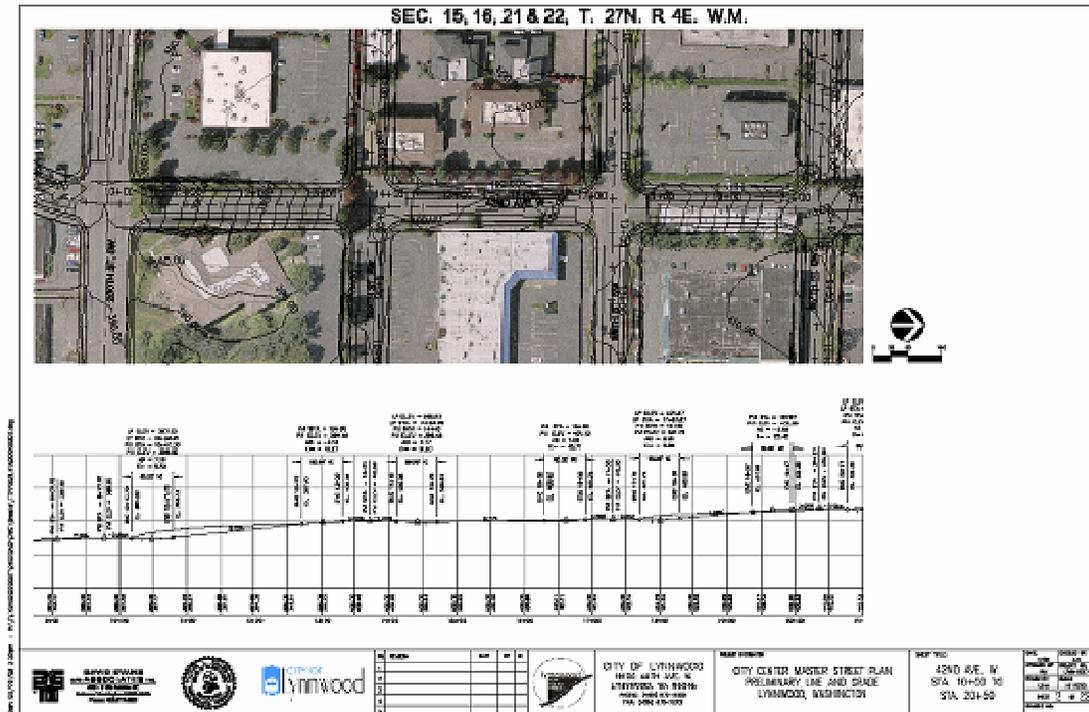
**Figure 3.  
Typical City Center Master Street Plan – Intersection Control**

City Center Intersection Configuration and Phasing			
Intersection	Control Type	Configuration and Pocket Lengths (ft)	Signal Phasing
194th St and 45th Ave	Signal		
194th St and 48th Ave	All-Way Stop		NA
194th St and 45th Ave	All-Way Stop		NA
194th St and 44th Ave	Signal		
194th St and 42nd Ave	Right-in/Right-Out		NA
194th St and 42nd Ave	Signal		
194th St and 40th Ave	Signal		

## City Center Street Master Plan Street Plan and Profile Sheets

Preliminary plan and profile sheets were prepared based upon the operational analysis completed and consistent with City of Lynnwood Street Standards and the City Center Subarea Plan. The plan and profile sheets provide preliminary horizontal and vertical alignments for each proposed street and street improvement. These profile sheets are intended as a starting point for future design and should not be considered final alignments or sections.

**Figure 4.**  
**City Center Master Street Plan – Plan and Profile Sheets**



Plan and profile sheets for each street are included in Appendix 5.

## City Center Street Master Plan Compatibility with Desired City Center Land Use and Urban Design

The proposed block spacing was checked against the 60 foot to 65 foot parking structure module dimension to confirm that the small block dimensions between the new local streets and some of the collector streets could support the structured parking and the urban densities envisioned in the plan. That accommodation is possible if the footprint of the parking structures is allowed to expand beneath the local street system.

The new local streets anticipated for the City Center Street Master Plan; new access streets at the approximate locations of 41<sup>st</sup> Avenue W, 43<sup>rd</sup> Avenue W, 197<sup>th</sup> Street SW and 199<sup>th</sup> Street SW, provide access to individual buildings or parcels, create an urban setting, establish building frontages with streetscape access and provide non-motorized circulation internally in the City Center subarea. The provision of a more significant street at 42<sup>nd</sup> Avenue SW will provide the basic structure of the City Center street network.

### City Center Access Study Arterial Recommendations

The Lynnwood City Center Access Study (Pertee 2008) recommended two arterial improvements that impact the compatibility of the City Center Street Master Plan and anticipated land use and urban design.

The 33<sup>rd</sup> Avenue W extension to Poplar Way creates a new north south connector that removes some traffic from the 44<sup>th</sup> Avenue W corridor and the intersection of 196<sup>th</sup> Street SW and 44<sup>th</sup> Avenue W improving the LOS slightly and reducing the need for additional turn lanes. Eliminating these turn lanes would improve non-motorized crossing safety at the intersection. This project has little impact on the compatibility of the City Center Street Master Plan and anticipated land use and urban design.

The 40th Avenue W extension to Larch/204<sup>th</sup> Street SW has significant affect on the City Center Master Street Plan compatibility with land use and urban design. It also provides new north south arterial connection to relieve the principle arterials. It does this by converting of 40<sup>th</sup> Avenue W, to a minor arterial; a street envisioned as a collector street in the City Center Street Master Plan. This results in much higher traffic volumes on 40<sup>th</sup> Avenue W requiring a 5-lane section. This would likely preclude on-street parking and make the street less compatible with the active sidewalks envisioned in the city Center Subarea Plan. The wider street would require additional public right-of-way with related increased construction costs.

## **Continuing Refinement of Street Sections and Intersection Controls**

It anticipated the street sections and intersection controls in this plan will be subject to change and refinement as specific development proposals arise, actual project costs are refined or other City, State or Federal actions or regulations influence street design in the future. Near term refinements include the following efforts.

### **200<sup>th</sup> Street SW**

The City has undertaken an analysis of 200<sup>th</sup> Street SW to refine the ultimate section necessary between Highway 99 and 44<sup>th</sup> Avenue W Preliminary findings of this study suggest that the western and eastern ends of 200<sup>th</sup> Street SW at Highway 99 and at 44<sup>th</sup> Avenue W respectively would benefit from additional capacity and turn lanes compared to the current recommendation of the City Center Master Street Plan and the central section west of 48<sup>th</sup> Avenue W does not require widening beyond three lanes. The initial findings of the this study are included in Appendix 6

### **196<sup>th</sup> Street SW**

The City has undertaken an analysis of 196<sup>th</sup> Street SW from 48<sup>th</sup> Avenue W to 33<sup>rd</sup> Avenue W to refine the ultimate section necessary between these limits and to investigate the feasibility of a Business Access and Transit Lane (BAT Lane) instead of a general purpose lane. Access management strategies to provide access to current development yet anticipating redevelopment and the City Center Street Master Plan will also be investigated.

## **City Center Street Master Plan Compatibility with City Center Park Master Plan**

The City Center Master Street Plan was developed concurrently with the City Center Park Master Plan. The alignments of the streets are coordinated with the location of the parks identified in the City Center Park Master Plan.

The streets most influenced by the location of the proposed parks are 198<sup>th</sup> Street SW (also known as the Promenade in the City Center Park Master Plan), 199<sup>th</sup> Street SW, 43<sup>rd</sup> Avenue W and 42<sup>nd</sup> Avenue W These streets form the boundaries of the proposed Central Park within the City Center Plan.

The location and alignments of the new local streets (199<sup>th</sup> Street SW and 43<sup>rd</sup> Avenue W) are somewhat flexible and they can be shifted to accommodate the size of the park if necessary. The locations of the collector streets (198<sup>th</sup> Street SW, and 42<sup>nd</sup> Avenue W) are less flexible. The alignment and right-of-way for 198<sup>th</sup> Street SW already exist as does much of the roadway. The alignment of 42<sup>nd</sup> Avenue W must connect to adjacent streets north and south of City Center to accommodate traffic mitigation identified in the SEIS.

The traffic conditions adjunct to the park will vary with lower traffic volumes on the new local streets to the west and south of the park and higher traffic volumes on the collector streets to the north and east of the park. The intersection of the Promenade and 42<sup>nd</sup> Avenue W will have the highest traffic volumes and will be a primary crossing point for many park users.

The cost estimates prepared for the City Center Street Master Plan include the wider sidewalks and landscaping proposed for 198<sup>th</sup> Street SW (the Promenade) and include the right-of-way costs required to accommodate that section.

## **City Center Street Master Plan Compatibility with Transit**

The provision of transit to City Center is more completely addressed in the City of Lynnwood Mode Split for City Center Street Master Plan (Perteet 2009). This report identifies two transit improvements that require additional coordination with the City Center Street Master Plan. These improvements are the potential location of a bus Super Stop and the potential locations of Sound Transit stations in the City Center.

### **Super Stop Location**

The report identifies alternative locations for a bus Super Stop. A Super Stop is designed to accommodate multiple busses simultaneously to allow transfers between routes but also to establish a visible location that makes transit an obvious element of the streetscape. The potential impacts to traffic flow of several busses in a concentrated location are relatively minor on the new local streets identified in the City Center Street Master Plan but may be significant on the collector streets. The final determination for a Super Stop and selection of the final location for the Super Stop should address arterial traffic flow and the location of future ST Stations. Bus and/or BRT will remain a key component of the City Center under any ST scenario.

### **Light Rail Station Location coordinate this section with the updated Perteet report**

This report identifies alternative locations for a light rail stations in addition to the ST2 expansion. Conceptual discussions of ST2 light rail at the Lynnwood Transit Center / Park & Ride (LTC/PR) station involve an elevated station located in the southwest corner of the City Center. As such, it would generate SOV traffic from drivers to the station and bus ridership through the City Center to connect to ST. The remote location would not encourage non-motorized traffic or transit oriented development in the City Center, and would create a barrier for pedestrians along and across principle arterials and collector streets between the City Center and the LTC/PR.

The current proposed location for the ST2 light rail station is at the (LTC/PR). This would be an end of the line station and the majority of light rail passengers would drive to the station. The proposed ST2 station location is remote from the City Center and, results in significant traffic impacts to the adjacent street system, and necessitates the need for parking.

With the ST2 light rail station at LTC/PR, the City has concluded that a City Center LRT station is essential to meet regional and local goals for developing the City Center area. Due to location and access to the LTC/PR, it is not feasible to construct a single station that would serve both City Center development and Transit Center commuter demand. The City of Lynnwood Mode

Split for City Center Street Master Plan Report (Perteet 2009) analyzed alternative locations within the City Center for the additional light rail extension and station locations, and made recommendations regarding the need for a station within the City Center.

### **City Center Access Study Arterial Recommendations**

The 40<sup>th</sup> Avenue W extension to Larch/204<sup>th</sup> Street SW would result in increased volumes on 40<sup>th</sup> Avenue W in the City Center. This could negatively affect the operation of a Super Stop on 40<sup>th</sup> Avenue W.

## **City Center Street Master Plan Cost Estimate**

The cost estimates for the City Center Street Master Plan has been developed using a project cost estimate spreadsheet created by David Evans and Associates, Inc. (DEA). The spreadsheet is a flexible tool that graphically represents the City's future City Center street system.

The cost estimates represent a planning level estimate which includes management, environmental, engineering, right-of-way, and construction costs for each segment of the recommended City Center street system. The analysis allows the determination of roadway cost estimates for the City Center street system either as a total project or as individual corridor projects.

Specific worksheets within the cost estimate spreadsheet allow for flexibility in determining the costs of each corridor project, and provide the ability to reflect potential cost implications of changing roadway classifications. The spreadsheet also offers several additional features, such as being able to select the type of roadway improvement from a drop-down menu, change the size of a city block, account for development within blocks, and exhibit both a cost estimate breakdown of typical construction bid items and a cost estimate summary of bid item categories. Each feature has its own worksheet associated with it. Detailed instructions on how to use the spreadsheet and input descriptions are provided on the first worksheet of the cost estimate spreadsheet file.

This spreadsheet-based tool was created as an easy way to approach the cost estimation of the City Center Roadway Network and provide a simple yet effective method to change the estimates based on updates in the development. The system provides a comprehensive process to create an organized set of cost estimation data to be used in future planning of the City Center and the consideration of a planned action ordinance for environmental review.

Each block and intersection corner that is currently planned for the future City Center street grid system is graphically represented in a worksheet. The project cost estimate is currently set to represent the roadway classifications and associated streetscape requirements identified in the City's Adopted Baseline Scenario. However, if the City elects to change the classification of a particular roadway, the flexibility of this cost estimating spreadsheet allows the City to make this change and have the new cost calculated based upon the revised roadway section and features.

The 19 separate cost estimates (1 baseline scenario and 18 individual cost estimates) that are included in the report are summarized in Table 3 below:

**Table 3.  
City Center Street Master Plan Cost Estimates**

	Road	Limits		Notes	Project Costs
		from	to		Total
1	44th	I-5	194th	4 New Signals, 0 Modified Signals	\$13,278,493
2	42nd	200th	194th	2 New Signals, 0 Modified Signals	\$14,668,986
3	196th	48th	36th	2 New Signals, 0 Modified Signals	\$14,417,475
4	Promenade/198th	45th	40th	0 New Signals, 0 Modified Signals	\$5,924,118
5	194th	40th	36th	2 New Signals, 0 Modified Signals	\$10,276,734
6	194th	36th	33rd	1 New Signal, 0 Modified Signals	\$6,939,689
7	194th	48th	40th	0 New Signals, 0 Modified Signals	\$5,164,422
8	200th	48th	40th	0 New Signals, 1 Modified Signal	\$9,007,098
9	201st	44th	200th	0 New Signals, 0 Modified Signals	\$5,622,661
10	45th	200th	194th	0 New Signals, 0 Modified Signals	\$11,180,858
11	43rd	200th	194th	0 New Signals, 0 Modified Signals	\$10,426,646
12	41st	200th	195th	0 New Signals, 0 Modified Signals	\$8,405,846
13	40th	200th	194th	0 New Signals, 0 Modified Signals	\$3,885,239
14	Promenade	40th	194th	0 New Signals, 0 Modified Signals	\$8,217,630
15	36th	196th	194th	0 New Signals, 1 Modified Signal	\$1,404,137
16	199th	44th	40th	0 New Signals, 0 Modified Signals	\$6,088,167
17	197th	44th	40th	0 New Signals, 0 Modified Signals	\$6,115,700
18	195th	45th	40th	0 New Signals, 0 Modified Signals	\$8,444,126
<b>* Individual Project Worksheet Totals (18 projects)</b>					<b>\$149,468,023</b>
<b>* Combined City Center Baseline Total (1 project)</b>					<b>\$150,320,763</b>

\* Differences between the costs to construct City Center Master Plan as one project and the costs to develop it as 18 separate projects are primarily attributed to the rounding of calculated numbers and using percentages of specific construction items to estimate the costs and quantities of others.

The City Center Roadway Cost Estimate data presented in the above table was provided to City of Lynnwood on June 21, 2007 and represents 2007 cost estimates. There has been no inflation added to account for future build out years. Summary Cost estimates for each segment are included in Appendix 7.

## City Center Street Master Plan Funding Sources

### City General Funds

The City could allocate general tax funds to a portion of the cost of the City Center Street Master Plan. These funds would directly impact other non-transportation programs or projects planned by the City.

### General Obligation Bonds and Voter Approved Bonds

The City could utilize debt financing in the form of General Obligation Bonds or voter approved Bonds to fund a portion of the cost of the City Center Street Master Plan. Using debt financing for this purpose could impact the ability of the City to fund other non-transportation programs or projects planned by the City.

## **City Arterial Funds**

The City could allocate arterial funds (typically the State Gas Tax allocation) to the cost of the City Center Street Master Plan. Using these funds would directly impact other transportation programs or projects planned by the City including street overlay, traffic signal operations, or traffic safety programs

## **State and Federal Grants**

The City is eligible to apply for numerous State and Federal grant programs. A list of current programs includes:

### *WSDOT Programs:*

Pedestrian and Bicycle Safety  
Safe Routes to Schools  
Public Transportation  
Rail

### *Other Washington State Funding Agencies:*

Freight Mobility Strategic Investment Board  
Public Works Trust Fund  
Transportation Improvement Board

### *Economic Development Funding Sources:*

Available funds are limited and require local match.

- Local Revitalization Tool (LRT)
- Local Infrastructure Financing Tool (LIFT)
- Community Economic Revitalization Board (CERB)

### *Federal Aid Programs:*

Highway Bridge Program (HBP) Funding Program  
Congestion Mitigation and Air Quality (CMAQ)  
Emergency Relief (ER)  
Safety - High Risk Rural Roads Program (HRRRP) & Highway Safety Improvement Program (HSIP)  
Surface Transportation Program (STP) Regional  
Transportation Enhancements

### *Federal Discretionary Programs:*

Bridge  
ITS Integration Program  
SAFETEA-LU High Priority Projects  
American Reinvestment and Recovery Act (ARRA)  
Transportation Investment Generating Economic Recovery (TIGER)

These programs have matching fund requirements from zero to over 50 percent. They may require additional environmental documentation and/or administrative effort over local funding sources. Most are competitive and difficult to predict. The City Center project embodies many of the objectives of several “smart growth” and “sustainability” grant programs, including mixed use, high densities and multi-modal transportation solutions.

## **Local Transportation Benefit Districts**

A law passed in 2007 allows city or county governments to create local transportation benefit districts and impose a local vehicle registration fee to fund local transportation projects. Once a

local transportation benefit district is set up, the district's board of directors may vote to charge a local vehicle licensing fee due when a vehicle owner buys new tabs.

The transportation benefit district board has the authority to impose a fee of up to \$20 per vehicle without voter approval. A transportation benefit district may impose a vehicle renewal fee of up to \$100 per vehicle or seek other sources of funding if approved by voters.

### **Local Improvement District (LID) Funding**

LID's are special assessment districts in which improvements will specially benefit primarily the property owners in the district. They are created under the sponsorship of a municipal government and are not self governing special purpose districts. To the extent and in the manner noted in the enabling statutes, they must be approved by both the local government and benefited property owners. *Refer to the Washington State Local Improvement District Manual, Fifth Edition. Report No. 59, October 2003.*

An independent real estate appraiser and consultant (Macaulay and Associates, Everett, WA) was contracted to prepare a feasibility study to determine the special benefits accrued to the City Center parcels related to the provision of improved transportation infrastructure identified in the City Center Master Plan. This analysis based upon the 2007 real estate market determined that near term special benefits to the City Center Subarea were in the range of \$35,000,000 to \$45,000,000. This represents an increase in the underlying real estate value of approximately \$4.25 to \$5.50 per square foot resulting from the provision of the roadway and parks infrastructure proposed for the City Center Subarea. The analysis did not include possible utility extension costs or benefits attributed to improved utility services. The parcel and market appraisal data used to develop the special benefit estimate is provided in Appendix 2.

It may be possible to combine LID funding with other developer contributions such as a voluntary SEPA mitigation payment or an impact fee without "double dipping" or charging the developer more than the fair share of the system improvements required to mitigate the transportation impacts of City Center. LID assessments are based upon a special benefit study that determines the increase in value to each property realized resulting from the project constructed using the LID funds. That benefit can be greater than the cost of the improvements, and can be greater than the property's proportional share on a traffic impact basis. If the special benefit to a property is greater than the costs of the project or the property's proportional share of the project, the remaining special benefit could be assessed to the property.

### **Transportation Impact Fees**

The City of Lynnwood does not currently have a transportation impact fee. Cities in Washington can use impact fees for transportation and other infrastructure improvements necessary to accommodate growth. Projects must be included in the City's Comprehensive Plan and adopted Capital Facilities Plan to be eligible for impact fees. The projects identified in the capital plan are considered system improvements. Impact fees are used to incrementally fund capital plans with the amount of the fee not to exceed the cost of the improvements reasonably related to the impacts of development. Impact fees may not be used to correct existing deficiencies. Impact fees may be used to recover the cost of previously constructed projects that still have capacity available to accommodate additional growth.

Impact fees are used by many cities in the State of Washington and range from a few hundred dollars per residential unit or peak hour trip to over ten-thousand dollars per residential unit or peak hour trip.

Impact fees can be established for an entire city, a subarea, or in some cases on a zone by zone basis. Many agencies choose to establish a single fee city-wide for simplicity and to reduce

challenges at zone boundaries. Other agencies choose to use zones to reflect the variations in the impact of development on the transportation system by geographic location.

Impact fees must be adopted by ordinance. Once adopted, individual impact fees assessed to a development can be appealed, but the underlying ordinance and fee structure are not.

A city-wide impact fee would allow the city to capture the proportional share of system improvement costs from City Center and all other development that would be accommodated by the system improvements.

### **State Environmental Policy Act (SEPA) Voluntary Mitigation Payments**

The State Environmental Policy Act (SEPA) requires mitigation for adverse environmental impacts. SEPA has been used in conjunction with local codes and ordinances to require mitigation for infrastructure impacts for many years. SEPA requires adequate public policy to provide the ability to demonstrate an adverse impact and require mitigation. Adopted Level of Service standards are the policy typically used to require mitigation of transportation impacts under SEPA, although public safety is often cited as the policy basis for mitigation to transportation impacts.

SEPA lends itself well to mitigation of impacts directly and substantially attributed to one development. Small incremental impacts are more difficult to mitigate under SEPA or can result in disproportionate responsibility related to proportionate share of impact. SEPA does not facilitate including other developments or parties in the mitigation of impacts.

The City Center Street Master Plan is based upon the SEPA required transportation mitigation identified in the City Center Sub-Area Plan SEIS. The SEIS identified the mitigation required for the overall plan but did not address phasing of the mitigation as the sub area developed. The SEIS did not provide a proportional share breakdown of mitigation requirements by use or trip in the subarea.

DEA prepared an estimate of transportation mitigation costs based upon total trip generation of the plan. That cost per unit of development was adopted as a voluntary SEPA mitigation payment that the City would accept as mitigation for traffic impacts associated with incremental development of the plan. The fee is voluntary and developers could choose to pay or offer alternative mitigation. SEPA voluntary mitigation payments are common, but have generally been replaced by impact fees.

## **Allocation of City Center Street Master Plan Costs**

The allocation of transportation improvement costs is typically allocated on the basis of the type of improvement, the proportional share of development traffic using the improvements, and/or the location and nature of the improvement; for instance, frontage improvements versus offsite interaction LOS mitigation.

### **Project Improvements vs. System Improvements**

Project improvements are necessary for a project to function; i.e., a cul-de-sac serving five homes for instance, but are not required for broader public benefit if the project were not proposed. Project improvements are not eligible for inclusion in city-wide impact fee systems that spread costs among all users

System improvements; i.e., arterials, are necessary independent of any specific project but support all projects in a planning area. This distinction is important because system improvement costs should be borne by as broad a user group as possible to equitably share system project costs.

The city-wide VISUM traffic model was used to systematically estimate the users of each roadway segment in the City Center Master Street Plan to determine if the various roadways proposed to support the City Center Master Plan were project improvements or system improvements. The analysis considered a broad range of users for each road segment including; City Center, the balance of the City of Lynnwood, Lynnwood’s Municipal Urban Growth Areas (MUGA's) and non-Lynnwood regional road users. Table 4 provides a summary of road users by segment for the City Center streets identified in the plan.

**Table 4.  
Road User Summary**

Project	Location	Trips	Intra CBD	CBD Lynnwood	Lyn Other to/from CCTR	MUGA	Other
44th	I-5 - 194th	7,243	1.8%	69.6%	23.4%	4.1%	1.0%
Poplar Way Extension	196th - 33rd	3,132	0.0%	54.1%	41.2%	4.2%	0.5%
42nd	200th - 194th	1,433	5.3%	94.7%	0.0%	0.0%	0.0%
196th	48th - 36th	7,390	1.7%	74.1%	23.1%	0.4%	0.7%
194th	36th - 33rd	1,259	0.5%	65.7%	29.8%	2.1%	1.9%
	40th - 36th	1,557	2.0%	84.6%	12.9%	0.5%	0.0%
	48th - 40th	1,254	2.4%	76.3%	20.6%	0.7%	0.0%
200th	48th - 40th	5,412	2.0%	66.5%	29.5%	1.1%	0.9%
201st	44th - 200th	958	3.3%	71.2%	17.4%	3.5%	4.6%
45th	200th - 194th	587	8.7%	91.3%	0.0%	0.0%	0.0%
43rd	200th - 194th	927	6.6%	93.4%	0.0%	0.0%	0.0%
41st	200th - 195th	676	5.5%	94.5%	0.0%	0.0%	0.0%
40th	200th - 194th	2,357	3.9%	95.1%	1.0%	0.0%	0.0%
199th	44th - 40th	1,039	3.9%	96.1%	0.0%	0.0%	0.0%
197th	44th - 40th	867	4.5%	95.5%	0.0%	0.0%	0.0%
195th	45th - 40th	1,219	4.5%	95.5%	0.0%	0.0%	0.0%
Maple Road Extension	AMP - 36th	582	0.0%	0.0%	82.6%	16.5%	0.9%
33rd Extension	184th - AMP	4,272	0.0%	26.1%	69.2%	4.3%	0.5%
36th Ave 5-lane widening	196th - 194th	3,518	0.2%	68.5%	28.4%	1.6%	1.3%
AMB/40th Signal	40th - AMB	3,698	0.5%	70.0%	26.7%	1.6%	1.3%
Promenade	45th - 40th	1,368	10.8%	89.2%	0.0%	0.0%	0.0%

The results of the analysis demonstrated that the improvements proposed for the boulevards and collector streets that are existing or proposed in the City Center Master Plan met the criteria of system improvements because City Center traffic was often a small proportion of the total traffic on each arterial while the greater proportion of traffic had origins and destinations outside the City Center.

The analysis also demonstrated that the new local streets between the collector streets creating the smaller blocks in the City Center Street Master Plan were almost exclusively used by City Center traffic, much like the residential cul-de-sac described earlier in this section. This analysis concludes that the new local streets may be addressed as project related improvements or access improvements solely for City Center properties.

#### **Developer Share of the Cost of City Center Improvements**

The determination of cost allocation for City Center Street improvements is dependent upon the nature of the development project’s traffic generation. Project traffic generates the need for system improvements and/or project improvements depending on the traffic analysis. The analysis within the report suggests that the new local streets should be considered project improvements and be made the sole responsibility of the developers of the City Center Subarea. Further, the boulevards and collector projects identified in the City Center Master Plan should be

considered city-wide system improvements, with a measurable related proportionate share of the costs of those projects being the responsibility of development within the City Center as well. There are several ways the developer share could be provided depending upon whether the improvements are project improvements or system improvements.

The developer share of project improvements could be funded by:

- Funded by individual developers on a piece meal basis.
- Multiple project improvements are fully funded by some developers with a latecomer's agreement to recover the added costs of the additional improvements from other developers.
- Multiple project improvements are funded by the city utilizing a Local Improvement District (LID) to finance the costs of a larger number of project improvements and assessing those costs to all property benefiting from the project.
- Conversion of the new local streets to privately owned facilities providing the functional intent as the local streets, but more integrated into the private development, and constructed and owned and operated by developers as part of their projects.

The developer share of system improvements could be funded by:

- The same mechanisms as above with the exception of the conversion to private facilities as system improvements must remain publicly owned.
- SEPA voluntary mitigation payments to provide the developer share of the project cost to the City.
- Impact fees to provide the developer share of City Center project costs to the City.
- Subsidize the developer share of system improvements with other sources including state or federal grants.
- Combinations of all of the above.

The system improvements/project improvements analysis suggests that the boulevards and collector streets such as 194<sup>th</sup> Street SW, 196<sup>th</sup> Street SW, 198<sup>th</sup> Street SW, 40<sup>th</sup> Avenue W, 42<sup>nd</sup> Avenue W and 44<sup>th</sup> Avenue W and 200<sup>th</sup> Street SW should be considered system improvements and the cost be made the joint responsibility of the development in the City Center Subarea, other development city-wide, adjacent agencies and the region. The cost of system improvements should be proportionally allocated to the public based upon the use of each arterial segment as shown in Table 4 above.

There are several ways the costs could be allocated:

- All costs are borne by the city with no developer contribution. The city would effectively subsidize the development cost.
- Costs are shared with the developers of City Center with specific SEPA voluntary mitigation payments to provide the developer share; and grants, general fund, bond and or levy funds to provide the public share.
- Costs are shared with all developers in the city using a city-wide impact fee to provide the developer share; and grants, general fund, bond and or levy funds to provide the public share.
- Costs are shared with all developers in the City Center using a Local Improvement District to provide the developer share; and grants, general fund, bond and or levy funds to provide the public share.
- Costs are allocated to non-city public sources such as state or federal grants. In this case the state or federal government would be subsidizing the city and developer share of the transportation improvements necessary for City Center.
- Combinations of all of the above.

## City Center Street Master Plan Phasing

The City Center Street Master Plan was developed for the build out condition assuming that 9.1 Million Square feet of development has occurred and the full City Center Street Master Plan has been implemented. This is important, in that the plan only describes a condition of full build out of the development and transportation system. For instance, interim periods were not analyzed to determine how much development could be supported by 50 percent of the street system, or what street improvements would be necessary for a specific parcel to redevelop in City Center.

The Market Analysis and Absorption Study (Johnson Gardner 2007) suggests that City Center will develop in phases as the market matures. Market conditions have changed significantly since the study was completed. The distributed ownership of numbers of small parcels also suggests that development will occur on an individual project-by-project basis unless significant assemblages of multiple parcels are completed.

The likelihood of phased development supports a phased approach to the implementation of the City Center Street Master Plan. Not all of the improvements outlined in the City Center Street Master Plan are needed at once to accommodate this type of lot-by-lot or even block-by-block redevelopment that will likely occur. The traffic operations analysis and road user share calculations in Table 4 provide some insight into potential phasing of the City Center Master Street Plan.

### High Priority Actions

The widening of 196<sup>th</sup> Street SW to provide added capacity near term and create an identity for the corridor. This project includes completing the widening of northbound 44<sup>th</sup> Avenue W as part of the SR 524 extension from 196<sup>th</sup> Street SW to Interstate 5. Consider a transit enhancement such as a Business Access and Transit Lane (BAT) for the widening project. While not specifically analyzed, a BAT lane is consistent with the function of the curb lane of 196<sup>th</sup> Street SW due to the high volume of business access that now occurs. The inclusion of BAT lanes will serve transit and address the projected mode split.

194<sup>th</sup> Street SW extension is part of the collector street system to provide relief to 196<sup>th</sup> Street SW and accommodate linkages to the Alderwood / City Center Transition Area to the northeast and access to south.

42<sup>nd</sup> Street W extension provides access into the City Center Core and establishes the collector street system. It is a system improvement eligible for a wide range of funding sources. If included in an impact fee program, the cost to construct it could be recovered by future impact fees.

198<sup>th</sup> Street SW/Promenade has vehicle capacity already and could be enhanced to improve marketability of the City Center core at a moderate cost.

Consider a more flexible LOS standard within the City Center that uses LOS averaging to allow improvements to be phased over time and slightly out of sync with development, either in advance of or following. This approach will be similar to the approach used in the development of a city-wide concurrency program.

# City Center Street Master Plan Recommended Actions

## City Center Street Master Plan Level of Service Standards

The City adopted an LOS E Standard for City Center Subarea. The traffic operations analysis suggests that this standard is achievable in general, but specific high volume intersections partiality on 196<sup>th</sup> Street SW and 44<sup>th</sup> Avenue W would require significant widening that would be inconsistent with the pedestrian mobility objectives of the City Center Subarea Plan.

The City is currently developing a concurrency management system and LOS standards city-wide that sets the LOS E for the City Center Subarea, D for other highways and C for new local streets. The proposed standard also allows for 20 percent of intersections city-wide to exceed the standard. This tolerance for some LOS F operations recognizes that some intersections simply cannot be improved to provide high vehicle LOS without negatively affecting pedestrian mobility and safety, or requiring excessive expenditure of limited transportation improvement funds.

Allowing 20 percent of intersections city-wide to exceed the standard also provides for project phasing, so that transportation improvements can lag behind growth to a predetermined limit on a city-wide basis.

Additionally, allowing LOS E and/or F for vehicles in the City Center Subarea would support higher transit usage.

***Action:** Require City Center transportation facilities to meet the LOS standards in the proposed city-wide concurrency management system based on a LOS averaging for intersections in the Subarea.*

## City Center Street Master Plan Roadway Improvements

Minor modifications to the adopted new local streets to allow more flexibility, even privatization of the new local streets should be explored to offer additional flexibility to development while retaining the local access and non-motorized benefits of the small block grid.

Recommendations from the City Center Access Study should be included; such as the Poplar Extension and 40<sup>th</sup> Avenue W Extension.

**Action:** The conversion of the new local streets (41st Avenue W, 43<sup>rd</sup> Avenue W, SW 197<sup>th</sup> Street SW and SW 199<sup>th</sup> Street SW) in the Subarea to private roadways and access points with design standards related to non-motorized mobility is recommended.

**Action:** Provide for sufficient ROW for the future extension of 40<sup>th</sup> Avenue W to the south under Interstate 5. This could be in the form of a three-lane roadway with parking that could be converted to five lanes in the future.

## City Center Street Master Plan Coordination with Land Use Plan

City Center Street Master Plan provides a hierarchal grid of boulevards (principle arterials, minor arterials), collector and new local streets consistent with urban transportation planning principles.

The block spacing was checked against the 60 to 65 parking structure module dimension to confirm that the small block dimensions between the new local streets and some of the collector streets could support the structured parking and the urban densities envisioned in the plan.

**Action:** Define urban design standards for the new access streets at the approximate locations of 41<sup>st</sup> Avenue W, 43<sup>rd</sup> Avenue W, 197<sup>th</sup> Street SW and 199<sup>th</sup> Street SW, to provide access to individual buildings or parcels, create an urban setting, establish building frontages with streetscape access and provide non-motorized circulation internally in the City Center Subarea.

**Action:** Consider the implications of the 40<sup>th</sup> Avenue W extension on land use adjacent to the 40<sup>th</sup> Avenue W.

### **City Center Street Master Plan Coordination with Parks Master Plan**

The Promenade is effectively a landscape enhancement to the 198<sup>th</sup> Street SW Corridor. It serves as a linkage to the other proposed parks and an aesthetic amenity to the City Center Subarea. The cost of the Promenade landscaping was included in the current cost estimates as a street cost. The ROW was treated as road ROW. The costs for the Promenade, including the landscaping and street furniture would logically fit a Local Improvement District funding scenario as much of the road capacity in the corridor exists and the Promenade has a direct positive impact on property values in the Subarea.

The proposed park sites create opportunities for Low Impact Development utilizing rain gardens and/or other shared storm water facilities.

**Action:** Consider the need for flexibility in the coordinated placement of streets and parks within the City Center to accommodate the objective of the Streets Master Plan.

**Action:** Consider including the Promenade as an early catalyst project funded with a Local Improvement District to improve property values and curb appeal in the City Center Subarea.

**Action:** Consider shared storm water facilities that serve both parks and roads.

### **City Center Street Master Plan Coordination with Transit**

Significant increases in transit service are required to achieve the desired mode split targets for the City Center Subarea. The City should proactively engage in discussions with Sound Transit (ST) and Community Transit (CT) to accelerate the provision of transit service to the City Center Subarea. The success of the ST 2 election is critical and the City should actively engage in the location decision for the north end station of the North Link Segment and the additional City Center station location.

**Action:** Engage in discussions with Community Transit to refine service for the City Center in the context of city-wide routing, and the location of a bus superstop in the City Center Subarea.

**Action:** Engage in discussions with Community Transit to include BRT in the 196<sup>th</sup> Street SW corridor to provide a direct linkage to Highway 99.

**Action:** Engage in discussions with Sound Transit to include a station in the core of the City Center Subarea to facilitate transit oriented development, and a station at the existing Transit Center / Park & Ride to accommodate multi-modal commuters and SOV drivers.

### **City Center Master Street Plan Funding**

The following recommendations are based upon the findings of the traffic analysis, funding assessment, and LID feasibility study.

**Action:** Designate the new local streets as project improvements with 100 percent developer responsibility and consider private roadway connections and/or design standards to provide the desired transportation connections without the expense of right-of-way acquisition and public ownership.

**Action:** Use a city-wide impact fee program to capture the development share of system improvement costs from all new development city-wide.

**Action:** Consider LID financing to the extent it allows private properties to finance City Center streets and/or other public project improvements. LID assessments for projects included in the impact fee program would be credited against impact fees due, thus providing property owners a financing mechanism to pay for all or a portion of their project mitigation or impact fees over time instead of up front. The City would essentially finance the mitigation for the developer, freeing private capital for other uses.

**Action:** Aggressively pursue state and federal grants to make up the public share and a portion of the developer share of the system improvement costs.

**Action:** Consider long term public financing options in addition to grants.

### **City Center Street Master Plan Phasing**

The City Center Street Master Plan provides a balanced land use and transportation system in the future. A phasing plan should be developed to ensure orderly growth in the Subarea with transportation improvements provided concurrent with growth in the Subarea. The phasing plan should include the following actions.

**Action:** 196<sup>th</sup> Street SW widening (including north bound 44<sup>th</sup> Avenue W south of 196<sup>th</sup> Street SW) to provide added capacity near term and create an identity for the corridor. Consider a transit enhancement such as a Business Access and Transit Lane (BAT) for the widening project.

**Action:** 194<sup>th</sup> Street SW extension provides relief to 196<sup>th</sup> Street SW and supports expansion to Alderwood / City Center Transition area to the northeast and City Center access to south.

**Action:** 42<sup>nd</sup> Avenue W extension provides primary collector access to the City Center and establishes the primary block structure of the City Center. It is a system improvement eligible for a wide range of funding sources. If included in an impact fee program, the cost to construct it could be recovered by future impact fees.

**Action:** 198<sup>th</sup> Street SW/Promenade has vehicle capacity already and could be enhanced to improve marketability of the City Center core at a moderate cost.

**Action:** Consider a more flexible LOS standard that uses LOS averaging to allow improvements to be phased over time and slightly out of sync with development, either in advance of or following.

**Action:** Include the City Center Subarea within the city-wide concurrency and impact fee program.

## Coordination with Other City Actions

The City has initiated a review of revitalization strategies along Highway 99. A separate environmental analysis will be prepared to document the implications of additional development within this area. The City is also proposing to annex additional land area to the north, east and south. Annexed areas will be subject to the previously approved county land use plans and corresponding environmental review.

**Action:** Look for opportunities to link additional development in the Highway 99 corridor to the City Center Subarea with transit (including BRT in the 196<sup>th</sup> Street SW corridor).

**Action:** Evaluate implications of these other city actions on the development of a city-wide concurrency and impact fee program for traffic improvements.

## Conclusion

This report completes the City Center Street Master Plan as funded pursuant to the “Seed Money” projects authorized by City Council. Review and consideration of the recommendations within this report are the next steps to proceed with the implementation of the City Center Plan.

The recommendations herein are based upon the information available at the time of the analysis and reflect general assumptions about the type and location of land use in City Center. Specific uses proposed for specific locations such as a hotel or office building will require subsequent review and confirmation of the access requirements and mitigation requirements of that specific development. In some cases the localized traffic impacts internal to City Center may be less than or greater than estimated in this document resulting in the need for modifications to the recommendations in the Street Master Plan.

Future federal, state or local regulations related to transportation and development could also affect the recommendations included in the plan.

This plan should be used to guide development of City Center with as much flexibility as possible responding to opportunities in the near term while preserving the overall intent of the City Center Subarea Plan.

# City Center Street Master Plan Executive Summary

The draft City Center Sub-Area Plan (City Center Plan) was formulated in January 2003. The plan envisioned additional density and a mix of land-uses within the City Center Sub-Area Boundary. An Environmental Impact Statement (EIS) of the Lynnwood City Center Sub-Area Plan was prepared and adopted in September 2004. This EIS and Supplemental EIS (SEIS) identified environmental impacts and mitigation related to the proposed City Center Plan. Adoption of the City Center Plan occurred in March 2005. Zoning implementing the City Center Plan was subsequently adopted March 2005, and amended in September 2007.

In 2006, the City of Lynnwood began the preparation of technical analysis to implement the City Center Plan. The ultimate goal is the completion of a planned-action ordinance to guide development of the City Center. Various “seed money” projects were initiated to complete the technical analysis regarding the proposed parks, street infrastructure, and transit. The City Center Street Master Plan was undertaken to verify the sufficiency of the City Center street network established in the City Center Plan, and provide recommendations for implementation. The Street Master Plan documents specific street improvements required from new development, and provide recommendations for implementing actions including project prioritization and funding. The following summarizes the findings regarding the sufficiency of the proposed City Center street network. This analysis is the basis for final recommendations within the City Center Street Master Plan.

## **Traffic Operations of Street Master Plan**

The boulevards are forecast (per the City’s 2025 VISUM travel forecasting model and 2025 Land Use scenario) to operate near or at capacity, Level of Service (LOS) E, in 2025 representing conditions similar, although potentially somewhat improved over today’s operations (per the City’s baseline VISUM travel forecasting model and baseline Land Use scenario). Critical intersections are forecast to operate under conditions similar to those of 2008. The LOS E standard recommended in the SEIS drives the recommended intersection improvements typically calling for additional turn lanes. These lanes can be accommodated; however, the resulting roadway widths and crosswalk lengths become undesirable from a pedestrian perspective. Applying an LOS E averaging methodology throughout the City Center will allow some intersections to experience greater congestion (LOS F) while maintaining an overall LOS of E or better for the entire Subarea. This approach could also reduce the size of some critical intersections such as the intersection of 196<sup>th</sup> Street SW and 44<sup>th</sup> Avenue W while not impacting area-wide service levels.

## **Compatibility of Street Master Plan with Land Use Plan**

The City Center Master Street Plan is compatible with the City Center Subarea Plan. The City Center Access study recommendation to extend 40<sup>th</sup> Avenue W south under Interstate 5 changes the nature of that roadway and may affect the roadway’s compatibility with the desired streetscape and function in City Center. The land use implications of 40<sup>th</sup> Avenue W north of 194<sup>th</sup> Street SW will require further analysis of impacts.

## **Compatibility of Street Master Plan with Parks Plan**

The City Center Master Street Plan establishes the location of the Central Park to some extent. There is flexibility in the location of the new local streets to the west and south of the park. The park is not particularly affected by the operation of the streets adjacent to it. The park is not anticipated to be a significant generator of vehicle traffic. It will be an attraction to pedestrians and bicyclists and those modes should be considered adjacent to the park.

## **City Center Street Master Plan Compatibility with Transit**

The location of proposed bus Super Stop and the Sound Transit Phase 2 (ST2) Light Rail Station are critical to the achievement of the mode split (Single Occupancy Vehicle (SOV) reduction) planned for the City Center. The location of Super Stop could affect vehicle traffic operations if not sited correctly. The location of the ST2 Light Rail Station in City Center above grade would have limited impact on the operation of City Center Streets, but will increase pedestrian and bicycle volumes in the vicinity of the station.

## **Street Master Plan Costs**

The 2007 cost estimate for the combined boulevards (principle arterial and minor), collector streets and new local streets identified in the City Center Master Street Plan is \$174,062,000.

The 2007 cost estimate for the combined boulevards and collector streets excluding the new local streets identified in the City Center Master Street Plan is \$128,922,000. The cost to construct the new local streets as private streets could be substantially less than the cost to construct them as public streets. The costs of the additional sidewalk width and planting areas associated with the Promenade Street are included in the estimate.

The need for pedestrian and vehicular access within the City Center may be accommodated through other means to achieve the intent of the plan while providing flexibility for development.

## **Street Master Plan Funding Options**

The city has a wide variety of funding sources to choose from to fund the City Center Master Street Plan. These include various public sources and developer exactions.

The analysis of the 2007 real estate market determined that near term special benefits to the City Center Subarea were in the range of \$35,000,000 to \$45,000,000. This represents an increase in the underlying real estate value of approximately \$4.25 to \$5.50 per square foot resulting from the benefit received through the provision of the City Center Plan, City Center Zoning, and associated roadway and parks infrastructure proposed for the City Center Subarea Plan. A Local improvement district (LID) may assess this “benefit” to private property to fund associated infrastructure. Market conditions have declined since 2007 and the revenues available through the local LID process may have also declined.

The need to balance the allocation of costs to the developers of City Center with incentives to achieve new development in Lynnwood is a policy decision. Comparable communities in the region have pursued incentives for this purpose. Local, State and Federal funding sources will also be needed to support costs of the City Center Street Master Plan, and finance infrastructure requirements for streets that are not attributable to development in the City Center. To be eligible for State and Federal grant funding, local funds for grant match or design are typically required.

The City is currently considering a traffic concurrency ordinance and city-wide traffic impact fee system. This approach provides the city with a long term revenue stream to fund traffic infrastructure that has greater flexibility than direct SEPA mitigation or voluntary SEPA mitigation payments from development. The City Center is integral to the city-wide traffic system and should be included in such a concurrency and impact fee approach.

## **Allocation of Street Master Plan Costs**

The 2007 cost estimate for the combined boulevard streets (principle and minor arterials), collector streets, and new local streets identified in the City Center Master Street Plan is \$174,062,000. Of this amount 70 percent can be attributed to traffic generated in the City Center,

28 percent city-wide to other growth, and 2 percent to growth outside the current city limits based upon the relative origins and destinations of modeled traffic using each of the various streets.

The 2007 cost estimate for the combined *boulevards, collector streets* (principle and minor arterials) excluding the new local street network identified in the City Center Master Street Plan is \$128,922,000. Of this amount 65 percent can be attributed to City Center Traffic, 33 percent city-wide to other growth, and 2 percent to growth outside the current city limits.

The analysis of the new local streets indicates that their implementation is clearly supported as a project improvement related to the City Center. Implementing the new local streets through the development approval process offers design flexibility to implement the concept of local circulation through a project specific strategy that is more cost effective.

### **Phasing of City Center Street Master Plan**

The likelihood of phased development supports a phased approach to the implementation of the City Center Street Master Plan. Not all of the improvements outlined in the City Center Street Master Plan are needed at once to accommodate the lot by lot or even block by block redevelopment that will likely occur. Infrastructure could be phased pursuant to the level of development that occurs over time. This approach will provide a cost effective provision of infrastructure based upon development as it occurs.

### **High Priority Actions**

The following street projects are identified as the most important to initiated phased development.

- 196<sup>th</sup> Street SW widening to provide added capacity near term and create an identity for the corridor. This project includes completing 44<sup>th</sup> Avenue W by widening the northbound lanes south of 196<sup>th</sup> Street SW. The City should consider transit enhancements such as a Business Access and Transit Lane (BAT) along 196<sup>th</sup> Street SW for the widening project which will reduce congestion and facilitate transit usage. While not specifically analyzed, a BAT lane is consistent with the function of the curb lane of 196<sup>th</sup> Street SW due to the high volume of business access that now occurs.
- 194<sup>th</sup> Street SW: Extend this street to 33<sup>rd</sup> Avenue W to provide relief to 196<sup>th</sup> Street SW, and to connect the City Center to the City Center / Alderwood transition area to the northeast.
- 42<sup>nd</sup> Avenue W extension: Provide the initial access to the City Center Core and establish a new collector arterial street. This project provides a system improvement eligible for a wide range of funding sources. If included in an impact fee program, the cost to construct it could be recovered by future impact fees.
- 198<sup>th</sup> Street SW / Promenade: This street has sufficient vehicle capacity, and could be enhanced to implement the pedestrian circulation system envisioned in the City Center.
- Level of Service: The City adopted level of Service E for the City Center which is a more stringent standard than applied elsewhere city-wide. Consider a more flexible LOS standard for the City Center that uses LOS averaging to allow improvements to be phased over time, either in advance of or following development to provide additional development flexibility while addressing traffic mitigation.