City of Marysville

# 2015
# TRANSPORTATION ELEMENT

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# Table of Contents



# Appendices

# Figures



# Tables

# Chapter 1. Introduction

The City of Marysville and surrounding communities have continued to grow significantly over the past decade, including large annexation areas in the east-central section of the City. This recent and forecast growth continues to add pressure to the transportation system serving these communities. In addition, the future City street network and non-motorized system must address the needs of existing and growth areas. The Transportation Element addresses streets and highways, truck routing, pedestrian and bicycle system needs, transit, and transportation demand management strategies to help the City meet these existing and future transportation demands.

The Transportation Element identifies improvement projects and programs, and policies to guide the development of an integrated multimodal transportation system. The Transportation Element builds off of prior planning efforts for the City and its urban growth area (UGA). The current Transportation Element has a planning horizon of 2035 to provide a long-range assessment of facility needs. The long-range evaluation will assist the City and neighboring communities to preserve needed rights-of-way and to assure that improvements can meet future needs, or be efficiently phased over time.

The first section of the Transportation Element presents a summary of the existing transportation system facilities and issues. The Transportation Element then presents an overview of household and employment growth and a range of improvement alternatives that were evaluated. The core of the Transportation Element includes the various multimodal systems plans and improvement projects and programs. Funding strategies are also presented, including use of fuel taxes, grants, transportation impact fees, and other City revenues. The final section presents the transportation-related goals, and policies to assist the City, other agencies, developers, and the general public in implementing the transportation system.

The Transportation Element of the Marysville Comprehensive Plan is based on and complies with the objectives and requirements of the Washington State Growth Management Act (GMA) [RCW 36.70A, 1990 and amendments]. The Transportation Element also is consistent and compatible with State, regional, Snohomish County, and adjacent local municipality transportation plans.

# Chapter 2. Inventory of Existing Transportation Facilities and Conditions

Travel needs within the City of Marysville are met by a range of transportation facilities and services. These facilities and services provide for travel within the City and also connect Marysville with the rest of the region. The City's existing transportation system is comprised of state highways, arterials, collectors, and local roads as well as facilities for pedestrians, bicycles, and transit. Rail lines also traverse the City and affect other travel modes. The following summarizes key elements of the existing transportation system serving the City. The inventory provides input for identifying and prioritizing the City's transportation improvement projects and programs presented later in the Transportation Element.

## 2.1 Street and Highway Network

The backbone of the City's transportation system is the street and highway system. The street and highway system provides mobility and access for a range of travel modes and users. Roadways are classified by their intended function and desired service. The City's roadway functional classification is presented in Chapter 4 (Transportation System Plan) of the Transportation Element, and is based on existing and future transportation needs for the City. Figure 1 shows the existing state highways and arterial system serving the City of Marysville.

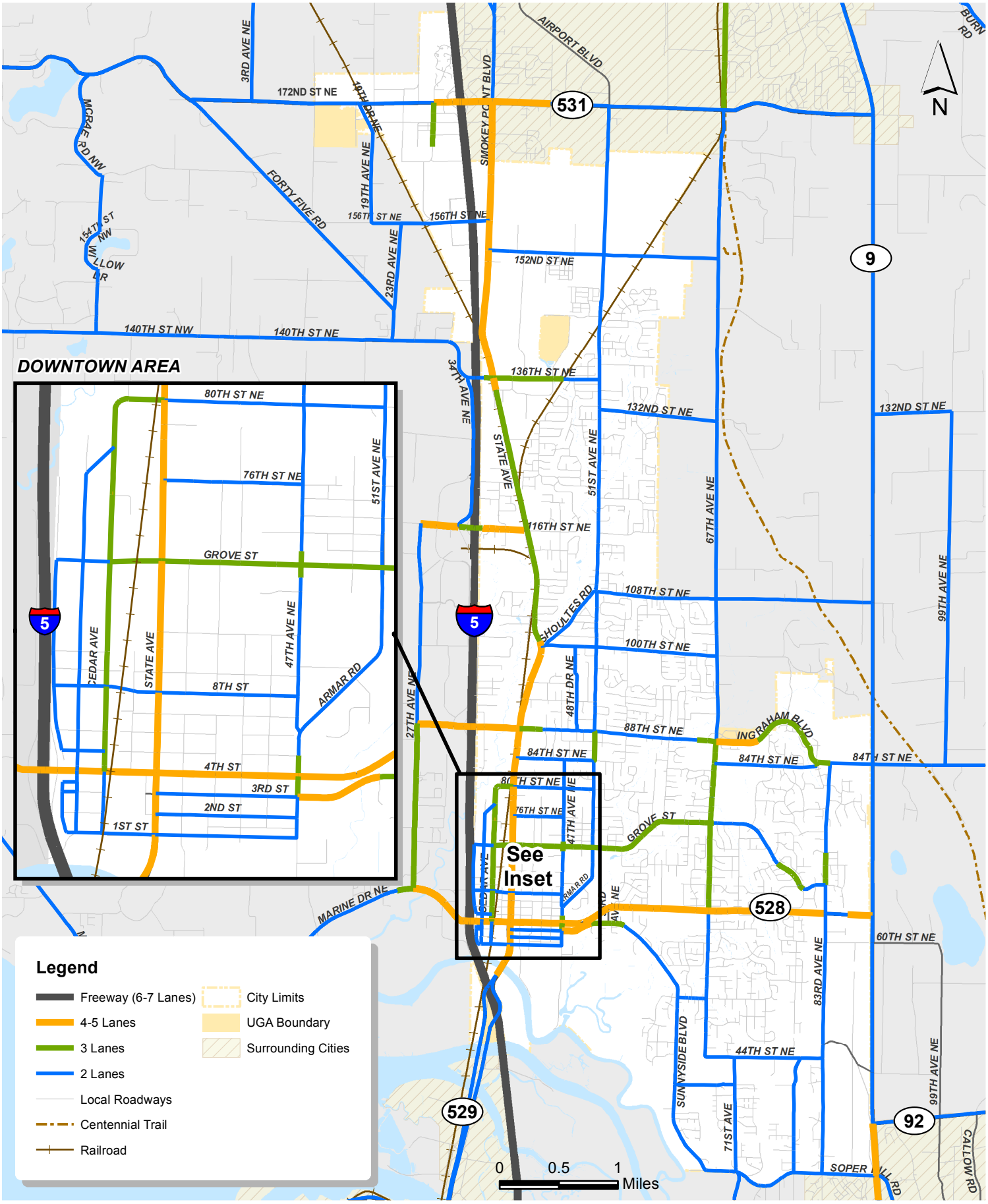
### 2.1.1 State Highways

Six state highways serve travel for areas in and around the City of Marysville. The state highways that serve north-south travel flows are I-5, SR 9, and SR 529. East-west travel flows are served by SR 531, SR 528, and SR 92.

**I-5** is a six-lane, north-south, limited access freeway that is classified as a Highway of Statewide Significance (HSS) by the Washington State Department of Transportation (WSDOT). It connects Marysville south to Everett, Seattle, and other communities south of Marysville. To the north, it connects to Skagit County, Whatcom County, and Canada. Four interchanges serve the Marysville community – 4th Street (SR 528), 88th Street NE, 116th Street NE, and 172nd Street NE (SR 531).

**SR 9** is another north-south state highway, and is also classified as a HSS. It is located approximately 3.5 miles east of I-5 and connects with the Cities of Arlington, Lake Stevens, Snohomish, and Woodinville. In rural areas, it generally has one lane in each direction with additional turn lanes at intersections. Since 2008, the section between SR 92 and south of Soper Hill Road has been expanded to two lanes in each direction. In addition, roundabouts have been added at 84th Street NE and SR 531.

**SR 528** is classified as a Tier 1 Regional Significant State Highway by WSDOT and the Puget Sound Regional Council (PSRC). SR 528 is an east-west State highway that connects SR 9 to I-5 through Downtown Marysville. Within Marysville, it is also known as 4th Street (Downtown area) and 64th Street NE. Since 2008, this corridor has been widened to two lanes in each direction between 47th Avenue NE and 67th Avenue NE and also near SR 9. Due to these recent improvements, SR 528 is now four to five travel lanes for nearly its full length within the City.




# Existing 2014 Highway and Street System

FIGURE 1

*City of Marysville Transportation Element 2015*

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**SR 529** is also classified as a Tier 1 Regional Significant State Highway. SR 529 is a north-south state highway connecting Marysville to the City of Everett and also to the Port of Everett. SR 529 becomes State Avenue within the City; the state highway designation ends at 4th Avenue (SR 528). The SR 529 bridge over the Steamboat Slough was recently widened to accommodate two lanes in each direction.

**SR 92** and **SR 531** are classified as Tier 2 Regional Significant State Highways by WSDOT in coordination with PSRC. SR 92 provides an east-west highway connection between Granite Falls and SR 9, and is generally a two-lane road with turn lanes at several major intersections. SR 531 (or 172nd Street NE) is an east-west state highway that serves the developing areas of northwest Marysville and the City of Arlington. In the developed areas near I-5 the corridor has five or more travel lanes, but the highway transitions to two or three lanes in the less developed areas.

### 2.1.2 North-South City Arterials

Nearly all the City arterials provide a direct connection between the northern and southern ends of the City. The primary north-south arterial serving Marysville is the State Avenue/Smokey Point Boulevard corridor, which is three to five lanes wide. Other corridors providing for north-south travel within the City include Cedar Avenue, 51st Avenue NE (also Armar Road/47th Avenue NE), 67th Avenue NE/44th Street NE/71st Avenue NE, and 83rd Avenue NE and are generally two- to three-lane roadways.

Since 2008, several major roadway projects have improved north-south mobility and safety within the City. A major gap along 51st Avenue NE was connected between 84th Street NE and 88th Street NE. Smokey Point Boulevard was widened to five lanes between 152nd Street NE and 136th Street NE. Existing right-of-way was adapted to provide a three-lane cross-section for the 67th Avenue NE corridor (Grove Street to 64th Street NE) and the Cedar Avenue corridor (80th Street NE to State Avenue).

### 2.1.3 East-West City Arterials

Few east-west City arterials provide a direct connection between the western and eastern ends of the City, but rather serve as connections between major north-south arterials. Only the 88th Street NE corridor provides a direct link between I-5 and SR 9 (besides state highways). The City east-west corridors include Sunnyside Boulevard/Soper Hill Road, Grove Street, 88th Street NE/Ingraham Blvd/84th Street NE, 116th Street NE, 136th Street NE, 152nd Street NE, and 156th Street NE. Most of these arterials are two- to three-lane roadways with the exceptions at I-5 interchanges (five-lane roadways) and the recently completed Ingraham Boulevard (three- to four-lane roadway).

Since 2008, two major roadway projects have improved east-west mobility and safety within the City. The future 156th Street NE/152nd Street NE arterial corridor is beginning to take shape after the 156th Street NE bridge over I-5 was recently completed. This bridge also provides a key alternative route to the Lakewood neighborhood. Ingraham Boulevard was also completed providing a continuous City arterial corridor between I-5 and SR 9.

## 2.2 Roadway Traffic Volumes

Traffic volumes in urban areas in the Puget Sound Region are typically highest during the weekday PM peak hour and are used for evaluating transportation system needs. In addition

to new 2014 traffic counts, recent roadway traffic volumes are gathered from the City of Marysville and WSDOT. Existing (2014) weekday PM peak hour volumes are shown in Figure 2 for selected study locations within and near the City. Table 1 shows weekday PM peak hour volumes by corridor and how total volumes have changed since the 2008 Transportation Element.

**Table 1. Weekday PM Peak Hour Volumes by Corridor**

| Corridor | Location | 2007 Volume[1] | 2014 Volume[2] | Volume Change | Annual Growth |
|---|---|---|---|---|---|
| State Avenue/ | s/o Smokey Point Blvd | 2,510 | 2,070 | -440 | -2.7% |
| Smokey Point Boulevard | n/o 116th St NE | 1,305 | 1,565 | 260 | 2.6% |
| | n/o 88th St NE | 2,320 | 1,870 | -450 | -3.0% |
| | n/o Grove St | 1,880 | 1,570 | -310 | -2.5% |
| | n/o 4th St (SR 528) | 1,650 | 1,440 | -210 | -1.9% |
| | s/o 1st St | 1,565 | 1,555 | -10 | -0.1% |
| 51st Avenue NE/ 47th Avenue NE | n/o 136th St NE | 745 | 755 | 10 | 0.2% |
| | n/o 88th St NE | 480 | 800 | 320 | 7.6% |
| | n/o 4th St (SR 528) | 820 | 890 | 70 | 1.2% |
| 67th Avenue NE | n/o 108th St NE | 665 | 770 | 105 | 2.1% |
| | n/o 88th St NE | 960 | 1,185 | 225 | 3.1% |
| | s/o 64th St NE (SR 528) | 860 | 925 | 65 | 1.0% |
| SR 9 | s/o 84th St NE | 1,200 | 1,505 | 305 | 3.3% |
| | n/o Soper Hill Rd | 1,950 | 2,590 | 640 | 4.1% |
| 172nd Street NE (SR 531) | w/o 27th Ave NE | 1,265 | 1,405 | 140 | 1.5% |
| | e/o 27th Ave NE | 2,280 | 2,665 | 385 | 2.3% |
| | e/o I-5 NB Ramps | 3,515 | 3,415 | -100 | -0.4% |
| | e/o Smokey Point Blvd | 2,560 | 2,395 | -165 | -0.9% |
| | w/o 67th Ave NE | 1,180 | 1,555 | 375 | 4.0% |
| 88th Street NE/ Ingraham Blvd / | e/o I-5 NB Ramps | 2,195 | 2,115 | -80 | -0.5% |
| 84th Street NE | e/o 51st Ave NE | 980 | 820 | -160 | -2.5% |
| | w/o 67th Ave NE | 680 | 795 | 115 | 2.3% |
| | w/o SR 9 | 730 | 670 | -60 | -1.2% |
| 4th Street/ 64th Avenue NE (SR 528) | e/o I-5 NB Ramps | 2,970 | 2,550 | -420 | -2.2% |
| | e/o State Ave | 1,545 | 1,660 | 115 | 1.0% |
| | w/o 67th Ave NE | 1,850 | 1,795 | -55 | -0.4% |
| | w/o SR 9 | 1,080 | 1,280 | 200 | 2.5% |

Source: Transpo Group, 2015
1. Volume is sum of both directions during weekday PM peak hour, based on nearby 2007 intersection counts.
2. Volume is sum of both directions during weekday PM peak hour, based on nearby 2014 intersection counts.

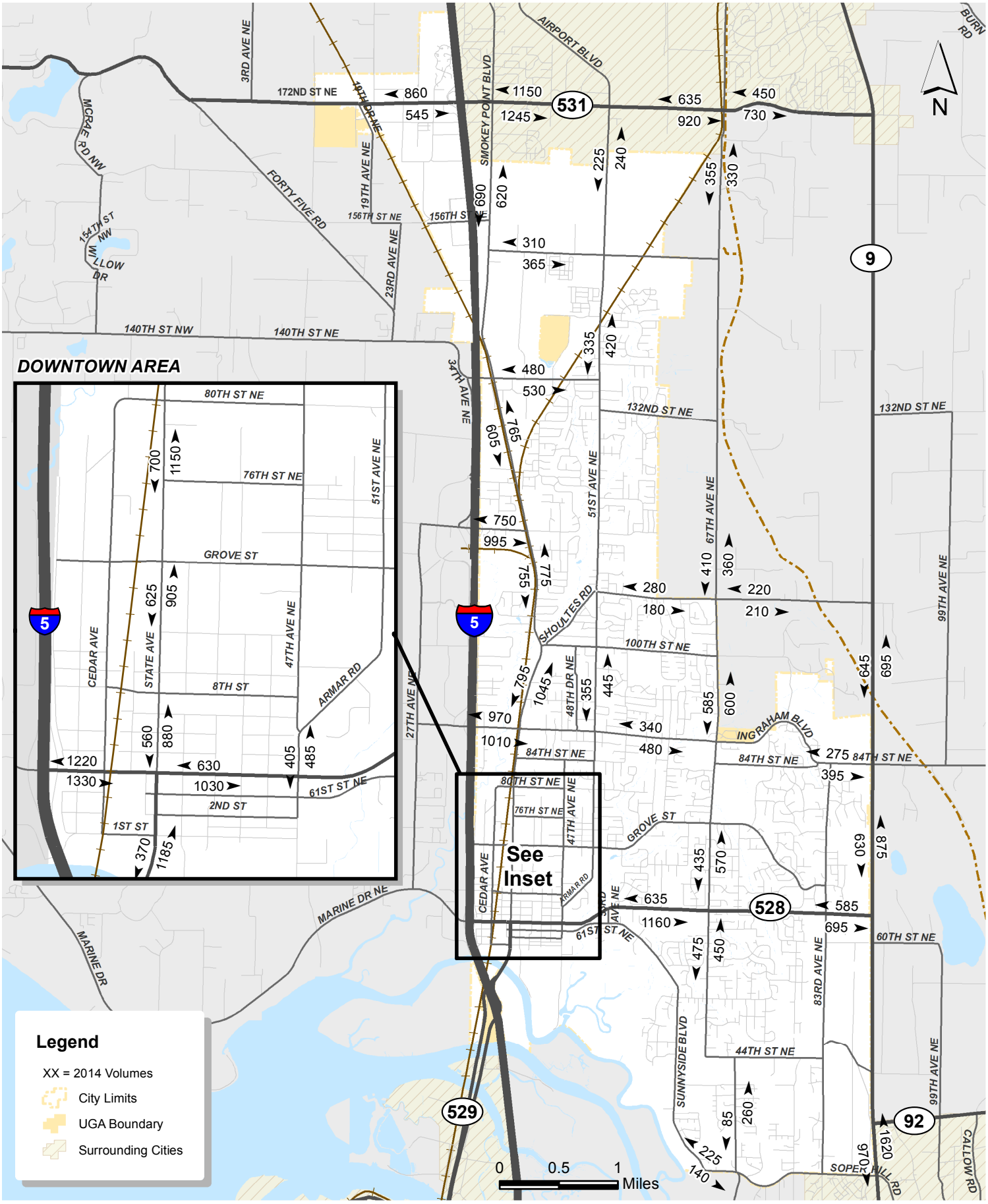
Consistent with historical trends, the highest weekday PM peak hour traffic volumes within the Marysville area continue to occur on the arterials connecting with the I-5 interchanges. Traffic volumes on SR 9 are also relatively high near Lake Stevens. These high volume locations can see traffic levels (total traffic in both directions) of 2,000 to 3,500 vehicles per hour (vph). Away from these locations, state highways and State Avenue/Smokey Point Boulevard have volumes generally in the 1,500 and 2,000 vph range. Other City arterials are generally between 1,000 and 1,500 vph.

Historical traffic growth (2007 to 2014) within the Marysville area has varied widely depending on location. This is due to various factors including: changing economic conditions over the past seven years; completion of several roadway projects that provide alternative routes and increased capacity; and, continued development activity in eastern and northern areas of the City.

As shown in Table 1, traffic growth has been highest along SR 9 and adjacent arterials, highlighting the influence of nearby new developments and roadway widening. New arterial connections, such as the 51st Avenue NE connection, appear to have shifted traffic away from high volume corridors (reducing volumes on State Avenue in the vicinity of 88th Street NE) and 156th Street NE overpass (reduced volumes on Smokey Point Boulevard near 172nd Street NE).

The Downtown area seems to have generally the same or lower traffic volumes compared to 2007 conditions, except for localized shifts due to recent roadway improvements. The State Avenue corridor between 1st Street and 88th Street NE has seen declines in volumes. In addition, the 4th Street area near I-5 has experienced reduced volume levels. It appears larger regional shifts may be occurring with some traffic shifting to SR 9 to connect with the greater Marysville area. Widening of 4th Street east of 47th Avenue NE, and the new 51st Avenue NE connection near 88th Street NE has created localized increases in traffic levels.

Traffic growth along 88th Street NE and 116th Street NE near I-5 remain relatively flat. This could be due to statewide trends of lower overall trip lengths and trip making, or regional commute shifts to SR 9 over I-5. The new Ingraham Boulevard connection on the east end of the 88th Street NE corridor appears to have shifted local City trips from using the SR 9 corridor to the 88th Street NE corridor near 67th Avenue NE. County traffic linked to areas east of the City along 84th Street NE may also be using the SR 9 corridor rather than traversing through Marysville to access the I-5 corridor.




# 2014 Weekday PM Peak Hour Traffic Volumes

FIGURE **2**

*City of Marysville Transportation Element 2015*

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## 2.3 Roadway Traffic Operations

Traffic operations analyses provide a quantitative method for evaluating how the transportation system is functioning. It is applied to existing and forecast conditions to assist in identifying issues and potential improvement options.

### 2.3.1 Level of Service Standards

Levels of service (LOS) are typically evaluated based on methodologies documented in the Highway Capacity Manual (HCM), Transportation Research Board, 2010. The HCM is a nationally recognized and locally accepted method of measuring traffic operations. Criteria range from LOS A, indicating free-flow conditions with minimal vehicular delays, to LOS F, indicating extreme congestion and significant delays. LOS at intersections is measured in terms of the average vehicular delay.

As part of its Comprehensive Plan, the City of Marysville has adopted level of service (LOS) standards to evaluate how intersections under its jurisdiction operate. As noted above, the transportation system serving Marysville is also under the jurisdiction of the State, County, and adjacent cities. These agencies also have established LOS standards which may affect the transportation system needs in the Marysville area. The following summarizes the existing level of service standards for these agencies.

**City of Marysville LOS Standards**. As part of the 2008 Transportation Element update, the City decided to limit its LOS standards to intersection operations during weekday PM peak hour conditions. The following criteria summarize the current LOS standards established by the City.

1. **LOS E "mitigated"** for arterial-arterial or arterial-collector intersections along the following corridors (LOS E "mitigated" means that the congestion should be mitigated through improvements, transit, ridesharing, or other travel modes when the intersection falls below LOS E).
    - SR 529/State Avenue/Smokey Point Boulevard between the south City limits and north City limits
    - 4th Street/64th Street NE (SR 528) between I-5 and SR 9
2. **LOS D** for arterial-arterial or arterial-collector intersections along the remaining City corridors

The City's LOS standards are consistent with the State and regional standards for state highways within the City, as described below.

**State Highway LOS Standards**. As discussed above, the City of Marysville is served by six state highways. Two of the highways, I-5 and SR 9, are classified as Highways of Statewide Significance (HSS). The other four are classified as Highways of Regional Significance (HRS).

According to WSDOT's Highway Systems Plan, the LOS standards are set forth by state law. State law sets LOS D for HSS facilities in urban areas and LOS C for HSS facilities in rural areas. I-5 and SR 9 are HSS facilities serving Marysville. Both I-5 and SR 9 is classified as Urban within the Marysville planning area so LOS D applies. The GMA concurrency requirements do not apply to HSS facilities.

LOS standards for state highways of regional significance are adopted by the Puget Sound Regional Council (PSRC) in coordination with WSDOT. The LOS standards for HRS are divided into three categories including Tiers 1, 2, and 3. The LOS standard for Tier 1 highways (SR 528 and SR 529) is LOS E-"Mitigated" meaning that mitigation must be provided during the PM peak hour if the level of service falls below LOS E. The standard for Tier 2 highways (SR 531 and SR 92) is LOS D. Tier 3 must maintain LOS C or above to meet standards; however, there are no Tier 3 state highways in the Marysville study area. PSRC notes that state law is silent on whether agencies include or exempt HRS facilities from local concurrency requirements.

**Snohomish County LOS Standards**. Unlike neighboring jurisdictions, Snohomish County LOS standards are defined based on arterial operations and not intersection LOS. Level of service along key arterials is measured by calculating corridor travel speeds. LOS standards for key arterials are defined by Snohomish County based on area type and arterial classification. In rural areas LOS standards range from LOS C to LOS E depending on the roadway type. In urban areas LOS E is considered acceptable.

**City of Arlington LOS Standards**. The City of Arlington directly abuts Marysville and several arterial corridors are shared by the two cities. Arlington has adopted LOS D or better for arterials and collectors. In addition, the LOS D standard applies to local roads that primarily serve its central business district or industrial areas. The City of Arlington further recognizes and adopts the most current LOS standard along state highways, as described above.

### 2.3.2 Existing Levels of Service

Intersection LOS at the key intersections were evaluated based on methodologies presented in the HCM 2010. Table 2 summarizes LOS at study intersections throughout the City.

As shown in Table 2, all but one of the study intersections operate within the established LOS standards. The intersection of 172nd Street NE/Smokey Point Boulevard currently operates at LOS E which does not meet the City of Arlington and WSDOT LOS standard. However, this intersection has improved from LOS F during 2007 conditions.

Most of the intersections identified in the 2008 Transportation Element as below LOS standards have been improved to increase intersections capacity or upgrade traffic controls. Intersections identified in the 2008 Transportation Element that were below LOS standards that have been improved include:

- 172nd Street NE/ I-5 Southbound Ramps (intersection capacity improvements)
- 172nd Street NE/ I-5 Northbound Ramps (intersection capacity improvements)
- 172nd Street NE/ 43rd Avenue NE (added signal)
- Smokey Point Boulevard/ 152nd Street NE (added signal)
- 51st Avenue NE/ 136th Street NE (added signal)
- 51st Avenue NE/ 100th Street NE (added signal)
- 88th Street NE/ 51st Avenue NE (added signal)
- 3rd Street/ 47th Avenue NE (added signal)

Some locations have also experienced reduced volumes due to traffic shifts or other factors as discussed previously. This includes decreases in traffic for 4th Street intersections near I-5 and SR 529 and higher volumes along the SR 9 corridor.

**Table 2. 2014 Intersection Levels of Service**

| | Total Entering Volumes[1] | | 2014 Existing Operations | | | |
|---|---|---|---|---|---|---|
| Intersection | 2007 | 2014 | Control[2] | LOS[3] | Delay (WM)[4] | Standard Met?[5] |
| 172nd St NE / 19th Ave NE | 1,145 | 1,320 | TWSC | D | 31 (SB) | N/A[8] |
| 172nd St NE / 25th Ave NE | N/A[7] | 1,435 | TWSC | E | 38 (SB) | N/A[8] |
| 172nd St NE / 27th Ave NE | 2,480 | 3,140 | Signal | D | 38 | YES |
| 172nd St NE / I-5 SB Ramps | 2,975 | 3,530 | Signal | A | 7 | YES |
| 172nd St NE / I-5 NB Ramps | 4,255 | 4,295 | Signal[6] | D | 38 | YES |
| 172nd St NE / Smokey Point Blvd | 5,340 | 4,780 | Signal | E | 64 | NO[9] |
| 172nd St NE / 43rd Ave NE | 1,870 | 2,420 | Signal | D | 53 | YES[9] |
| 172nd St NE / 51st Ave NE | N/A[7] | 2,395 | Signal | C | 26 | YES[9] |
| Smokey Point Blvd / 156th St NE | 1,495 | 1,595 | Signal | A | 6 | YES |
| Smokey Point Blvd / 152nd St NE | 1,415 | 1,840 | Signal | C | 21 | YES |
| Smokey Point Blvd / 116th St NE | 2,115 | 2,570 | Signal | D | 38 | YES |
| 51st Ave NE / 136th St NE | 1,170 | 1,295 | Signal | B | 15 | YES |
| 51st Ave NE / 100th St NE | 1,180 | 1,695 | Signal | A | 8 | YES |
| 88th St NE / I-5 SB Ramps | 2,380 | 2,280 | Signal | C | 24 | YES |
| 88th St NE / I-5 NB Ramps | 2,755 | 2,630 | Signal | B | 19 | YES |
| 88th St NE / State Ave NE | 3,150 | 3,465 | Signal | D | 53 | YES |
| 88th St NE / 51st Ave NE | 1,240 | 1,505 | Signal | B | 19 | YES |
| 88th St NE / 67th Ave NE | 1,500 | 1,855 | Signal | B | 18 | YES |
| SR 9 / 84th St NE | 2,070 | 2,370 | RAB | C | 31 | YES |
| 4th St (SR 528) / I-5 SB Ramps | 2,650 | 2,475 | Signal[6] | C | 33 | YES |
| 4th St (SR 528) / I-5 NB Ramps | 3,530 | 2,630 | Signal[6] | C | 27 | YES |
| 4th St (SR 528) / State Ave | 3,170 | 3,010 | Signal | C | 26 | YES |
| 4th St (SR 528) / 47th Ave NE | 2,440 | 2,705 | Signal | C | 23 | YES |
| 64th St NE (SR 528) / 67th Ave NE | 2,350 | 2,665 | Signal | C | 28 | YES |
| 3rd St / State Ave | 2,140 | 1,785 | Signal | A | 10 | YES |
| 3rd St / 47th Ave NE | 1,600 | 1,360 | Signal | D | 48 | YES |
| SR 9 / SR 92 | N/A[7] | 3,070 | Signal | C | 23 | YES |
| SR 9 / Soper Hill Road | 2,370 | 3,205 | Signal | B | 13 | YES |

Source: Transpo Group, 2015

1. Total entering volumes at the intersection. 2007 volumes based on analysis conducted for the 2008 Transportation Element
2. Intersection traffic control: "Signal" is typical traffic signal; "TWSC" is two-way stop control; "RAB" is roundabout.
3. Level of service as defined by *Highway Capacity Manual 2010* (Transportation Research Board, 2010)
4. Average delay per vehicle in seconds. For TWSC, average delay only reflects delays for the worst movement (WM); "SB" is southbound.
5. Indicates whether the LOS standard that applies to that intersection is met.
6. Due to limitations in the HCM2010 methodology, these intersections were evaluated with the *Highway Capacity Manual 2000* (Transportation Research Board, 2000) methodology.
7. Intersection volumes for 2007 not available.
8. Not applicable. These intersections are not arterial-arterial or arterial-collector intersections, and thus do not fall under the City's LOS standards. Cities define how Regionally Significant Highways LOS standards are applied.
9. These intersections are within the City of Arlington. Table reflects Arlington LOS standards.

## 2.4 Roadway Traffic Safety

The traffic safety analysis was conducted at intersections within the City of Marysville. Historical collision data along all major City roadways were provided by WSDOT for the five-year period from 2009 to 2013. I-5 facilities were not included in the safety review. Analysis and statistics were summarized by collisions related to intersections, fatalities, and pedestrians or bicycles.

### 2.4.1 Intersection Safety Analysis

Table 3 summarizes the collision history at intersections within the City of Marysville that had a high collision rate. Typically, any intersection with a collision rate greater than one collision per million entering vehicles (MEV) should be monitored to determine if improvements could be made to improve safety.

**Table 3. Intersections with High Collision History (2009-2013)**

| Intersection | Average Collisions Per Year | Daily Total Entering Vehicles[1] | Collisions Per MEV[2] | Collision Type[3] |
|---|---|---|---|---|
| 172nd St NE / 27th Ave NE | 14.6 | 31,400 | 1.27 | Rear-End |
| 172nd St NE / Smokey Point Blvd | 17.4 | 47,800 | 1.00 | Rear-End |
| 88th St NE / State Ave | 24.6 | 34,650 | 1.95 | Rear-End |
| 80th St NE / State Ave | 9.2 | 22,900 | 1.10 | Rear-End |
| 4th St (SR 528) / Cedar Ave | 17.8 | 26,900 | 1.81 | Rear-End |
| 4th St (SR 528) / State Ave | 21.2 | 30,100 | 1.93 | Approach Turn |
| 3rd St / State Ave | 6.6 | 17,850 | 1.01 | Angle |
| 64th St NE (SR 528) / 67th Ave NE | 12.4 | 26,650 | 1.27 | Approach Turn |

Source: WSDOT Collision Records, 2015
1. Estimated based on 2014 weekday PM peak hour volumes.
2. Collisions per million entering vehicles.
3. The majority or plurality of collisions types recorded.

The State Avenue and 4th Street corridors continue to be the areas with the highest number of collisions. The most common accident type is rear-end collisions. Typically, a main cause for a rear-end collision is traffic congestion (vehicles following too closely). Approach turn and angle collisions relate to conflicts within the intersection itself. These can be influenced by a variety of factors including aggressive driving (congestion related), failure to yield, poor sight distances, or intersection geometrics. It should be noted that the volumes reflect 2014 conditions, but the collisions occurred over a 5-year period when traffic volumes were higher at many of these locations. This means that the rate per MEV in Table 2 may be slightly overestimated.

### 2.4.2 Fatalities

During the five year study period (2009-2013), six collisions resulted in six fatalities in the study area. Two fatalities involved bicyclists, two fatalities involved pedestrians, and two were drivers. All of the pedestrian and bicycle fatalities occurred in the dark time periods, some with and without street lights present. In three of the fatalities, drivers were noted to be under the influence of alcohol. Two of the fatalities (bicyclist and pedestrian) were located along State Avenue between 116th Street NE and 100th Street NE. Another fatality (bicyclist) was nearby along Shoultes Road north of 100th Street NE. The other pedestrian fatality was

along State Avenue near 5th Street. The two driver fatalities were along State Avenue near 128th Street NE and along 64th Street NE near 83rd Avenue NE.

### 2.4.3 Pedestrian/Bicycle Safety

Between 2009 and 2013 there were 69 collisions involving pedestrians and 85 collisions involving bicyclists in Marysville. The largest concentration (41) of these types of collisions occurred along the State Avenue corridor. A total of 31 bicycle related collisions and 10 pedestrian related collisions occurred in this corridor between 2009 and 2013. Outside the State Avenue corridor, these types of collisions were not concentrated at any one corridor.

## 2.5 Freight System

Freight movement in the study area involves both trucks and rail transportation. The City works to provide adequate routes and facilities for movement of goods by truck. Rail tracks also traverse the City. The railroad track impacts other transportation modes in the City.

### 2.5.1 Truck Routes

The Washington State Freight and Goods Transportation System (FGTS) is used to classify state highways, county roads, and city streets according to average annual gross truck tonnage they carry as directed by RCW 47.05.021. The FGTS establishes funding eligibility for the Freight Mobility Strategic Investment Board (FMSIB) grants and supports designations of HSS (Highways of Statewide Significance) corridors, pavement upgrades, traffic congestion management, and other state investment decisions.

FGTS classifies roadways using five freight tonnage classifications (WSDOT FGTS 2013 Update), T-1 through T-5. Routes classified as T-1 or T-2 are considered strategic freight corridors and are given priority for receiving FMSIB funding. The only T-1 corridor within the Marysville planning area is I-5. There are several T-2 corridors in the planning area including: SR 9; SR 92; 84th Street NE (east of SR 9); SR 531 (between I-5 and 67th Avenue NE); SR 529 from Everett to I-5, and Marine Drive (between 27th Avenue NE and I-5). The T-3 and T-4 classified roadways largely align with the City's arterial and collector street network. These classifications are based on existing truck activity.

The City has adopted a defined system of truck routes as described in Marysville Municipal Code Chapter 11.62. The primary north-south truck route is SR 529/State Avenue/Smokey Point Boulevard. Due to physical constraints, State Avenue between 2nd Street and Grove Street is not part of the designated truck route, with the Cedar Avenue/80th Street NE corridor serving as the bypass truck route. Turns at the intersection of State Avenue/4th Street to/from the north leg as well as northbound right-turn movements are not permitted. Other north-south routes include: 51st Avenue NE/Armar Road corridor (between SR 528 and north City limits); and 67th Avenue NE (between 64th Street NE and north City limits). East-west truck routes include: 4th Street/64th Street NE (SR 528) corridor (between I-5 and SR 9); 88th Street NE (between I-5 and State Avenue); 116th Street NE (between I-5 and State Avenue); 136th Street NE/140th Street NE corridor (between west City Limits and Smokey Point Boulevard/State Avenue); and 152nd Street NE/156th Street NE corridor (within City Limits).

While 67th Ave NE is defined as a truck route, there is a design issue for southbound trucks making a right turn onto SR 528. The curb radius is too small and recent complaints have

confirmed the need for the City to evaluate a project to increase the radius on the NW corner of the intersection.

### 2.5.2 Rail Crossings

There are a total 17 public crossings and 9 private crossings in the City of Marysville. Burlington Northern Santa Fe (BNSF) Railways operates the main rail line through the City of Marysville and a spur that branches off from the main line and ends in Arlington. The BNSF mainline generally parallels State Avenue and Smokey Point Boulevard south of 140th Street NE. The spur to Arlington branches off from the BNSF mainline approximately one quarter mile north of 116th Street NE in Marysville.

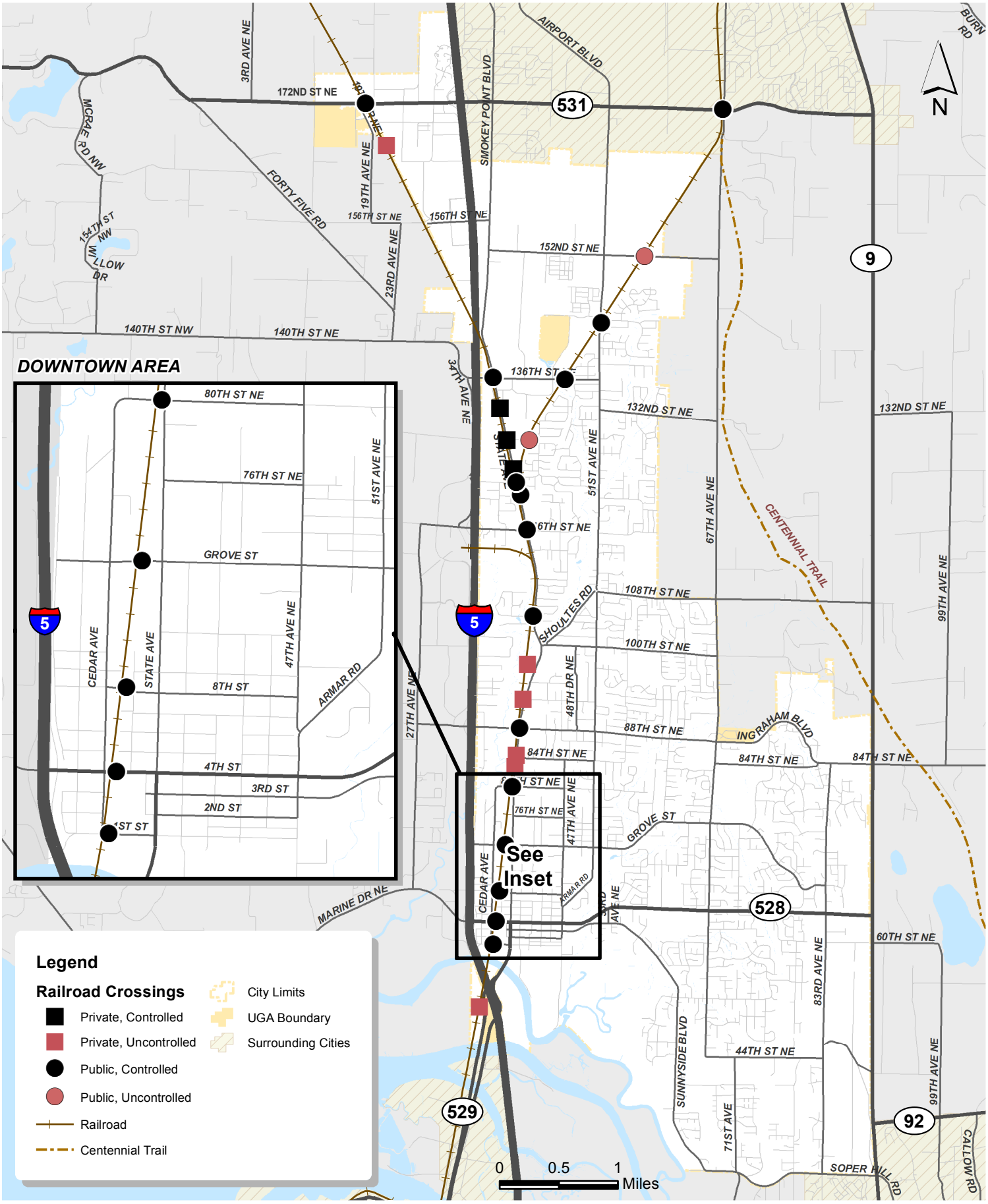
The BNSF main line contains 11 public and 9 private crossings in the City while the remaining 6 crossings are on the BNSF spur to Arlington. Figure 3 illustrates the location of the rail crossings within the City and provides information on whether the crossing is public or private and whether the crossing is signalized or simply signed.

The *Washington State 2010-2030 Freight Rail Plan* reports that approximately 18 trains use the BNSF mainline every day with AMTRAK operating an average of four passenger trains through Marysville each day. The *Freight Rail Plan* also identifies 18 trains per day as the capacity of the BNSF mainline through Marysville.

The rail crossings have been the location of eleven collisions between January 2005 and October 2010 with some of the collisions resulting in injuries. Incident reports compiled by Federal Railroad Administration show that the collisions at the public at-grade crossings were a result of motorists ignoring the gates and flashing beacons or stopping on the railroad tracks.

Two separate investigations, one completed in 2011 by the City (Cherry Point Coal Export Facility Rail Operations) and a second completed by PSRC in 2014 (Economic Evaluation of Regional Impacts for the Proposed Gateway Pacific Terminal at Cherry Point) identify some of the potential impacts of the proposed coal export terminals at Cherry Point which is located in Northwest Washington. These studies indicate that in 2035 as many as 43 trains per day could travel through Marysville, with 18 related to the proposed coal terminals. This could result in a total gate down time from 70 minutes (1 hour 10 minutes) to 145 minutes (2 hours 25 minutes) a day. The study also identified potential negative impacts which are exacerbated by the lack of grade-separated rail crossings and the location of the BNSF mainline through the heart of the City and proximity to I-5.

Rail crossings also impact pedestrian and bicycle travel in the City and surrounding area. Some of the rail crossings of streets are at oblique angles which can result in safety problems for bicyclists. In addition, pedestrians and bicyclists can feel unsafe and be exposed to collisions, especially at uncontrolled crossings.




# Existing 2014 Rail Crossings

FIGURE 3

*City of Marysville Transportation Element 2015*

transpogroup

## 2.6 Pedestrian and Bicycle Facilities

Pedestrian and bicycle facilities play a vital role in the City's transportation system. The non-motorized transportation system is comprised of facilities that allow residents to meet their mobility needs and recreation desires on foot or bicycle. A well-developed system provides healthy travel options, encourages recreational activities, reduces vehicle demand on City roadways, and enhances the safety of the public. Pedestrian and bicycle facilities also provide access to and from transit stops and ensure that those people with mobility limitations can easily and safely access goods and services.

A well-used non-motorized transportation system will connect traffic generators, such as major employers, Downtown business, schools, residential areas, parks, and transit stops through a system of pedestrian and bicycle facilities. Existing pedestrian facilities are shown in Figures 4 and 5, and bicycle facilities are shown in Figures 6.

Most recently completed pedestrian and bicycle improvement projects have been constructed as part of roadway expansion projects. However, there are also major non-motorized projects completed as standalone improvements such as: sidewalk improvements to 47th Avenue NE (7th Street NE to Grove Street); bike lanes on 67th Avenue NE (SR 528 to 84th Street NE); bike lanes on Grove Street (State Avenue to 67th Avenue NE); Bayview Trail (SR 528 to 84th Street NE); and, new bike lanes on Cedar Avenue (1st Street to 80th Street NE).

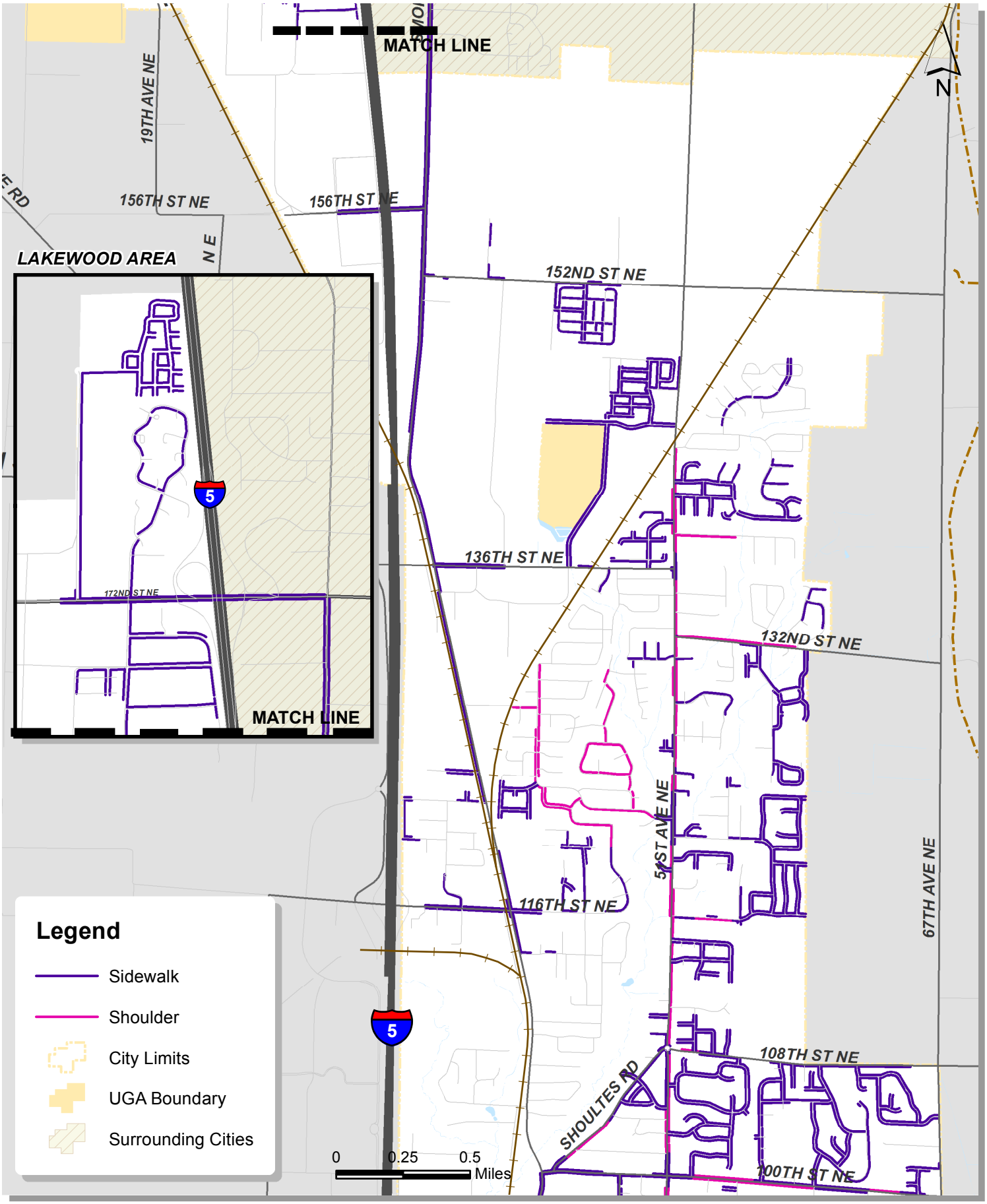
### 2.6.1 Pedestrian Facilities

As shown in Figures 4 and 5, the majority of the existing sidewalks and pathways for pedestrians are located in the Downtown area of the City and in the neighborhoods of Getchell Hill, Jennings Park and East Sunnyside. Sidewalks or shoulder that can be used for walkways also are located along some arterials and local streets in other parts of the City. Some of the shoulders are areas in which the shoulder of the roadway has been striped for pedestrian travel and parking is not allowed.

The vast majority of new sidewalks constructed over the last decade were part of larger roadway expansion projects or were constructed by developers as new subdivisions or commercial projects were built. Although not complete, a large amount of new sidewalks have been constructed along Smokey Point Boulevard.

However, a variety of gaps exist in the pedestrian system. These gaps reduce connectivity of the pedestrian system and pose safety issues particularly for vulnerable populations like seniors, children and people with limited mobility. The *City's Engineering Design and Development Standards* provide guidance on when pedestrian facilities should be provided as well as guidance on basic dimensions.

The City also is served by several multi-use trails which primarily serve recreational purposes. The Centennial Trail located east of Marysville runs roughly north/south between and beyond the City of Arlington to the north and the City of Lake Stevens to the south. Currently, there are limited pedestrian connections to the Centennial Trail for Marysville residents. The Bayview/Whiskey Ridge Trail runs along the PSE utility corridor roughly parallel to 83rd Avenue NE between SR 528 and 84th Street NE. Trails through parks and subdivisions are also distributed throughout the City. Other trails or pathways have or are being developed as part of the City's parks and open space plans.

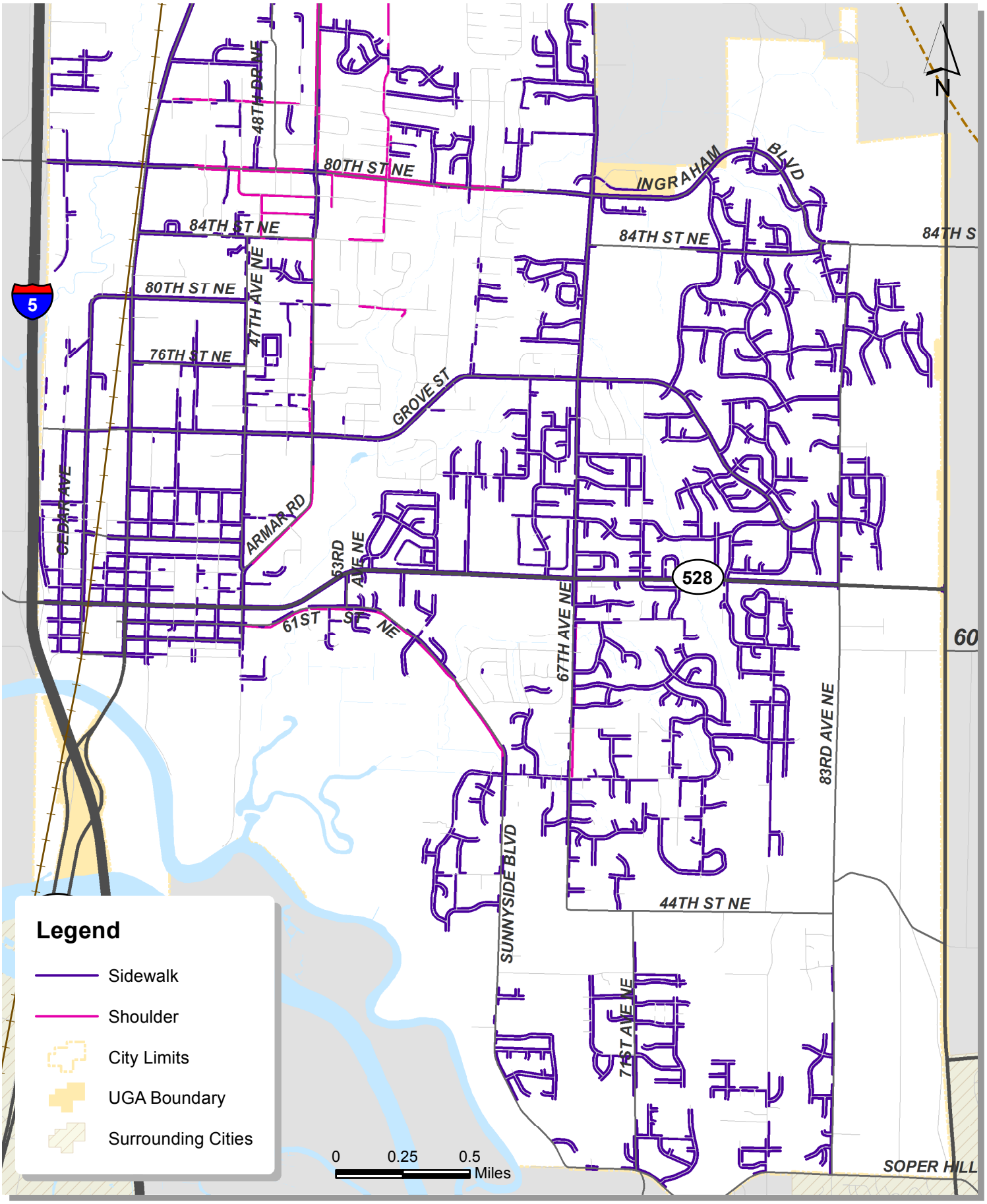



# Existing 2014 Pedestrian Facilities (Northern City)

FIGURE 4

*City of Marysville Transportation Element 2015*

transpogroup




# Existing 2014 Pedestrian Facilities (Southern City)

FIGURE **5**

*City of Marysville Transportation Element 2015*

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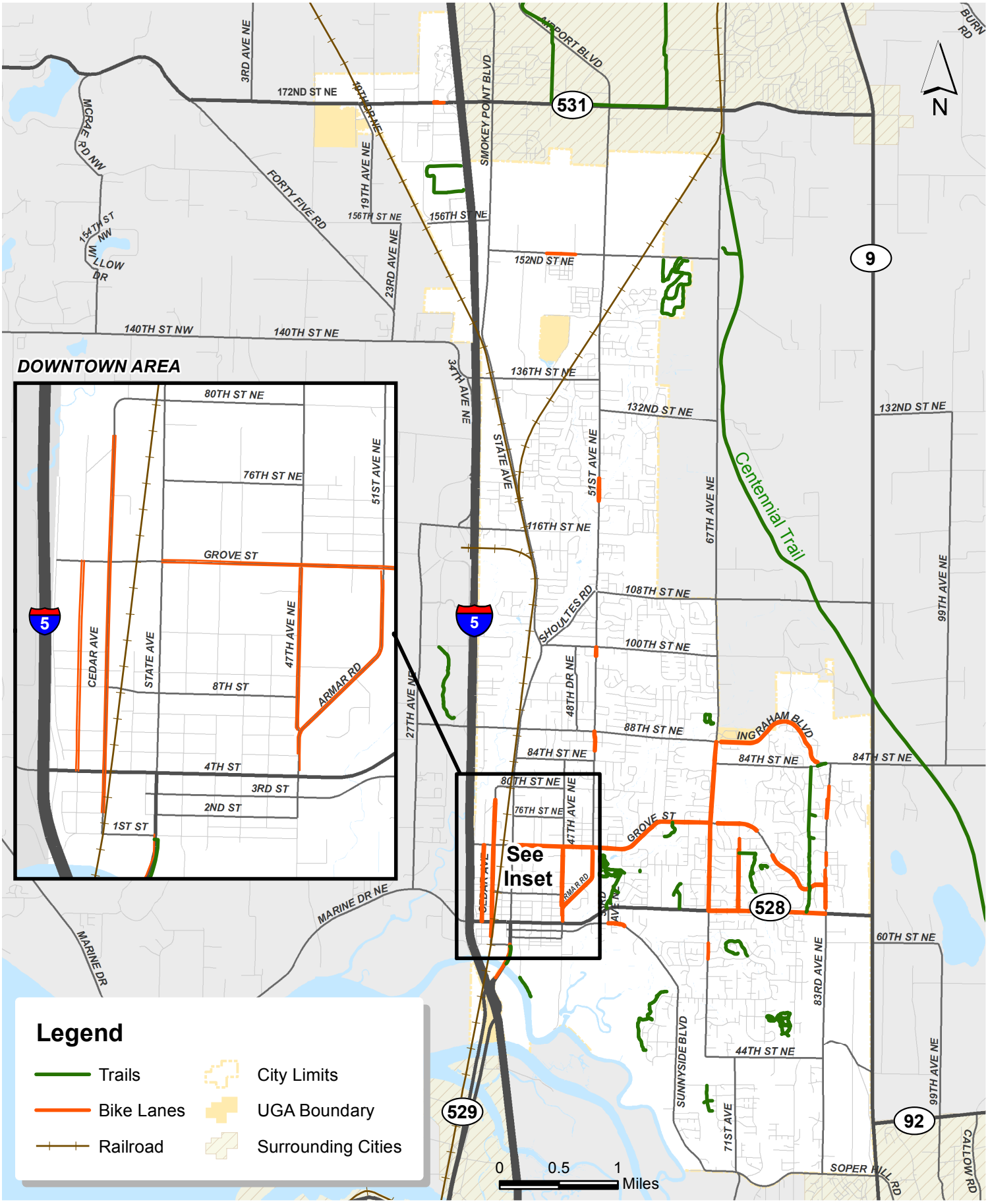



# Existing 2014 Bicycle Facilities

FIGURE 6

*City of Marysville Transportation Element 2015*

transpogroup

### 2.6.2 Bicycle Facilities

There are a limited number of existing bike lanes within Marysville and the surrounding communities as shown in Figure 6. Existing bicycle facilities are concentrated along a few select corridors. Beach Avenue, Cedar Avenue and Grove Street have bike lanes along a majority of their length. Bike lanes are also found along some segments of 47th Avenue NE, 51st Avenue NE, 67th Avenue NE, Ingraham Boulevard, 64th Street NE, 71st Avenue NE, and 83rd Avenue NE although significant gaps still exist. Bike lanes along Beach Avenue and 47th Avenue NE have been completed since the 2008 Transportation Element update.

Connections between the City and regional multi-use trails do not currently exist. Currently no other bicycle facilities like bike routes, shared-lane markings, bicycle boulevards, or buffered bike lanes exist within the City. The City's *Engineering Design and Development Standards* provide general guidance on when bicycle facilities should be provided.

## 2.7 Transit and Transportation Demand Management

Transit is another important component of the City's transportation system. Community Transit provides both fixed-route local and commuter bus service as well as paratransit services. A significant amount of information provided in the section was provided by Community Transit.

Local transit service is focused on core arterial routes like State Avenue and Smokey Point Boulevard NE with connections to park & ride lots. Other roads like 4th Street, 88th Street NE, 51st Avenue NE, and 172nd Street NE are also served by local transit service although at lower frequencies. Commuter service is concentrated along I-5 serving park & rides.

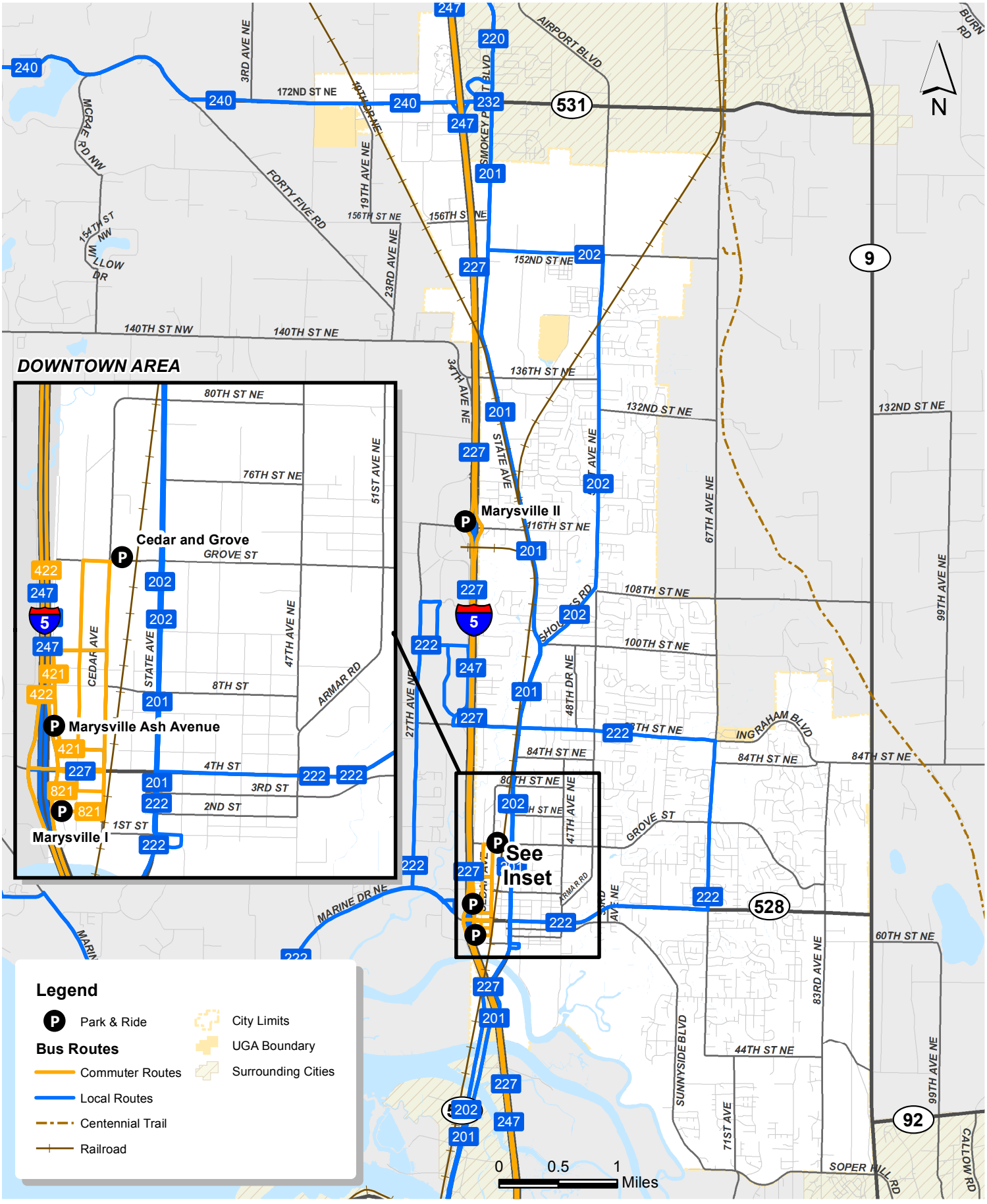
### 2.7.1 Transit Service

Transit service is a vital component of a balanced transportation system. Community Transit, which operates transit service throughout Snohomish County, operates nine bus routes in and through the City of Marysville including six local routes, two commuter routes to Downtown Seattle and one route to the University District.

To cope with revenue shortfalls during the economic downturn, Community Transit reduced the frequency of commuter service, restructured local service to serve the highest-demand areas, as well as eliminated Sunday service. These changes took place in 2012. Community Transit has started adding back some of these services as funds become available.

Local routes serve travel needs within Snohomish County, with service usually available six days per week. Commuter routes provide express service for Snohomish County residents to employment and higher-education destinations on weekdays. Two routes provide service to employment destinations in the vicinity of Paine Field.

Table 4 summarizes 2013 service characteristics of each route. It also provides the average daily boardings. Figure 7 shows the 2013 fixed routes throughout the City along with the existing park and ride facilities.




# 2013 Transit Routes and Facilities

FIGURE 7

*City of Marysville Transportation Element 2015*

transpogroup

**Table 4. Transit Service Routes (2013)**

| Route Number | Route Description | Weekday Service | Saturday Service | 2013 Average Weekday Daily Boardings | 2013 Average Boardings per Revenue Hour |
|---|---|---|---|---|---|
| 201 | Local core service between Arlington and Lynnwood, via State Avenue. Stops at the Smokey Pont Transit Center, State & 88th St NE, Broadway & Tower Street, Everett Station, Mariner P&R, Ash Way P&R, Alderwood Mall and LTC. | Yes | Yes | 1,562 (1,824) | 24.1 |
| 202 | Local core service between Arlington and Lynnwood, via 51st Avenue SE. Stops at the Smokey Pont Transit Center, State & 88th St NE, Broadway & Tower Street, Everett Station, Mariner P&R, Ash Way P&R, Alderwood Mall and LTC. | Yes | Yes | 1605 (727) | 24.4 |
| 222 | Local feeder service between Marysville and Silver Village, with stops at 88th & State Ave., Quil Ceda Village, and Marine Dr. & 33rd NE. | Yes | Yes | 326 (371) | 13.3 |
| 227 | In-county commute service between Smokey Point and the Everett Boeing Plant. | Yes | No | 114 (57) | 32.2 |
| 240 | Local rural service between Stanwood and Smokey Point, with stops at Lake Goodwin Resort, Warm Beach Senior Community, and Stanwood Station. | Yes | No | 377 (120) | 6.1 |
| 247 | In-county commute service between Stanwood and the Everett Boeing Plant with a stop at the I-5 & 116th St NE Flyer Stop. | Yes | No | 138 (216) | 33.2 |
| 421 | Inter-county commuter service between Marysville and Downtown Seattle, with a stop at LTC. | Yes | No | 652 (471) | 34 |
| 422 | Inter-county commuter service between Stanwood and Downtown Seattle with freeway flyer stops in Marysville and at LTC. | Yes | No | 195 (177) | 27.5 |
| 821 | Inter-county commute service between Marysville and the University District, with a stop at LTC. | Yes | No | 269 (116) | 33.5 |

Source: Community Transit, Year End 2013 System Performance Report
4. Numbers in parenthesis indicate the totals shown in the 2008 Transportation Element

## 2.7.2 Park & Ride Lots

As shown on Figure 7, the City currently is served by five park & ride lots. Combined, the five facilities have approximately 571 parking stalls, up from 346 parking stalls in 2005. These additional parking spaces were provided through construction of the Cedar & Grove Park & Ride as well as the Smokey Point Park & Ride. With 223 spaces, the Cedar & Grove Park & Ride lot is the largest of the five. Table 5 summarizes the utilization rates of each of the park & ride lots in 2013 as well as in 2008 for lots where information was available.

Most of the park & ride lots are located near I-5. Construction of the Cedar & Grove Park & Ride lot, which was identified in the 2008 Transportation Element as a project funded and constructed by Community Transit, has helped address capacity issues, with all park & ride lots now at 80 percent or less of capacity. The Marysville (South) I Park & Ride lot, which is

served by commute routes, has the lowest utilization at 49 percent of capacity. Utilization data for the United Methodist Church, which was not available in 2008, is now available and included in Table 5 below.

**Table 5. Marysville Park & Ride Lot Utilization (2013)**

| Facility | Location | Stalls | Percent Used |
|---|---|---|---|
| Marysville Ash Avenue | Near 6th St / Ash Ave | 202 (202) | 69% (87%) |
| Marysville (South) I | Near 2nd St / Ash Ave | 74 (74) | 49% (47%) |
| Marysville (North) II | Near 116th St NE / I-5 SB Ramps | 70 (83) | 80% (99%) |
| Cedar & Grove | Near Cedar Ave / Grove St | 223 (NA) | 79% (NA) |
| Marysville United Methodist Church | At 5600 64th Street NE | 32 (NA) | 53% (NA) |

Source: Community Transit Year End 2013 System Performance Report

1. Numbers in parenthesis indicate totals shown in the2008 Transportation Element. NA indicates Park & Ride is new or data was not available.

### 2.7.3 DART Paratransit

Dial-A-Ride Transportation (DART) provides services to individuals who have disabilities and/or the elderly who are unable to access fixed-route services. The Americans with Disabilities Act (ADA) requires that Community Transit offer comparable curb-to-curb paratransit service within 0.75 mile of all local fixed-routes during hours of fixed-route operation.

Community Transit currently provides DART paratransit service to over 4,000 registered disabled patrons within Snohomish County, with an average daily ridership of more than 600 patrons. Community Transit's paratransit service requirements are tied to the local service network. Dart service is operated under contract with Senior Services of Snohomish County.

### 2.7.4 Vanpool Program and Rideshare Services

Community Transit's vanpool program is one of the largest in the nation. The fleet consists of 415 vehicles that include 7-, 12-, and 15-passenger vans, including two mobility device lift-equipped vans for persons with disabilities. Vanpools serve commuter groups with an origin or destination in Snohomish County.

In 2013, vanpools provided 9 percent of all Community Transit passenger trips, or more than 0.9 million rides. In 2013, there were 362 active Community Transit vanpools. Thirty-two of these vanpool groups originated in Marysville for employers in south Snohomish County and King County. Eight of the vanpool groups travel to the Everett Boeing facility.

Community Transit also offers ride-matching services throughout the region to those interested in carpooling and vanpooling. Commuters are matched by where they live, their destination, and their work schedule. When someone applies for a ride match, a list of others looking to share the ride are sent to the individual. In addition, the person's name will be added to the regional database of more than 18,000 commuters who want to share the ride.

### 2.7.5 Commute Trip Reduction (CTR) Plan

The City adopted a Commuter Trip Reduction (CTR) Plan in 1997, and then updated the plan in 2008 (Ord. 2476) to comply with State requirements. The CTR program aims to reduce drive alone vehicle trips for major employers which are defined as companies with 100 or

more employees who arrive between 6 a.m. and 9 a.m. The 2008 update identified three employers — the City of Marysville, Zodiac Aerospace, and the Everett Clinic at Smokey Point — with a goal of reducing drive alone trips and vehicle-miles-traveled by 10 percent for CTR affected sites. The CTR plan also requires: designation of a transportation coordinator; distribution of information about alternatives to SOV commuting; and annual progress reports.

# Chapter 3. Travel Forecasts and Alternatives Evaluation

In addition to addressing existing needs, the City must develop its transportation system to accommodate forecast growth. The GMA requires that the transportation planning horizon be at least ten years in the future. For the 2015 update, the City decided to use the same long-range horizon (year 2035) that was used in the 2008 Transportation Element. The transportation improvement projects are grouped into short-range (2015-2020), mid-range (2021-2026), and long-range (2027-2035) time frames to help guide implementation of the plan.

The City's travel forecasting model was updated to support the City's transportation planning efforts. The travel demand model provides a tool for forecasting long-range traffic volumes based on the projected growth in housing and employment. The model is also useful in evaluating transportation system alternatives.

## 3.1 Land Use Forecasts

Travel forecasts are largely derived based on changes in households and employment within the study area. In addition, the travel forecasts must incorporate growth in the volume of traffic entering and exiting the greater Marysville area. The Citywide land use targets for 2035 were based on PSRC land use assumptions for 2035, which is consistent with patterns of growth assumed in PSRC's *VISION 2040*.

The following summarizes the overall projected growth in residential dwelling units and employment that were used in forecasting the 2035 travel demands.

### 3.1.1 Residential Growth

Figure 8 shows the projected housing growth in Marysville and surrounding communities. Overall, the number of dwelling units in the study area is projected to grow by 31,700, or an increase of about 60 percent over 2007. This is equivalent to a 1.7 percent annual growth rate, slightly less than the 2.1 percent annual rate assumed in the 2008 Element. The City of Marysville is forecast to grow by nearly 15,300 dwelling units. This is about a 15 percent drop in the estimate from 2008. Growth in the City and its UGA is forecast to average 2.0 percent per year, down from 2.3 percent rate assumed previously.

As shown in Figure 8, housing in the southeast parts of Marysville is projected to grow the fastest, accommodating nearly 40 percent of the growth in housing. These areas are projected to grow from 4,900 to over 10,900 households by 2035. The East Sunnyside-Whiskey Ridge subarea is within the southeast Marysville district shown on Figure 8.

The remaining growth in households in the City would be fairly evenly divided between north and central Marysville. Approximately 4,700 new dwelling units are forecast for north Marysville. The number of dwelling units in central Marysville would increase by approximately 4,600 dwelling units between 2007 and 2035.

Significant growth in housing is also forecast in the Cities of Lake Stevens and Arlington. Growth in these other communities also affects the transportation system needs in Marysville.

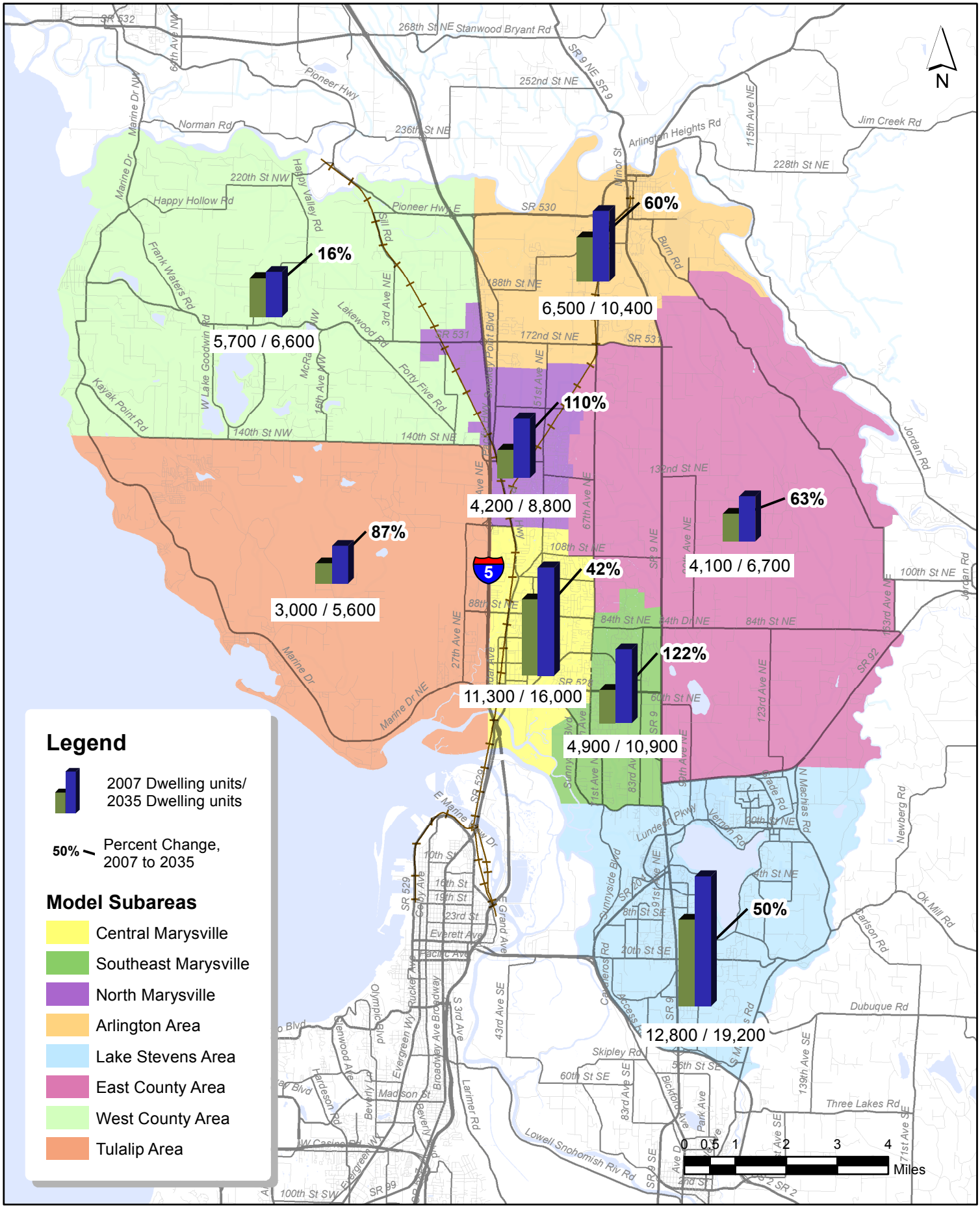
Approximately 6,400 additional housing units were assumed to be constructed between 2007 and 2035 in or near the City of Lake Stevens. However this is much less than the 11,000 housing units assumed in the 2008 Element for this area. The number of housing units in the Arlington area also would nearly double, from 6,500 to 10,400 during the 28 year period.

Housing unit growth on the Tulalip reservation and in other County areas is forecast to be more moderate. Combined, these three areas are projected to grow by approximately 6,100 additional housing units, representing 20 percent of the study area growth between 2007 and 2035.

### 3.1.2 Employment Growth

Figure 9 summarizes the forecast growth in employment used in developing the 2035 travel forecasts. The number of jobs in the travel demand model study area is forecast to increase by 171 percent – from 30,500 employees in 2007 to about 82,700 employees in 2035. This is about 15,700 more jobs than forecasted in the 2008 Element. The bulk of the employment growth will occur within Marysville, Arlington, and the Tulalip reservation. Employment within the Arlington area is projected to more than double, growing from 9,500 to 26,200 jobs by 2035 (about 7,900 more jobs than the 2008 Element). The north Marysville area also is expected to have significant growth in jobs, with over 15,000 additional employees. The City of Marysville has prepared the Smokey Point and Lakewood Subarea Master Plans for these areas. Combined, the Arlington and north Marysville areas account for nearly two-thirds of the forecast growth in employment within the overall model study area, similar to forecasts in the 2008 Element.

The number of jobs within the Tulalip reservation is forecast to grow significantly between 2007 and 2035. Over 7,100 additional jobs, reflecting an increase of 129 percent, are assumed for the Tulalip area west of I-5.




# Forecast Housing Growth 2007 - 2035

FIGURE
8

*City of Marysville Transportation Element 2015*

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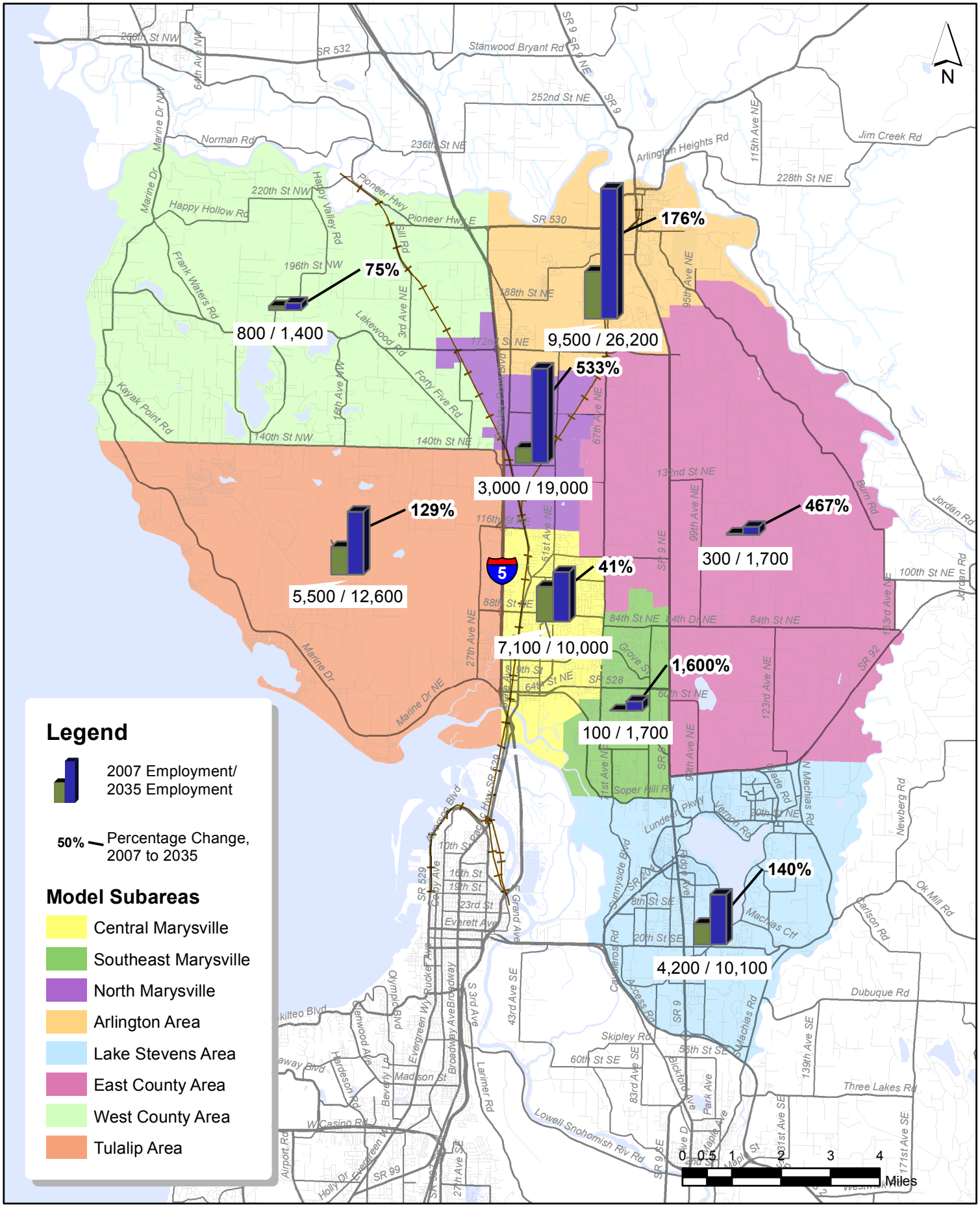



# Forecast Employment Growth 2007 - 2035

FIGURE 9

*City of Marysville Transportation Element 2015*

transpogroup

## 3.2 2035 Baseline and Alternatives Evaluation

The updated travel forecasting model was used to convert the 2007 and forecast (2035) land use data into travel demands. The 2007 data were used to calibrate and validate the model. The 2035 model was used to forecast traffic volumes and travel patterns.

The 2035 forecast model was initially set up assuming currently committed and planned transportation improvement projects would be constructed by 2035. This scenario provides a baseline for identifying potential alternative transportation improvement needs. The results of the alternatives evaluation were used to establish a framework for the Transportation Systems Plan.

### 3.2.1 2035 Baseline Evaluation

The 2035 baseline model was developed based on capacity improvement projects identified in prior plans and project lists prepared by WSDOT, Snohomish County, the City of Marysville, the other adjacent cities, and the Tulalip Tribe. Some of these improvements are funded or are expected to be funded in the next few years. Other improvements were considered long-term commitments based on plans and, therefore, were assumed complete by 2035 for the baseline analyses. The follow projects were assumed in the 2035 baseline scenario:

- Added traffic signals to the **State Avenue/84th Street NE** and **88th Street NE/55th Avenue NE** intersections.
- **State Avenue** widened to five lanes between 116th Street NE and 136th Street NE
- Added new westbound lane on **88th Street NE** between 36th Avenue NE and I-5 northbound on-ramp.
- New **156th Street NE** five lane corridor between Smokey Point Boulevard and 51st Avenue NE.
- New **40th Street NE** three to five lane corridor between Sunnyside Boulevard and SR 9. Connects to SR 9 at the SR 92 intersection.
- New **27th Avenue NE** three lane corridor between 172nd Street NE and 156th Street NE.
- Reconstructed **I-5/116th Street NE** interchange (Single-Point Urban Interchange or SPUI)
- Reconstructed **I-5/88th Street NE** interchange (SPUI)
- New ramps to/from the north at the **I-5/SR 529** interchange to serve Marysville to I-5 traffic.
- **US 2 Trestle** widening: westbound widening at Ebey Slough Bridge to three lanes; convert eastbound emergency lane to travel lane in PM peak hour.
- Widened **SR 9** corridor: five lanes between US 2 and Lake Stevens Road; seven lanes between Market Place and Lundeen Parkway.
- **SR 531** widened to five lanes between 43rd Avenue NE and SR 9

The 2008 Marysville Transportation Plan recommended that 88th Street NE be widened to a four- to five-lane arterial and connected to SR 9 via Ingraham Road. One focus of the alternatives evaluation was to identify strategies to reduce the need for a four to five-lane arterial in the 88th Street NE corridor; therefore, the 2035 baseline evaluation assumed that the 88th Street NE corridor would remain at two lanes.

The 2035 baseline forecasts also showed:

- The new ramps on I-5/SR 529 interchange reduces the previously assumed levels of congestion on 4th Street (SR 528) east of I-5; however, congestion is shifted to the 2nd Street and 3rd Street corridors east of State Avenue.
- The existing Sunnyside Boulevard would be overcapacity (47th Avenue NE to 52nd Street vicinity), which also adds congestion to the alternate route along SR 528 and 67th Avenue.
- The SR 9 corridor will be over capacity between SR 531 in Arlington to SR 92 near Lake Stevens.
- Sections of Grove Street, east of 51st Avenue NE, are forecast to be over capacity.
- Sections of 88th Street NE (with no assumed improvements) are over capacity.
- The north-south arterials of 51st Avenue NE and 67th Avenues NE are over capacity between 152nd Street NE and 108th Street NE.
- 172nd Street NE west of 27th Avenue NE would be over capacity.
- The section of State Avenue between 100th Street NE and 116th Street NE was assumed to remain at three lanes and would be over capacity.
- Even with five-lane widening, the SR 531 corridor will still be congested on sections between I-5 and SR 9.
- Intersection improvements will be required to address delays and congestion in several other locations

While the 2035 baseline analysis showed many corridors over capacity, in some cases the solution may not be to expand capacity on that specific corridor. Providing additional capacity along parallel routes also may reduce the travel demands on the problematic corridors. The alternatives evaluation explored how specific improvements would directly or indirectly impact congested corridors.

### 3.2.2 Alternatives Evaluation

Based on the results of the 2035 baseline forecasts, several alternatives were defined and evaluated. These included six main alternative areas:

- Widening SR 9 north of SR 92;
- Widening 88th Street NE between State Avenue and 67th Street NE;
- Construction of I-5/156th Street NE Interchange;
- Widening 51st Avenue NE in northern sections of City;
- Widening State Avenue between 100th Street NE and 116th Street NE;
- and, the Downtown Bypass.

The following summarizes key findings from the alternatives evaluation which were used to establish the framework for the Transportation Element.

### *SR 9 Widening*

Comparing the 2014 traffic counts with the 2007 data, significant traffic growth has occurred along the SR 9 corridor in the southeast Marysville area. This coincided with recent capacity improvements along the corridor south of SR 92. This suggests that further capacity improvements to SR 9 could have similar impacts (i.e. more City traffic could shift to the SR 9 corridor instead of using the I-5 corridor).

This alternative scenario evaluated widening the SR 9 corridor to four to five lanes between SR 531 and SR 92. The result of this improvement showed: reduced east Snohomish County cut-through traffic between I-5 and SR 9; reduced east-west City of Marysville traffic between I-5 and SR 9; and reduced traffic demands on parallel routes (for example 67th Avenue NE and 83rd Avenue NE).

### *88th Street NE Widening*

In the 2008 transportation analysis, potential extension of 116th Street NE and/or 80th Street NE was evaluated to help relieve congestion and the need for widening 88th Street NE between State Avenue and 67th Avenue NE. The 116th Street NE corridor extension was evaluated with different eastern termini, ranging from 51st Avenue NE to east of 67th Avenue NE to see if it could reduce travel demands on 88th Street NE. In addition, possible extension of 80th Street NE was considered as a potential way to shift traffic out of the 88th Street NE corridor.

The results of 2008 Transportation Element concluded that extension of 116th Street NE and providing only three lanes on 88th Street NE would not resolve this major capacity need. Travel associated with the commercial growth west of I-5 and residential growth east of I-5 would not readily shift to an extension of the 116th Street NE corridor due to the longer travel distance and time. In addition, the costs for extending 116th Street NE and widening 88th Street NE to three lanes would be significantly greater than widening 88th Street NE to five lanes without the extension of 116th Street NE. Extending 80th Street NE to connect to 60th Avenue NE would also help reduce congestion on 88th Street NE, but at higher costs and provide more circuitous travel patterns.

The 2015 Transportation Element analyses largely focused on strategies to reduce or eliminate the need to widen 88th Street NE to five lanes through shifting traffic to SR 9. The analyses assumed widening of SR 9 between 84th Avenue NE and SR 92 to four to five lanes, consistent with the recent widening south of Soper Hill Road. The model was examined to determine the users of 88th Street NE under the three-lane scenario and the five-lane scenario. Under both scenarios the majority of users were either local users (City land uses within a couple blocks of the corridor) or City land uses in the east areas of Marysville (between 60th Drive NE to SR 9, and Ingraham Boulevard to SR 528). Under the three-lane scenario some of local users diverted to nearby local and arterial streets, and the east City users diverted to other City arterials and SR 9. Under the five-lane scenario for 88th Street NE, the increase in east Snohomish County cut-through traffic was not significant. In other words, the five-lane widening of 88th Avenue NE would most benefit local area traffic patterns, as well as residents in the east part of the City. At the same time, the widening would directly impact residents and other land uses directly on the corridor (between State Avenue and SR 9). In addition, the widening of 88th Street NE to five lanes also would be

very expensive to construct due to right-of-way constraints and structures very near the edge of the existing corridor.

### *I-5/156th Street NE Interchange*

The alternatives evaluation tested conditions with and without the new interchange at I-5 and 156th Street NE to assess the potential traffic shifts to other arterials. The model analysis was also conducted to understand what travel patterns would most benefit from a new interchange with I-5 at this location.

The alternatives analyses concluded that the proposed new interchange at I-5/156th Street NE is a very important element of the City's future transportation system. The interchange is needed to serve the increased travel demands associated with the significant growth in employment in north Marysville and Arlington. The new interchange also serves growth in the Lakewood area on the west side of I-5. Without the interchange, the existing corridor along 172nd Street NE (SR 531) would be well over capacity.

### *51st Avenue NE (and 67th Avenue NE)*

The recent completion of 51st Avenue NE between 84th Street NE and 88th Street NE has created a continuous arterial between SR 528 and SR 531 within the City of Marysville, which resolved traffic diversion through adjacent neighborhoods.

The increase in employment and commercial land uses in the Lakewood and Smokey Point areas of the City creates commuter demands on north/south arterials for Marysville residents. This includes the arterials of Smokey Point Boulevard, 51st Avenue NE, and 67th Avenue NE. Based on the analysis, 51st Avenue NE and 67th Avenue NE could reasonably accommodate traffic demand if the corridors were widened to a three-lane capacity (i.e. two lanes, with turn pockets and better access management).

For 51st Avenue NE within the Smokey Point subarea, a three-lane capacity roadway would be sufficient to handle traffic demand. However, this assumed exclusive turn lanes at major intersections and the completion of the planned full grid network envisioned in the sub-area plan. If this grid network becomes not feasible, five lanes would be needed along 51st Avenue NE between 152nd Street NE and 172nd Street NE (SR 531).

### *State Avenue Widening*

Under 2035 baseline conditions, only one section of the State Avenue/Smokey Point Boulevard corridor was not five lanes. This three lane section between 116th Street NE and 100 Street NE is currently three lanes. Assuming all the other major planned improvements in place (in other words the improvements outline in Section 3.2.3), keeping this section at three lanes would result in over capacity conditions. The main diversion would be to the I-5 corridor with added traffic congestion on the 116th Street NE and 88th Street NE corridors near I-5. Along the corridor itself, the major impacts of only three lanes would be degraded operations at the State Avenue/100th Street NE and State Avenue/116th Street NE intersections as well as fewer gaps in traffic for left turns at unsignalized driveways and intersections along the section of State Avenue.

### *Downtown Bypass*

Another major alternative is a potential Downtown bypass route. The bypass was defined as a possible way to address the congestion on 4th Street (SR 528) in Downtown Marysville and

to provide a more direct connection between SR 529 and southeast Marysville. The bypass could also help reduce diversion of traffic to other Downtown streets.

A three lane (one lane each direction, with center turn lane) Downtown bypass was assumed to connect between the intersections of 1st Street/ State Avenue and 47th Avenue NE/Sunnyside Boulevard. The alignment follows due east from the 1st Street/State Avenue intersection until 47th Avenue NE. The bypass would turn north along 47th Avenue NE until the 3rd Street where it would connect to a widened Sunnyside Boulevard corridor. The new corridor was found to reduce traffic congestion on 4th Street (SR 528) within Downtown and the associated traffic diversion to other Downtown streets.

The Downtown bypass does not, however, result in any significant traffic shifts outside of the Downtown area such as 88th Street NE and other key corridors. In addition, the bypass does not significantly reduce traffic on 3rd Street between State Avenue and 47th Avenue NE. However, the City has recently designed a remodeled 3rd Street to include traffic calming such as traffic circles and curb bulb outs which should change the character of the street and discourage cut through traffic. These changes are anticipated to occur in the near future.

With the bypass, intersection operations at the 3rd Street/47th Avenue NE would be problematic. One possible solution would be to close the west leg of the 3rd Street/47th Avenue NE intersection to vehicle traffic. This would both improve intersection operations and further reduce the cut-through potential on 3rd Street. Adding a single-lane roundabout at this intersection would also improve operations.

### 3.2.3 Plan Framework

Based on the baseline and alternatives evaluation, the City established a framework for its long-range highway and street system. The framework builds from the City's prior Comprehensive Plan and Subarea Plans, as well as other agency transportation improvement programs. Key elements of the framework plan include:

- Widen SR 9 to four to five lanes between 84th Street NE and SR 92.
- Improve 88th Street NE corridor to three lanes between State Avenue and SR 9. In sections where left-turns are not expected or restricted, two lanes would be sufficient. The corridor would also have pedestrian improvements. No further widened would be needed in the section between 67th Avenue NE and 83rd Avenue NE.
- Implement a Downtown bypass route to connect between 1st Street/ State Avenue and 3rd Street/47th Avenue NE; the specific alignment as well as the design of the 3rd Street/47th Avenue NE intersection is still to be determined.
- Widen Sunnyside Boulevard to four to five lanes between 47th Avenue NE to south of 52nd Street NE; the Sunnyside Boulevard/Soper Hill Road corridor would be three lanes between 52nd Street NE and SR 9.
- Construct a new 40th Street NE corridor between Sunnyside Boulevard and the SR 9/SR 92 intersection, per the Sunnyside-Whiskey Ridge Subarea Plan.
- Widen State Avenue to five lanes between 100th Street NE and 116th Street NE to add capacity to the corridor.
- Construct a new five-lane, east-west principal arterial route in the 156th/152nd Street NE corridor. It would connect the Lakewood subarea west of I-5 and 67th Avenue

NE. Right-of-way for potential extension of the corridor east to SR 9 is also recommended to be preserved.

- Construct a new interchange with I-5 at 156th Street NE to serve extensive planned growth in north Marysville and Arlington.
- Upgrade 51st Avenue NE and 67th Avenue NE corridors to three-lane capacity roadways.
- Add additional connector roads to improve circulation and reduce traffic impacts on the arterial system.

The following highlights some of the major improvement projects to help the City meet its transportation system needs. The discussion is organized by corridor to show how the improvements work together to support the overall system.

### *I-5 Access Improvements*

I-5 provides the primary connection between Marysville and the Puget Sound Region and other parts of Washington State. Marysville is served by four existing interchanges, including the Smokey Point (172nd Street/SR 531) interchange shared with Arlington.

The Transportation Element includes specific projects to improve three of the existing interchanges. The Tulalip Tribes are working with WSDOT to reconstruct the interchanges at 88th Street NE and 116th Street NE. The existing diamond interchanges at these two locations would be converted to single-point urban interchanges (SPUI). The SPUI design can provide for more efficient operations by eliminating a traffic signal at each location. The City of Marysville supports the funding and construction of these improvements.

WSDOT improved the I-5/172nd Street NE (SR 531) interchange at Smokey Point. Phase 1 of the project added travel lanes and improved intersection operations at the interchange. A second phase of the project provided a loop ramp for the west-to-south turn movement. This has helped reduce delays along the corridor.

The City of Marysville is working with WSDOT to fund and construct a new interchange at I-5/156th Street NE. The City recently funded and constructed a new overpass at this location, through a Local Improvement District, which has increased the connectivity between the Lakewood area and the rest of the City. In addition, a new interchange at 156th Street NE will further reduce future traffic volumes at the adjacent 172nd Street NE (SR 531) and 116th Street NE interchanges. The I-5/156th Street NE interchange is important to provide regional access to serve the projected growth in north Marysville (on both sides of I-5), in Arlington, and in Snohomish County.

The City also worked with WSDOT to identify potential improvements to reduce congestion and delays at the 4th Street (SR 528) interchange serving Downtown. The “City Center Access Study” resulted in a series of recommendations that included new ramps at the I-5/SR 529 interchange and 4th Street widening at the I-5/4th Street interchange. Other spot improvements were recommended and included as a separate project entitled “City Center Access Improvement Projects” in Table 10.

### *East-West Corridor Improvements*

Several east-west corridors will need improvements to meet the forecast 2035 travel demands. The key corridors provide access to/from I-5, across I-5, or to SR 9. In addition to adding travel lanes and turn lanes, the plan includes improvements at arterial intersections.

To serve the growth forecast in the Lakewood and Smokey Point areas, a new principal arterial is planned for 156th Street NE/152nd Street NE corridor. The corridor would ultimately connect west of the BNSF rail line as a grade-separated crossing to serve Snohomish County areas west of the City as well. This preserves the corridor for long-range transportation needs and the potential growth outside of the existing UGA. A five-lane arterial will cross I-5 and provide access to the proposed interchange which is being coordinated with WSDOT. The 156th Street NE alignment for the corridor will extend east of Smokey Point Boulevard and then transition to the 152nd Street NE alignment; the specific alignment has not been established. East of 51st Avenue NE, the corridor could be initially constructed as a two-to-three lane facility, although right-of-way should be preserved to support an ultimate four-to-five lane cross-section. Because there are limited east-west corridors in the greater Marysville area that provide a direct connection between SR 9 and I-5, the City's Transportation Element recommends preserving the right-of-way to allow future extension east of 67th Avenue NE. This needs to be further coordinated with Snohomish County and WSDOT.

The travel forecasts show a need to widen the 136th Street NE/132nd Street NE corridor to a three-lane capacity. This corridor provides a connection between the UGA in the 51st Avenue NE corridor to State Avenue/Smokey Point Boulevard. It also connects across I-5 to the 140th Street NE corridor in unincorporated Snohomish County.

The recent widening of 116th Street NE between I-5 and State Avenue to five lanes will accommodate future volumes. Some additional spot intersection improvements will still be needed to support planned growth. As discussed under the section on alternatives evaluation, future extension of 116th Street NE east of State Avenue was not included in the recommended plan.

The 108th Street NE and 100th Street NE corridors provide east-west access and circulation in the central part of Marysville. The higher volumes of traffic will increase the need to upgrade the non-motorized facilities to better meet urban standards, such as the installation of sidewalks or other pedestrian facilities. Additional bicycle facilities are also identified for these two corridors.

A key change in the Transportation Element is the widening of 88th Street NE to two to three lanes between State and 67th Avenues. Previously, the corridor was recommended to be improved to four to five lanes. With other recent improvements, the corridor provides a direct connection between SR 9 and the Tulalip developments west of I-5. However, with a widened SR 9 between 84th Street NE and SR 204 in Lake Stevens, more regional and City traffic is able to use this southern option to access I-5 (or other points south) rather than using Marysville streets to access the I-5 corridor. By maintaining 88th Street NE as a two- to three-lane arterial, construction costs and impacts to local neighborhoods will also be greatly reduced.

The City has almost completed a four- to five-lane corridor along 4th Street/64th Street NE (SR 528) between I-5 and SR 9. The City has completed the corridor widening between 47th

Street NE and 67th Avenue NE. A small section of the corridor between 83rd Avenue NE and 87th Avenue NE remains to be widened.

In addition to improvements along 4th Street in Downtown Marysville, the plan recommends constructing a Downtown bypass route. The bypass route would provide an alternative for some of the traffic that would otherwise use 4th Street, or other local Downtown streets. It is recommended that the bypass connect the 1st Street/State Avenue intersection with Sunnyside Boulevard at 47th Avenue NE. The specific alignment for the corridor has not yet been defined.

Forecast traffic volumes on Sunnyside Boulevard confirm the need for a four- to five-lane arterial from 47th Avenue NE to south of 52nd Street NE. South of 52nd Street NE, the Sunnyside Boulevard/ Soper Hill Road corridor is recommended to be widened to 3 lanes.

The Transportation Element incorporates the new 40th Street NE/35th Street NE corridor identified in the East Sunnyside-Whiskey Ridge Subarea Plan. The new arterial corridor will provide additional capacity to serve growth in this area. It also will provide a direct connection to the SR 9/SR 92 intersection.

The 44th Street NE corridor also needs to be improved between 67th Avenue NE and SR 9. This includes a new connection between 83rd and 87th Avenues NE which would replace the existing Sunnyside School Road connection located north of 44th Street NE. This will provide a more direct arterial connection to serve the East Sunnyside-Whiskey Ridge subarea.

### *North-South Corridor Improvements*

North-south travel in and around Marysville is primarily focused on I-5 and four arterial corridors. The four primary arterial corridors include State Avenue/Smokey Point Boulevard, 51st Avenue NE, 67th Avenue NE and SR 9. Due to recent City improvements State Avenue/Smokey Point Boulevard the corridor will provide four to five lanes from Everett to Arlington through Marysville except for the one section between 136th Street NE and 100th Street NE. Part of this section (136th Avenue NE to 116th Street NE) is planned to be widened in the near-term. The other section (116th Street NE to 100th Street NE) would not likely be widened for a long-time due to existing major power lines, the bridge, and right-of-way constraints. The timing of the later section widening would depend on traffic operations at the State Avenue/116th Street NE and State Avenue/100th Street NE intersections as well as access difficultly at unsignalized intersections and driveways within the section.

East of State Avenue, 51st Avenue NE provides for north-south travel in the City. The plan calls for widening 51st Avenue NE to two to three lanes between 88th Street NE and 152nd Street NE. This widening is needed to provide turn lanes to minimize the effect of turning traffic on the throughput of the corridor. North of 152nd Street NE the corridor would also be widened to two to three lanes to 172nd Street NE (SR 531) to accommodate the projected commercial growth in the Smokey Point Master Plan area.

The plan also recommends upgrading the 67th Avenue NE corridor between 172nd Street NE (SR 531) and the East Sunnyside-Whiskey Ridge subarea. North of 108th Street NE, the future volumes would require widening to a three-lane capacity. This segment is outside the City of Marysville, so the road would likely be constructed to rural road standards. Between 108th Street NE and 88th Street NE, the corridor is within the City of Marysville. The plan calls for widening this segment to a two- to three-lane urban arterial with non-motorized

facilities. Much of 67th Avenue NE between 88th Street NE and 64th Street NE (SR 528) would support three lanes plus bicycle facilities. South of 64th Street NE (SR 528) the plan incorporates the adopted East Sunnyside-Whiskey Ridge improvements along the 67th Avenue NE/40th Street NE/71st Avenue NE corridor. These include upgrading the existing roadway to a three-lane arterial. A new arterial connection also would be constructed between 67th Avenue NE/44th Street NE and 71st Avenue NE/ 40th Street NE to provide a more direct route to Soper Hill Road.

Improvements are also identified for 83rd Avenue NE and 87th Avenue NE corridors. These include upgrading the roads to arterial standards. Several local connector roads are also identified for completion.

WSDOT has built several projects to improve SR 9 in the vicinity of Marysville. The most significant improvement was widening SR 9 to four to five lanes between SR 92 and Lundeen Parkway in Lake Stevens. This improvement would also include additional turn lanes at key intersections at Soper Hill Road and at SR 92. WSDOT also has improved intersections of SR 9 at 84th Street NE and at 172nd Street NE (SR 531). This plan calls of widening of SR 9 to 4 to 5 lanes between SR 92 and 84th Avenue NE, which improves mobility to/from the south for both regional and City traffic. Widening north of 84th Avenue NE would also have benefits for regional traffic, but less direct benefits to the City and would involve a major bridge reconstruction.

The widening of SR 9 between SR 92 and 84th Avenue NE is not, however, part of WSDOT's SR 9 Route Development plan or the PSRC *VISION 2040* Transportation Plan. This will require the City working with the state, PSRC, and other local agencies to add this improvement to their long-range transportation plans. WSDOT has designed the recently built single-lane roundabouts along SR 9 to be easily converted to two-lane roundabouts in the future. In other words, WSDOT has prepared for possible capacity improvements along SR 9 north of SR 92.

### *Intersection Improvements*

Intersection improvements are included as part of the major east-west and north-south corridors improvements discussed previously. The plan also incorporates improvements at other intersections throughout the City. The improvements include additional turn lanes to meet the 2035 travel demands and improve safety. Changes in traffic controls from stop signs to traffic signals also are identified to support safe and efficient operations as traffic volumes and non-motorized travel modes increase.

### *Intelligent Transportation System Improvements*

The City of Marysville has identified a need to implement an Intelligent Transportation System (ITS) over the next five to 10 years. By implementing ITS, the City can efficiently manage its traffic infrastructure and congestion on key City corridors. The City's biggest need regards ITS improvements and implementation centers on an effective advanced traffic management system (ATMS). The ATMS system would enable City staff to perform four basic functions from their central offices: 1) signal coordination and management, 2) roadway monitoring and response, 3) ITS device management, and 4) data collection.

The City desires to have its own independent ITS system. City staffing for traffic engineering would need to be increased to implement ITS on day-to-day operations. In order to plan for and implement an ATMS system the City must have a reliable high-speed communication

network that interconnects the ITS field devices to a remote management center. At this time, City ITS communication network is mostly limited to radio interconnect systems with some copper interconnect along 4th Street and State Avenue. The City needs to develop an ITS Architecture Plan to guide development of ITS systems throughout the City. Then the City can build an ITS system based on the Architecture Plan.

### 3.2.4 Forecast 2035 Intersection Operations with Plan Framework

The forecast traffic volumes with the recommended improvements were evaluated to assess the 2035 traffic operations. Table 6 shows the resulting 2035 PM peak hour intersection levels of service, assuming completion of the identified roadway and intersection improvements.

As noted in the existing conditions section, the City has established the following intersection level of service standards for arterials, collectors, and state highways within the City limits.

- LOS E mitigated on the SR 529/State Avenue/Smokey Point Boulevard corridor from the south city limits to north city limits.
- LOS E mitigated on the 4th Street/64th Street NE (SR 528) corridor between I 5 and SR 9.
- LOS D on all other intersections of arterials or collectors with another arterial or collector.

These level of service standards are consistent with the adopted state and regional LOS standards for state highways. LOS E mitigated means that the congestion should be mitigated through improvements, transit, ridesharing, and other travel modes when the intersection falls below LOS E.

With the planned improvements and forecast growth, the I-5 interchange ramp intersections with 4th Street (SR 528) are forecast to operate at LOS C. This is largely the result of the planned City Center Access Study recommended projects. The potential improvements are being coordinated with WSDOT.

The intersection of SR 9/84th Street NE is forecast to operate at LOS D based on the 2035 PM peak hour forecast volumes and assuming the roundabout is converted to a two-lane roundabout. WSDOT built this roundabout with a design that could easily convert to a two-lane roundabout in the future. This widening is not part of WSDOT's current plans for the SR 9 corridor but is recommended as part of the City of Marysville's Transportation Element.

Other intersections forecast to be below the adopted level of service standards are along 172nd Street NE (SR 531) in Arlington. This state highway has a standard of LOS D. Two intersections – at Smokey Point Boulevard and 43rd Avenue NE – are forecast to operate at LOS E during the 2035 PM peak hour.

**Table 6. 2035 Intersection Levels of Service with Plan Network**

| Intersection | Total Entering Volumes[1] | | 2035 Operations with Plan Network | | | |
|---|---|---|---|---|---|---|
| | 2014 | 2035 | Control[2] | LOS[3] | Delay (WM)[4] | Standard Met?[5] |
| 172nd St NE / 19th Ave NE | 1,320 | 2,225 | RAB | A | 7 | YES |
| 172nd St NE / 23rd Ave NE[8] | 1,435 | 3,600 | RAB | B | 13 | YES |
| 172nd St NE / 27th Ave NE | 3,140 | 5,020 | Signal | D | 43 | YES |
| 172nd St NE / I-5 SB Ramps | 3,530 | 4,810 | Signal | A | 5 | YES |
| 172nd St NE / I-5 NB Ramps | 4,295 | 5,000 | Signal[6] | D | 50 | YES |
| 172nd St NE / Smokey Point Blvd | 4,780 | 6,075 | Signal | E | 77 | NO[9] |
| 172nd St NE / 43rd Ave NE | 2,420 | 3,830 | Signal | E | 67 | NO[9] |
| 172nd St NE / 51st Ave NE | 2,395 | 3,565 | Signal | C | 33 | YES[9] |
| Smokey Point Blvd / 156th St NE | 1,595 | 4,620 | Signal | D | 53 | YES |
| Smokey Point Blvd / 152nd St NE | 1,840 | 2,960 | Signal | C | 23 | YES |
| Smokey Point Blvd / 116th St NE | 2,570 | 3,985 | Signal | D | 46 | YES |
| 51st Ave NE / 136th St NE | 1,295 | 2,300 | Signal | D | 54 | YES |
| 51st Ave NE / 100th St NE | 1,695 | 2,155 | Signal | B | 16 | YES |
| 88th St NE / I-5 SB Ramps | 2,280 | 4,705 | Signal | C | 24 | YES |
| 88th St NE / I-5 NB Ramps | 2,630 | N/A[7] | N/A[7] | N/A[7] | N/A[7] | N/A[7] |
| 88th St NE / State Ave NE | 3,465 | 4,555 | Signal | E | 73 | NO |
| 88th St NE / 51st Ave NE | 1,505 | 2,250 | Signal | D | 40 | YES |
| 88th St NE / 67th Ave NE | 1,855 | 3,260 | Signal | D | 41 | YES |
| SR 9 / 84th St NE | 2,370 | 4,195 | RAB | D | 42 | YES |
| 4th St (SR 528) / I-5 SB Ramps | 2,475 | 2,705 | Signal[6] | C | 33 | YES |
| 4th St (SR 528) / I-5 NB Ramps | 2,630 | 3,425 | Signal[6] | C | 28 | YES |
| 4th St (SR 528) / State Ave | 3,010 | 3,235 | Signal | C | 29 | YES |
| 4th St (SR 528) / 47th Ave NE | 2,705 | 3,285 | Signal | D | 47 | YES |
| 64th St NE (SR 528) / 67th Ave NE | 2,665 | 3,455 | Signal | D | 41 | YES |
| 3rd St / State Ave | 1,785 | 1,745 | Signal | C | 22 | YES |
| 3rd St / 47th Ave NE | 1,360 | 3,335 | RAB | B | 11 | YES |
| SR 9 / SR 92 | 3,070 | 4,865 | Signal | D | 54 | YES |
| SR 9 / Soper Hill Road | 3,205 | 4,585 | Signal | C | 31 | YES |

Source: Transpo Group, 2015

1. Total entering volumes at the intersection.
2. Intersection traffic control: "Signal" is typical traffic signal; "RAB" is roundabout.
3. Level of service as defined by *Highway Capacity Manual 2010* (Transportation Research Board, 2010)
4. Average delay per vehicle in seconds.
5. Indicates whether the LOS standard that applies to that intersection is met.
6. Due to limitations in the HCM2010 methodology, these intersections were evaluated with the *Highway Capacity Manual 2000* (Transportation Research Board, 2000) methodology.
7. Not applicable. Intersection is combined with SB ramp intersection with interchange improvement (SPUI).
8. The 172nd Ave NE/25th Ave NE intersection will be shifted west to align at 23rd Ave NE.
9. These intersections are within the City of Arlington. Table reflects Arlington LOS standards.

The intersection of 172nd Street NE/27th Avenue NE is expected to operate at LOS D in the future. This assumes restricting westbound U-turns, and restricting southbound I-5 off-ramp traffic from using the westbound left-turn lanes at the 27th Avenue NE intersection. Additional turn lanes at this intersection were also assumed. This intersection is expected to continue to see traffic growth despite alternate routes to the Lakewood sub area. New roundabouts at 172nd Street NE/19th Avenue NE and 172nd Street NE/23th Avenue NE are expected to operate at LOS C or better.

The intersection of State Avenue/88th Street NE is expected to operate at LOS E in the future. By limiting the widening of 88th Street NE to two to three lanes, forecast traffic volumes will be reduced at this intersection; however, the lower volumes will still exceed the capacity without widening the intersection. The City is currently evaluating potential for more limited improvements that reduce the impacts at the cemeteries on either side of 88th Street NE, east of State Avenue. The railroad tracks on the west side of State Avenue also create limited space for improvements. The LOS E condition assumes additional turn lanes on the east and north legs.

The intersection of 3rd Street/47th Street NE is expected to operate at LOS D in the future assuming a the Downtown bypass and five-lane widening of the Sunnyside Boulevard corridor. This intersection was assumed to be a single-lane roundabout. As the details of the Downtown bypass get further known, it is recommended exploring the option of restricting all vehicle traffic on the west leg of this intersection. This would improve intersection operations as well as further reduce cut-through traffic on 3rd Street.

# Chapter 4. Transportation Systems Plans

The transportation systems plans provide the blueprint for improvement projects and programs to meet the multimodal transportation needs of the community. The transportation systems plans are based on the evaluation of existing system deficiencies and forecasts of future travel demands. The improvement projects and programs must be balanced with the availability of funding, as discussed in Chapter 5. The systems plans build on the prior Comprehensive Plan, the subarea master plans, input from stakeholders, and the updated evaluation of existing and forecast conditions in Marysville.

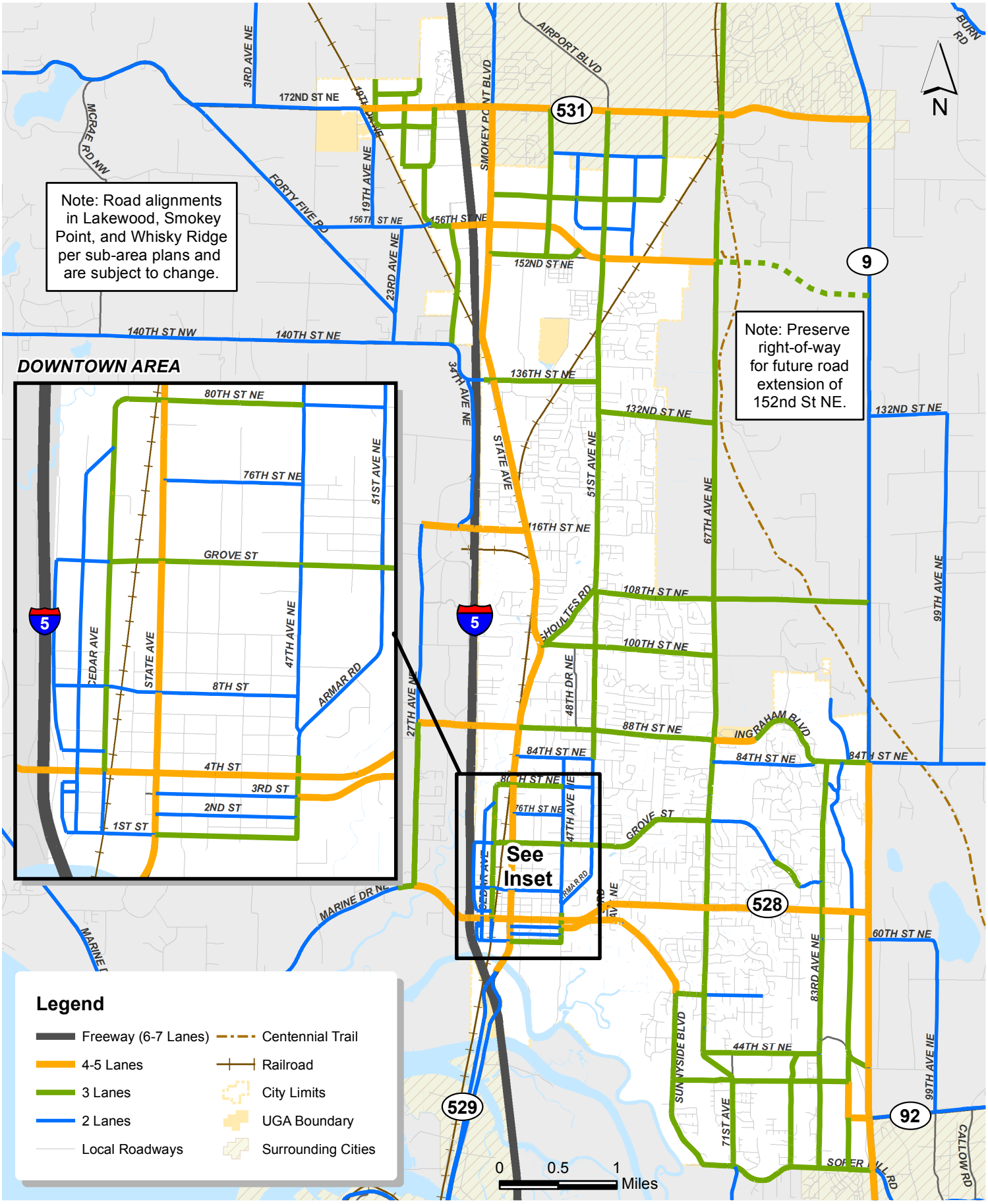
The transportation systems plans are organized and presented by travel mode to provide an overview of key components of each element. However, the plans are integrated to create a multimodal transportation system. For example, improvements along arterial streets and highways also incorporate appropriate non-motorized improvements. The non-motorized systems were defined to support access to transit, and to provide alternatives to automobile travel within the City. As improvement projects move toward implementation, the City will conduct detailed design studies, supported with project-level environmental review, and input from the public and other stakeholders.

The plans illustrate how the City of Marysville's transportation system supports, and relies on, transportation facilities and programs provided by other agencies. These include new or improved interchanges with I-5, consistency of the arterial and collector road system, connectivity of trails and non-motorized transportation systems, additional transit service and facilities, and rideshare programs. The City will continue to coordinate with WSDOT, Snohomish County, adjacent cities, the Tulalip Tribes, and Community Transit to develop a comprehensive multimodal transportation system for the greater Marysville area.

## 4.1 Streets and Highways

Streets and state highways are the core of the transportation system serving the City of Marysville and surrounding communities. They provide for the overall movement of people and goods, for a wide range of travel modes. Streets and highways serve automobile trips, trucks, transit, vanpools, carpools, and the majority of bicycle and pedestrian travel. Therefore, the streets and highways establish the framework for the overall transportation system for the City. Figure 10 highlights the highway and street system envisioned for the City of Marysville based on the size (number of lanes) and connectivity of City arterials.

The core of the street and highway system includes arterials and collectors. The City also has designated specific corridors as truck routes, which can affect the design features of specific improvement projects. The arterial system is supported by future connector roads to provide circulation and connectivity of the overall system.




# Highway and Street System Plan

*City of Marysville Transportation Element 2015*

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FIGURE **10**

### 4.1.1 Arterial and Collector Classifications

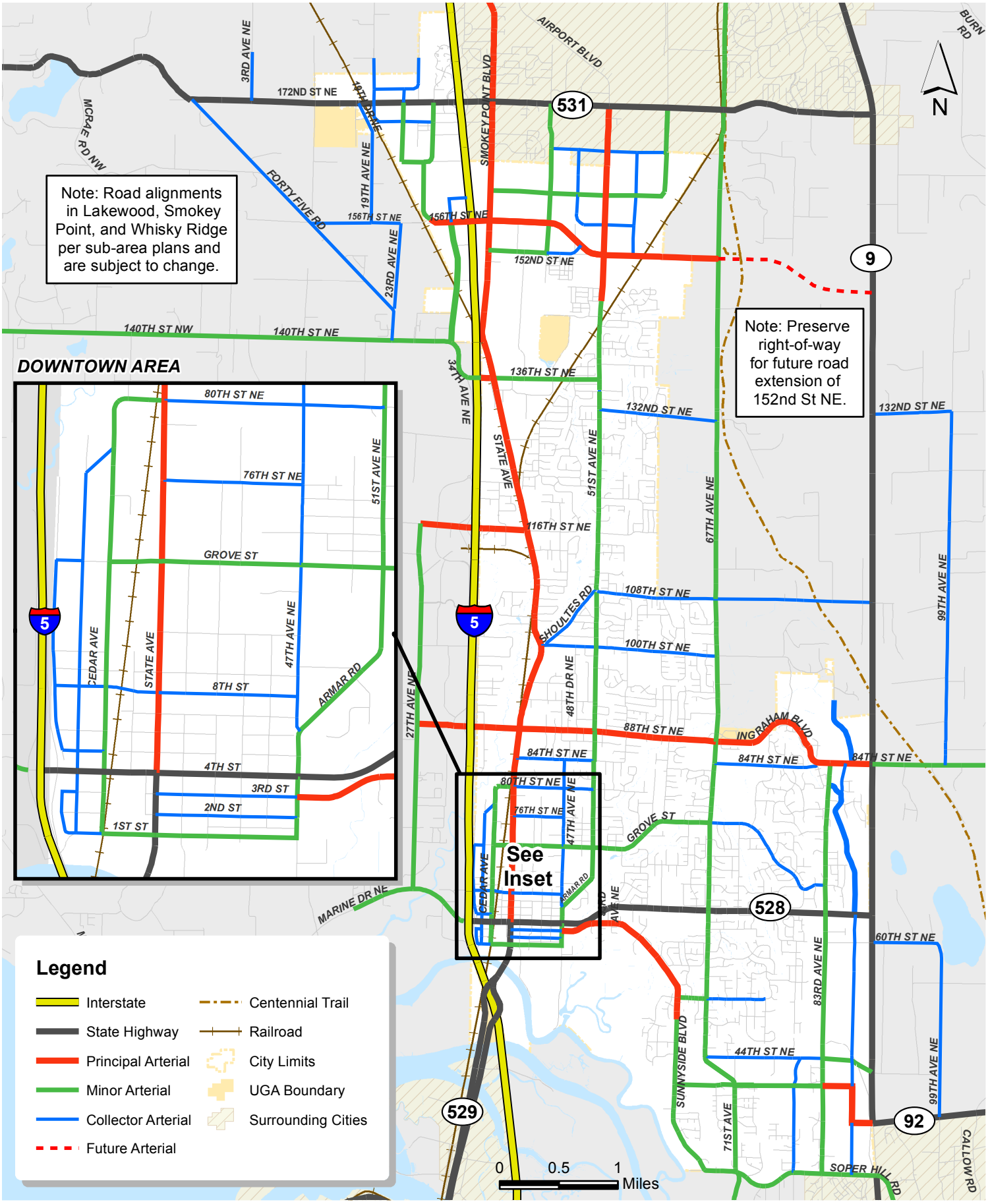
Roadways within a network are typically classified based on their desired purpose, design, and function. Table 7 describes typical roadway functional classifications. Figure 11 shows the functional classification for streets within the City of Marysville and designated Urban Growth Area (UGA).

**Table 7. Functional Classifications**

| Classification[1] | Definition |
|---|---|
| Freeways | Multi-lane, high speed, high-capacity roadway generally intended exclusively for motorized traffic. Freeways have controlled access and are intended to serve longer, regional intra-state or interstate travel. |
| Principal Arterials | Principal arterials connect focal points of traffic generation throughout the City and adjacent areas. They are used to provide access to the regional highway system, connect major community centers and connect to adjacent cities. These streets are intended to primarily serve "through" traffic with limited access to abutting land use. Principal arterials typically carry the highest traffic volumes. |
| Minor Arterials | Minor arterials are inter-community roadways that connect community centers with each other or to principal arterials or freeways. Minor arterials serve lesser points of traffic generation, and provide greater land access than principal arterials. Generally, minor arterials have moderate to high traffic volumes and may include some restriction of traffic movements and limitations on spacing of driveways and local streets. |
| Collector Arterials | Collectors distribute traffic between the local street system and the arterial street system. They provide land access as well as connections between neighborhoods and smaller community centers. Collectors typically have low to moderate traffic volumes and limited regulation of access control. On-street parking is usually limited. |
| Local Streets | Local streets primarily provide direct land access and generally discourage through traffic. These streets typically have low to moderate traffic volumes and few access controls. On-street parking is generally allowed. |

The general hierarchy of functional classification is based on the relationship between the function of the roadway and the surrounding land uses and the relationship between mobility and access (see Figure 12). For example, commercial developments will generally desire to locate along arterials or collectors due to a high amount of mobility and visibility. Likewise, it is desirable to have parks, schools, and residential homes located along collector or local streets due to lower traffic volumes and a high degree of access.

Figure 11 shows the functional classification for streets within the City of Marysville and designated Urban Growth Area. In addition, Figure 11 shows how the City's arterial classifications connect with and support the surrounding regional transportation system. The functional classifications incorporate changes identified in several City subarea master plans. The functional classification also reflects the analysis of the longer-range needs to serve growth through 2035.




# Roadway Functional Classification

*City of Marysville Transportation Element 2015*

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FIGURE **11**

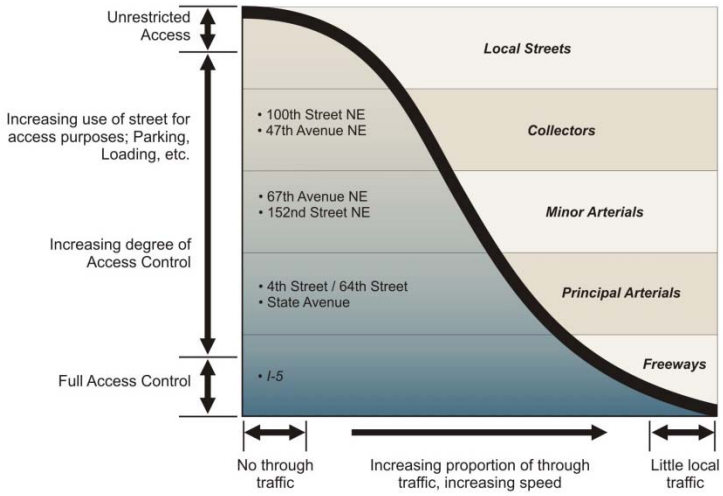



Figure 12. Classification Relationship between Mobility and Access

### 4.1.2 Truck Routes

The City of Marysville has a significant level of truck activity. With the increased commercial and employment growth forecast through 2035, the level of truck activity will also increase.

As mentioned in Chapter 2, WSDOT's Freight and Goods Transportation System (FGTS) classifies state highways, county roads, and city arterials according to average annual gross truck tonnage. The following corridors in the greater Marysville area are designated as part of a Strategic Freight Corridor: I-5; SR 9; SR 92; 84th Street NE (east of SR 9); SR 531 (between I-5 and 67th Avenue NE); and Marine Drive (between 27th Avenue NE and I-5).

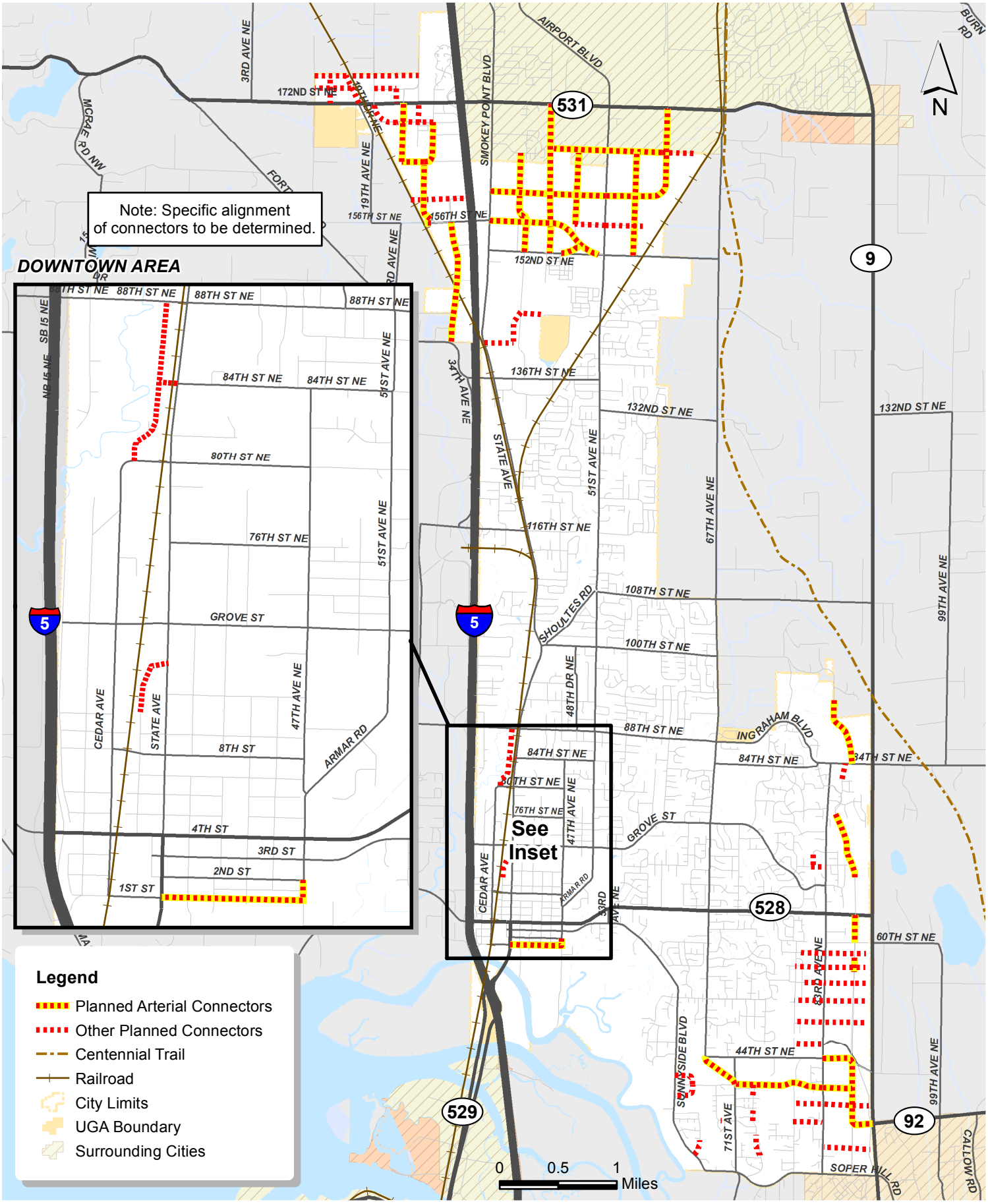
In order to systematically address the needs of future truck travel, the City has adopted a defined system of truck routes as described in the Marysville Municipal Code Chapter 11.62. The truck route system will continue to be evaluated as the City develops.

The Smokey Point and Lakewood subareas are planned for significant commercial activity. This commercial growth will require additional truck routes. As appropriate, the City can designate arterials, collectors, and connector roads to serve these developing commercial areas.

### 4.1.3 Connector Roads

In addition to the classified arterials, the City recognizes the need for additional connector roads. The connector roads are needed to facilitate property access, circulation, and connectivity of the roadway system. Connector roads are needed to fill in gaps in the existing system, as well as serve the growth projected for the City.

Figure 13 shows the general locations of planned connector roads, including the future arterial routes as shown on Figure 11. Specific alignments have not been identified for the planned connector roads. The alignments will be defined as part of future corridor studies or as adjacent properties are developed. Some of the other planned connector roads also may be classified as arterials in the future, depending on specific design and access requirements at the time the corridor is developed.




# Planned Connector Roads

FIGURE **13**

*City of Marysville Transportation Element 2015*

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### 4.1.4 Rail Crossings

The City of Marysville has the most at-grade crossings along the BNSF mainline of any city within the Puget Sound Regional Council planning area (see Economic Evaluation of Regional Impacts for the Proposed Gateway Pacific Terminal at Cherry Point, PRSC, 2014). The City has developed a strategy to increase the number of grade-separated rail crossings to improve mobility and safety within the City.

Several improvements would provide alternate routes from existing at-grade crossings. The SR 529 ramp improvements at I-5 would provide direct access to/from I-5 and Downtown Marysville, allowing traffic to avoid the at-grade crossings at 4th Street and 88th Street NE. The Grove Street undercrossing of the railroad would also provide an alternate route near the Downtown area for better local circulation. In the north end of the City, the 156th Street NE interchange improvement would provide an alternate route for areas east of I-5, where currently the 116th Street NE interchange is impacted by the railroad near State Avenue. Improvements to 156th Street NE west of I-5 would also provide another grade-separated route to/from I-5 for west Snohomish County travelers (an alternate to the SR 531 rail crossing). Grade separation improvements are costly and likely not feasible directly at the 88th Street NE and 116th Street NE crossings due to geographic and land use constraints.

## 4.2 Non-Motorized Transportation Systems Plans

The City of Marysville will continue to develop pedestrian and bicycle facilities as part of its transportation system improvements. The City has adopted street standards that provide for a range of facilities including sidewalks, sidewalks with planted buffers, wide sidewalks, bike lanes, and multiuse trails. Updates to these standards will also include bike routes, buffered bike lanes and bicycle boulevards.

The Transportation Element identifies the desired priority pedestrian system plan and bicycle systems plan, which will guide the development and implementation of improvement projects throughout the City. As noted above, many roadway improvement projects include pedestrian and bicycle facilities which are key for the completion of the overall non-motorized transportation systems.

Both system plans were developed using existing planning work as the foundation with key connection and facility types added to develop a holist vision of a safe and attractive non-motorized transportation system. Projects near school, transit, mix-use centers and parks were all an area of particular focus.

### 4.2.1 Pedestrian Systems Plan

Sidewalks, walkways, and multiuse trails are integral to the City's overall transportation system. The City generally desires to have sidewalks or other pedestrian facilities on both sides of streets, unless special circumstances make it physically or cost prohibitive.

The City requires that new developments construct sidewalks on their internal streets and adjacent frontages. This process has helped the City convert the rural roadways developed under Snohomish County road standards into the urban facilities needed to support the additional growth and higher traffic volumes within the City. Developer improvements will continue to provide for a large portion of the ultimate pedestrian system; however, even with those improvements some significant gaps would remain in sidewalks along arterial and collector corridors.

Figure 14 illustrates the priority pedestrian system plan for the City as well as road segments which do not currently have sidewalks on either side of the roadway. The priority system plan includes corridors where future roadway widening projects will construct or complete the sidewalk network as well as all other arterial roadways in the city. It includes routes in Downtown and Lakewood which have been identified by subarea plans as key routes for pedestrians. Additional routes were identified through a review of Safe Routes to School maps and Community Transit bus routes.

Most of the additional pedestrian facilities will be constructed as part of associated roadway projects. These may be constructed as part of developer frontage requirements or as part of a capital project by the City of Marysville or another agency. In some corridors, pedestrian facilities will be provided through development of multi-use trails separated from the travel lanes.

The priority pedestrian system plan includes several connections to regional multi-use trails. A connection between the Whiskey Ridge Trail in the Puget Sound Energy (PSE) right-of-way and the Centennial Trail is one such connection. This new trail would serve the growing area in the East Sunnyside-Whiskey Ridge Subarea. The pedestrian systems plan also provides a system of local connectors to the proposed Whiskey Ridge Trail. Another trail connection at 152nd Street NE is also identified.

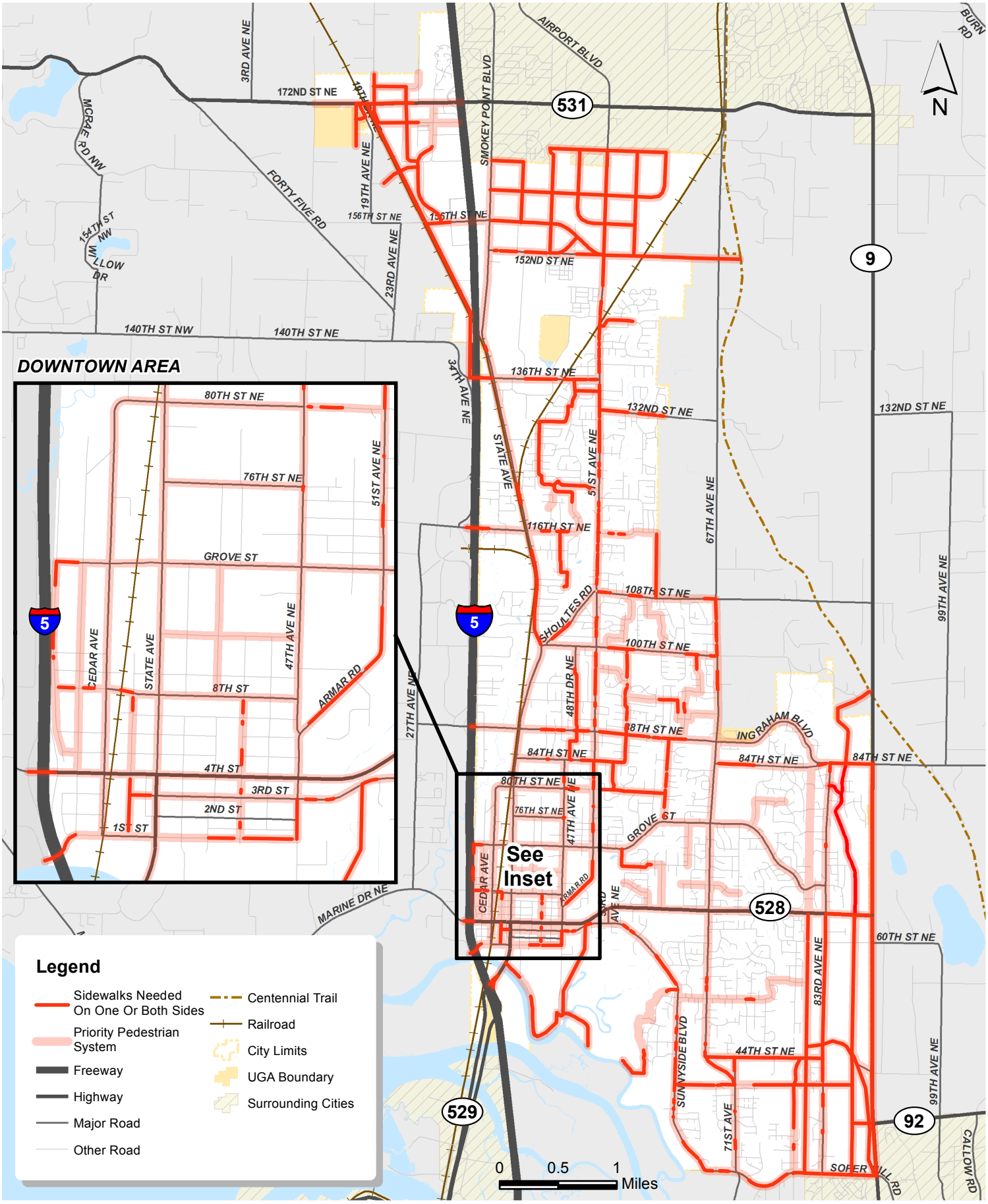
The City should identify a timeline and secure funding for completions of an Americans with Disabilities Act (ADA) Title II Self-Assessment and Transition Plan. The Federal Highway Administration (FHWA) and the Department of Justice (DOJ) have emphasized the importance of compliance with ADA Title II compliance over the last few years. There are segments of substandard sidewalks and curb ramps within the City that would not be included in planned roadway projects. A Transition Plan is required for establishing policies and priorities and identifying programs to address any deficiencies in a comprehensive manner.

### 4.2.2 Bicycle Systems Plan

Figure 15 shows the planned bicycle system plan for Marysville and the surrounding areas. The bicycle system plan, when completed will provide comprehensive network of attractive bicycle facilities between the City's residential neighborhoods, the transit system, employment areas, schools, and parks.

The bicycle facilities will include multiuse trails, bike lanes, buffered bike lanes, bike routes, and bicycle boulevards on lower volume roadways. Road shoulders and shared lane markings are appropriate bike facilities in the adjacent rural areas. Specific improvements for each corridor are identified, however project level planning and engineering studies are still required to determine feasibility on a project by project basis.

As shown on Figure 15, bicycle facilities would be along most key arterials, excluding State Avenue and parts of 88th Street NE due to high vehicle and truck volumes and limited right-of-way. Key investment priorities include completion of short gaps in the existing bike lane system, construction of continuous bike lanes along 51st Avenue NE and bicycle boulevards which provides alternatives to arterials, connecting neighborhoods to destinations like schools and parks.




# Priority Pedestrian System Plan

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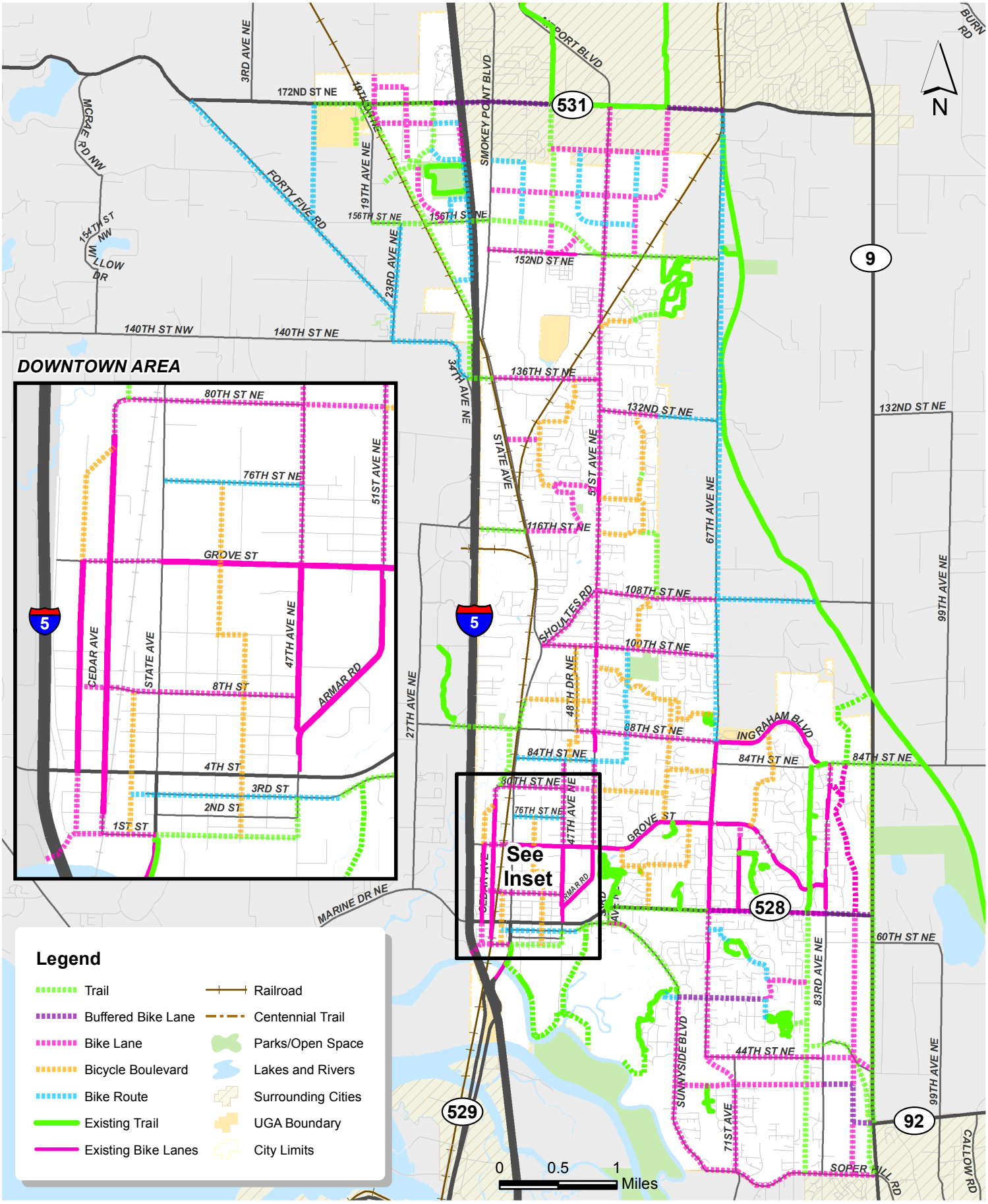
FIGURE **14**




# Bicycle System Plan

*City of Marysville Transportation Element 2015*

transpogroup

FIGURE
**15**

## 4.3 Transit and Transportation Demand Management

In order to provide a comprehensive transportation system, the City of Marysville recognizes the importance of transit and transportation demand management (TDM) programs. In general, these programs build on regional programs with some refinements to reflect the specific needs of the City.

### 4.3.1 Transit

Transit service in the Marysville area is provided by Community Transit. Community Transit has an adopted six-year Transit Development Plan (TDP) for the period 2015 to 2020. The TDP provides a framework to guide Community Transit's service delivery through the next six years. The City should continue to work with Community Transit to improve transit services and develop a convenient, integrated and efficient transit system that supports future growth.

#### *Future Transit Service*

Due to the recession and the associated reduction of sales tax revenue, many of the service improvement previously identified have not occurred. Community Transit's 6-year TDP identifies a variety of investments targeted at bringing back service. The restoration of Sunday service on the 202, 222 and 240 is scheduled to occur in June of 2015. Additional service hour have been forecasted however how those resources will be invested has not been determined yet. Additional service along the SR 9 corridor is identified as a key priority. In addition, as the Lakewood and Whiskey Ridge areas see growth, demand for transit services associated with these areas will grow.

### 4.3.2 Transportation Demand Management (TDM) Program

In addition to improving the transit system, expansion of existing TDM programs are recommended to reduce the overall amount of travel by single-occupancy vehicles within the City. TDM programs are coordinated with regional agencies such as Snohomish County, Community Transit and PSRC.

The City of Marysville has adopted a Commute Trip Reduction (CTR) plan (see Chapter 11.52 of the Municipal Code). The plan establishes goals consistent with the state legislation (RCW 70.94.521) and focuses on major employers located in the city. Strategies focus on transit incentives, ridesharing services, parking management and work scheduling.

- Transit Incentives – Employers can provide free or reduced-rate transit passes to all employees.
- Ridesharing - Employers can develop and maintain a database of home addresses to facilitate carpool and vanpool matching between employees working on the same site. Employers can also provide financial incentives or reserved parking spaces for carpool and vanpool vehicles.
- Flexible Work Schedules – Flexible work hour schedules allow employees to adjust start/end times to accommodate carpools, vanpools, or transit options. Alternative work schedules can also be used to reduce the number of days an employee commutes during peak travel periods. These programs help reduce the need for adding capacity to highways and arterials, and reduce the levels of peak hour congestion.

- Telecommuting – The use of telecommunications technology can allow some employees to work from home, reducing the need for travel to and from a work site for some work days.
- Secured Bicycle Parking and Showers – Secured bicycle parking could be provided in the vicinity of major employment centers, preferably in a covered, weather-protected area. Shower facilities at work sites are also desirable to encourage commuting by bicycle.

## 4.4 Transportation Improvement Projects and Programs

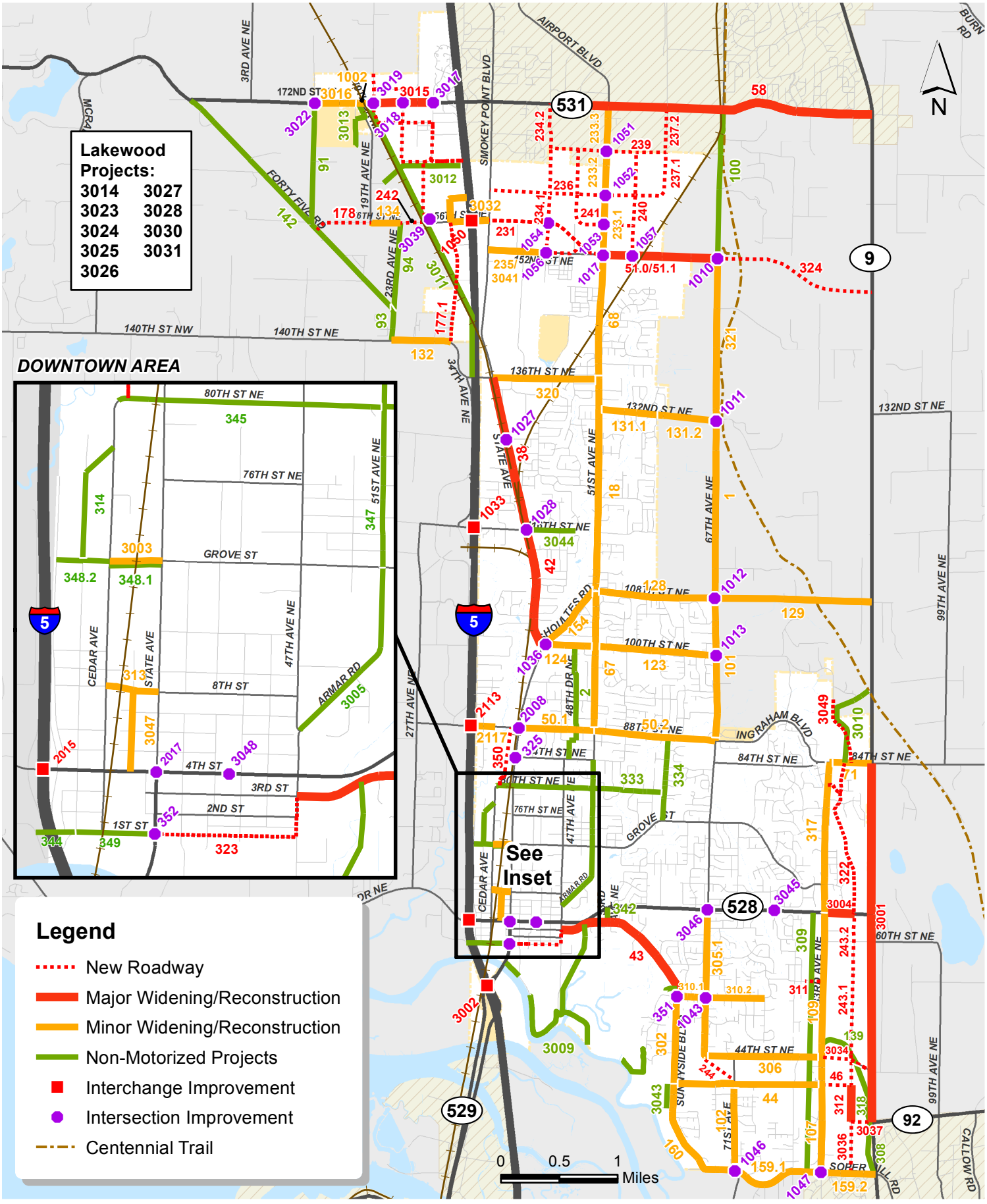
The City has identified a comprehensive list of multimodal transportation system improvement projects and programs. The multimodal improvement projects address transportation needs within the existing City limits. It also identifies improvement projects within the City's unincorporated UGA needed to serve future growth within the area as it is annexed. Improvements under other jurisdictions include previously identified projects as well as potential improvements identified by the City of Marysville. The City will continue to coordinate with the other agencies in their transportation planning efforts to facilitate development of a comprehensive transportation system for the City and surrounding communities. Figure 16 shows a map of the projects. The projects were categorized as follows (and shown in Tables 8 to 20):

- **Programs** (Table 8) – The City has an extensive maintenance and operations (M&O) program to preserve the various components of the transportation system. The M&O program covers general administration, roadway and storm drainage maintenance, street lighting, sidewalk maintenance and constructing traffic signals and signs, street cleaning, and safety programs. Also includes a program to enhance traffic signal operations through implementation of an Intelligent Transportation System (ITS) program for the City.
- **Interchange** (Table 9) – includes construction of new or modifying existing interchanges with I-5.
- **Intersection** (Table 10) – upgrading an intersection through addition of turn lanes and/or modification of traffic controls (traffic signal, stop signs, etc.).
- **Major Widening** (Table 11) – widening an existing corridor to add through travel lanes and turn lanes to increase capacity. Appropriate non-motorized improvements would be incorporated.
- **Minor Widening and Reconstruction** (Tables 12, 13, 14, and 15) – reconstructing and upgrading roadways to serve higher traffic volumes and non-motorized travel. May include addition of turn lanes at intersections or construction of a center, two-way left-turn lane.
- **New Construction** (Tables 16, 17, and 18) – constructing a new arterial or collector road, including appropriate non-motorized facilities.
- **Non-motorized Improvements** (Tables 19 and 20) – projects that primarily focus on upgrading or completing bicycle and/or pedestrian facilities.

Each of the projects have been assigned a likely timing horizon of short-range (2015-2020), mid-range (2021-2026), and long-range (2027-2035). The timing blends the relative priority of each project with the likely timing to be able to fund, design, and construct an improvement

project. For example, while constructing a new interchange at I-5/156th Street NE is a high priority, it is not reasonable to be funded and constructed by 2021 based on current funding programs. The timing horizon also takes into consideration the availability of funding, which is presented in the next section of the Transportation Element.

Planning level cost estimates were prepared for each project under the jurisdiction of the City of Marysville. The planning level cost estimates are based on typical unit costs for different project types. The cost estimates also account for potential right-of-way acquisition, and engineering design. Costs of specific needs such as a bridge or major power lines are also incorporated, at a planning level. All of the cost estimates are reported in 2015 dollars.




# Transportation Improvement Projects

FIGURE **16**

*City of Marysville Transportation Element 2015*

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**Table 8. City-Wide Programs**

| ID | Program Name | Program Description |
|---|---|---|
| 330 | Operations/Maintenance | Operations/Maintenance Program |
| 332 | Transit | Support implementation of Community Transit service |
| 339 | Intelligent Transportation System Program | Implement Intelligent Transportation Systems Program to improve signal coordination and management, transit signal priority, roadway monitoring and response, ITS device management, and data collection. |
| 3006 | Bicycle Program | Citywide bicycle projects not including in other capital projects.<br>- Trails (see pedestrian program)<br>- Buffered Bike Lanes (2.9 miles)<br>- Bike Lanes (5.9 miles)<br>- Bicycle Boulevards (12.4 miles)<br>- Bike Routes (4.2 miles) |
| 3007 | Pedestrian Program | Citywide pedestrian projects not included in other capital projects<br>- Trails (3.6 miles)<br>- SR2S Sidewalks (6.1 miles)<br>- Other Sidewalks (3.0 miles) |
| 3008 | Safety Program | Program to improve safety at spot locations |

**Table 9. Interchange Projects**

| ID | Project Name | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 1033 | 116th St NE & I-5 Ramps | Construct single-point urban interchange (SPUI). | Other Agency |
| 3002 | SR 529 & I-5 Ramps | Add new ramp from SB SR 529 to SB I-5, and new ramp from NB I-5 to NB SR 529 | Other Agency |
| | ***MID-RANGE*** | | |
| 1050 | 156th St NE & I-5 Ramps | Construct single-point urban interchange (SPUI). Upgrade 156th St NE to 6-7 lane roadway near interchange. At Smokey Point Blvd/156th St NE intersection, provide two NB left-turn lanes and separate EB and SB right-turn lanes. | Other Agency |
| 2015 | SR 528 (4th St) & I-5 Ramps | City Center Access Project. Widen SR 528 under I-5 to six lanes: Three WB lanes (through lane, shared through-left lane, and left-turn lane) and three EB lanes (two through lanes and left-turn lane). Add EB right-turn lane and SB left-turn lane to the SB Ramp intersection. Add northbound left-turn lane to NB Ramp intersection. | Other Agency |
| | ***LONG-RANGE*** | | |
| 2113 | 88th St NE & I-5 Ramps | Construct single-point urban interchange (SPUI); | Other Agency |

**Table 10. Intersection Projects**

| ID | Project Name | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 352 | City Center Access Improvement Projects | Extend EB left-turn lane at SR 528/State Ave NE intersection. Add EB left-turn lane and NB right-turn lane at the State Ave/1st St intersection. | $500,000 |
| 1028 | State Ave / 116th St NE | Modify traffic signal; add second WB through lane, and extend EB right-turn lane. Add SB right-turn lane and overlap phase. | $1,810,000 |
| 2017 | SR 528 / State Ave | Modify turn radius | $1,110,00 |
| 3017 | 172nd St NE / 27th Ave NE | Modify signal operations with U-turn restrictions. | Other Agency |
| 3018 | 172nd St NE / 23rd Ave NE | Construct two-lane roundabout. | $2,000,000 |
| 3045 | SR 528 / 76th Ave NE | Add traffic signal when warranted. | $500,000 |
| 3046 | SR 528 / 67th Ave NE | Increase northwest corner radius for truck movements. | $250,000 |
| 3048 | SR 528 / Alder Ave | Add pedestrian beacon/signal between Alder Ave and Quinn Ave. | $300,000 |
| | ***MID-RANGE*** | | |
| 325 | State Ave / 84th St NE | Add west leg to intersection, including rail crossing. Install signal and close adjacent rail crossings. | Developer |
| 1010 | 152nd St NE / 67th Ave NE | Add turn lane(s) and traffic signal when warranted. | Other Agency |
| 1011 | 67th Ave NE / 132nd St NE | Add turn lane(s) and traffic signal when warranted. | Other Agency |
| 1017 | 152nd St NE / 51st Ave NE | Add turn lane(s) and traffic signal when warranted. | $1,570,000 |
| 1047 | Soper Hill Rd / 83rd Ave NE | Add turn lane(s) and traffic signal when warranted. | Other Agency |
| 2008 | State Ave / 88th St NE | Improvements still to be defined. | $950,000 |
| 3017.2 | 172nd St NE / 27th Ave NE (Phase 2) | Minor modifications to the traffic signal | Other Agency |
| 3022 | 172nd St NE / 11th Ave NE | Construct one-lane roundabout | $1,500,000 |
| | ***LONG-RANGE*** | | |
| 351 | Sunnyside Blvd / 52nd St NE | Add turn lane(s) and traffic signal when warranted. | $1,580,000 |
| 1012 | 67th Ave NE / 108th St NE | Add turn lane(s) and traffic signal when warranted. | $1,180,000 |
| 1013 | 67th Ave NE / 100th St NE | Add turn lane(s) and traffic signal when warranted. | $400,000 |
| 1027 | State Avenue / 128th St NE | Add turn lane(s) on east leg. | $650,000 |
| 1036 | State Ave / 100th St NE / Shoultes Rd | Improve operations at these tightly spaced intersections. Improvements still to be defined. | $4,500,000 |
| 1043 | 67th Ave NE / 52nd St NE | Add turn lane(s) and traffic signal when warranted. | $590,000 |
| 1046 | Sunnyside Blvd / Soper Hill Rd | Add turn lane(s) and traffic signal when warranted. | $1,690,000 |
| 1051 | 51st Ave NE / 164th St NE | Add turn lane(s) and traffic signal when warranted. | $1,390,000 |
| 1052 | 51st Ave NE / 160th St NE | Add turn lane(s) and traffic signal when warranted. | $1,390,000 |
| 1053 | 51st Ave NE / 157th St NE | Add turn lane(s) and traffic signal when warranted. | $1,390,000 |
| 1054 | 156th St NE / 43rd Ave NE | Add turn lane(s) and traffic signal when warranted. | $1,410,000 |
| 1056 | 152nd St NE / 43rd Ave NE | Add turn lane(s) and traffic signal when warranted. | $1,220,000 |
| 1057 | 152nd St NE / 54/55th Ave NE | Add turn lane(s) and traffic signal when warranted. | $1,190,000 |
| 3039 | 156th St NE / 27th Ave NE | Construct two-lane roundabout | $2,000,000 |

**Table 11. Major Widening Projects**

| ID | Project Name (Project Extents) | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 38 | State Avenue (116th St NE to 136th St NE) | Widen to 4/5 lane arterial including sidewalks. | $3,500,000 |
| 42 | State Avenue (100th St NE to 116th St NE) | Widen to 4/5 lane arterial including sidewalks (both sides, project extent) and significant utility relocation. Build new culvert over Quilceda Creek. | $10,480,000 |
| 3015 | 172nd St NE (27th Ave NE to 19th Ave NE) | Widen roadway to 4/5 lane arterial with 20 ft planted buffer and multiuse trails (both sides, project extent). | $8,560,000 |
| | ***MID-RANGE*** | | |
| 312 | 87th Ave NE (35th St NE to 40th St NE) | Reconstruct 4/5 lane arterial including, sidewalks (both sides, full length) and buffered bike lanes (both sides, full extent). | $6,650,000 |
| | ***LONG-RANGE*** | | |
| 43 | Sunnyside Blvd (47th Ave NE to south of 52nd St NE) | Widen to 4/5 lane arterial including sidewalks and multiuse trail. Include traffic control and intersection geometry improvements where needed. | $18,350,000 |
| 51.0 | 152nd St NE (51st Ave to City Limits) | Widen to 4/5 lane arterial including sidewalks and multiuse trail | $7,930,000 |
| 51.1 | 152nd St NE (City Limits to 67th Ave NE) | Widen to 4/5 lane arterial including sidewalks and multiuse trail | Other Agency |
| 58 | SR 531 (1,300 feet west of 43rd Ave NE to SR 9) | Widen to 4/5 lane arterial including sidewalks (both sides, project extent) and buffered bike lanes (both sides, project extent) | Other Agency |
| 3001 | SR 9 (SR 92 to 84th St NE) | Widen to 4/5 lanes and provide multiuse trail (one side, project extent). SR 528 intersection to be expanded. Project not currently on WSDOT or PSRC project lists. | Other Agency |
| 3004 | SR 528 (83rd Ave NE to 87th Ave NE) | Widen to 4/5 lanes including sidewalks (both sides, project extent) and buffered bike lanes (both sides, project extent). | $4,900,000 |

**Table 12. Reconstruction or Minor Widening Projects (North Marysville – West of I-5)**

| ID | Project Name (Project Extents) | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 3032 | 156th St NE Route Improvements (Smokey Point Blvd and Twin Lakes Ave) | Improve 156th St NE bridge access by increasing turn radii, eliminating stop signs for primary travel pattern, signal modifications that reduce turning delays and sign as bike route. | $520,000 |
| | ***LONG-RANGE*** | | |
| 132 | 140th St NE (23rd Ave NE to 31st Ave NE) | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | Other Agency |
| 134 | 156th St NE (19th Ave NE to 23rd Ave NE) | Reconstruct 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent). | Other Agency |
| 1002 | 172nd St NE (19th Ave NE to 16th Dr NE) | Construct new traffic signal at 16th Dr NE, new two-lane roundabout at 19th Ave NE, and intersection improvements at 19th Dr NE (per Lakewood Subarea Plan) | $3,240,000 |
| 3014 | 19th Ave NE (172nd to North City Limits) | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent). | $2,190,000 |
| 3016 | 172nd St NE (19th Ave NE to 11th Ave NE) | Reconstruct and widen to a 2/3 lane roadways including multiuse trail. At 16th Dr NE intersection, add turn lane(s) and traffic signal when warranted. At 19th Dr NE intersection, upgrade intersection to urban standards and restrict NB to WB turn movements. | $3,290,000 |

**Table 13. Reconstruction or Minor Widening Projects (North Marysville – East of I-5)**

| ID | Project Name (Project Extents) | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 235 | 152nd St NE (Smokey Point Blvd to 43rd Ave NE) | Reconstruct to urban arterial standards including sidewalks (both sides, project extent) and bike lanes (both sides, project extent). | Developer |
| 3041 | 152nd St NE (Smokey Point Blvd to 51st Ave NE) | Shoulder widening | $125,000 |
| | ***MID-RANGE*** | | |
| 233.2 | 51st Ave NE (160th St NE to City Limits) | Construct 3 lane arterial including sidewalks (both side, full length) and buffered bike lanes (both side, full length). Provide right-turn lanes at major intersections. | $3,680,000 |
| 233.3 | 51st Ave NE (City Limits to SR 531) | Widen to 3 lane arterial including sidewalks (both sides, project extent) and buffered bike lanes (both sides, project extent). Provide right-turn lanes at major intersections. | Other Agency |
| | ***LONG-RANGE*** | | |
| 1 | 67th Ave NE (108th St NE to 132nd St NE) | Reconstruct and widen to 2/3 lane arterial including bike route and pedestrian facilities. | Other Agency |
| 18 | 51st Ave NE (108th St NE to 136th St NE) | Reconstruct and widen to 2/3 lane arterial including bike lanes and sidewalks. | $16,740,000 |
| 68 | 51st Ave NE (136th St NE to 152nd St NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent). | $9,500,000 |
| 131.1 | 132nd St NE (51st Ave to City Limits) | Reconstruct to urban arterial standards including sidewalks and bike lanes (both sides, project extent). | $3,590,000 |
| 131.2 | 132nd St NE (City Limits to 67th Ave NE) | Reconstruct to rural arterial standards including bicycle and pedestrian facilities. | Other Agency |
| 233.1 | 51st Ave NE (152nd St NE to 160th St NE) | Construct 3 lane arterial including sidewalks (both side, full length) and buffered bike lanes (both side, full length). Provide right-turn lanes at major intersections. | $6,200,000 |
| 320 | 136th Street (State Ave to 51st Ave) | Reconstruct and widen to 2/3 lane arterial including sidewalk and bike lanes (both sides, project extent). | $5,410,000 |
| 321 | 67th Ave (152nd Street to 132nd St NE) | Reconstruct and widen to 2/3 lane arterial including bike route and pedestrian facilities. | Other Agency |

**Table 14. Reconstruction or Minor Widening Projects (Central Marysville)**

| ID | Project Name (Project Extents) | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 50.1 | 88th St NE (State Ave to 51st Ave) | Widen to 2/3 lane arterial including sidewalks and parallel bike facilities along 84th St NE, 92nd St NE, and State Ave (bike route, bike boulevard, multi-use trail). | $7,950,000 |
| 313 | 8th Street (Cedar Ave to State Ave) | Reconstruct and widen to 2/3 lane arterial including sidewalks and bike lanes. | $1,240,000 |
| 2117 | 88th St NE (36th Ave NE to NB I-5 on-ramp) | Add new WB lane (right-turn drop lane). | $1,900,000 |
| | ***MID-RANGE*** | | |
| 71 | 84th St NE (83rd Ave NE to SR 9) | Widen to 3 lane arterial. Construct multi-use trail. | $2,090,000 |
| | ***LONG-RANGE*** | | |
| 50.2 | 88th St NE (51st Ave NE to 67th Ave NE) | Widen to 2/3 lanes including sidewalks and bike lanes. | $12,490,000 |
| 67 | 51st Ave NE (88th St NE to 108th St NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks and bike lanes. | $9,030,000 |
| 101 | 67th Ave NE (88th St NE to 108th St NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike routes (both sides, project extent). | $6,850,000 |
| 123 | 100th St NE (51st Ave NE to 67th Ave NE) | Reconstruct to urban arterial standards including sidewalks and bike lanes (both sides, project extent). | $5,530,000 |
| 124 | 100th St NE (Shoultes Rd to 51st Ave NE) | Reconstruct to urban arterial standards including sidewalks and bike lanes (both sides, project extent). | $1,990,000 |
| 128 | 108th St NE (51st Ave NE to 67th Ave NE) | Reconstruct to urban arterial standards including sidewalks and bike lanes (both sides, project extent). | $5,130,000 |
| 129 | 108th St NE (67th Ave NE to SR 9) | Reconstruct to rural arterial standards including bicycle and pedestrian facilities. | Other Agency |
| 154 | Shoultes Rd (100th St NE to 108th St NE) | Reconstruct to urban arterial standards including sidewalks and bike lanes (both sides, project extent). | $4,820,000 |
| 3003 | Grove St RR Undercrossing (State St to Cedar Ave) | Add grade-separate roadway crossing under the railroad. | $19,910,000 |

**Table 15. Reconstruction or Minor Widening Projects (Southeast Marysville)**

| ID | Project Name (Project Extents) | Project Description | Project Cost |
|---|---|---|---|
| | ***MID-RANGE*** | | |
| 44 | 40th St NE (Sunnyside Blvd to 83rd Ave NE) | Reconstruct and widen to 2/3 lanes, and construct missing segments for 2/3 lane arterial including sidewalks and bike lanes (both sides, full extent). | $13,100,000 |
| 109 | 83rd Ave NE (SR 528 to 40th St NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks. | Developer |
| 159.2 | Soper Hill Rd (83rd Ave NE to SR 9) | Reconstruct and widen to 2/3 lane arterial including sidewalks and bike lanes (both sides, project extent). | Other Agency |
| 317 | 83rd Ave NE (SR 528 to 84th St NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks and bike lanes. | Developer |
| | ***LONG-RANGE*** | | |
| 102 | 71st Ave NE (Sunnyside Blvd / Soper Hill Road to 40th St NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks and bike lanes (both sides, project extent). | $4,810,000 |
| 107 | 83rd Ave NE (40th St NE to Soper Hill Rd) | Reconstruct and widen to 2/3 lane arterial including sidewalks. | Developer |
| 159.1 | Soper Hill Rd (71st Ave NE to 83rd Ave NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks) and bike lanes (both sides, project extent). | $7,680,000 |
| 160 | Sunnyside Blvd (71st Ave NE to 40th St) | Reconstruct and widen to 2/3 lane arterial including sidewalks and bike lanes (both sides, project extent). | $8,860,000 |
| 302 | Sunnyside Blvd (South of 52nd Ave NE to 40th St) | Reconstruct and widen 2/3 lane arterial including sidewalks and bike lanes (both sides, full extent). | $5,620,000 |
| 305.1 | 67th Ave NE (44th St NE to SR 528) | Reconstruct and widen 2/3 lane arterial including sidewalks and bike lanes (5,700). | $7,660,000 |
| 306 | 44th St NE (67th Ave NE to 83rd Ave NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent). | $7,460,000 |
| 310.1 | 52nd St NE (Sunnyside Blvd to 67th St NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks and buffered bike lanes. | $1,220,000 |
| 310.2 | 52nd St NE (67th Ave NE to 75th Ave NE) | Reconstruct and widen to 2/3 lane arterial including sidewalks and buffered bike lanes. | Developer |

**Table 16. New Roadway Projects (North Marysville – West of I-5)**

| ID | Project Name (Project Extents) | Project Descriptions | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 3023 | 174th St NE<br>(21st Ave NE to Railroad ) | Construct 2/3 lane arterial with sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | Developer |
| 3026 | 27th Ave NE<br>(169th Pl NE to 25th Ave NE) | Construct 2/3 lane arterial with sidewalks (one side, project extent) and multiuse trail (one side, project extent) | $2,150,000 |
| 3027 | 23th Ave NE<br>(172nd St NE to 23rd Ave NE) | Construct 2/3 lane arterial with sidewalks, bike lanes and multiuse trail | $13,880,000 |
| 3031 | 169th Pl NE<br>(27th Ave NE to Twin Lakes Ave) | Construct 2/3 lane arterial with sidewalks (both sides, project extent) and bike routes (both sides, project extent) | Developer |
| | ***MID-RANGE*** | | |
| 3028 | 25th Ave NE<br>(164th St NE to 156th St NE) | Construct 2/3 lane arterial with sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $9,320,000 |
| | ***LONG-RANGE*** | | |
| 177.1 | 27th Ave NE Extension<br>(140th St NE to 156th St NE) | Construct 2/3 lane arterial | $28,010,000 |
| 178 | 156th St NE<br>(11th Ave NE to 19th Ave NE) | Construct 2/3 lane arterial | Other Agency |
| 242 | 156th St NE Extension<br>(27th Ave NE to 23rd Ave NE) | Construct 2/3 lane arterial including sidewalks (one side, project extent) and multiuse trail (one side, project extent). Includes new grade separated crossing of railroad tracks. | $12,330,000 |
| 3024 | 19th Ave NE/ 169th Pl<br>(172nd St NE to 27th Ave NE) | Construct 2/3 lane arterial with sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $9,320,000 |

**Table 17. New Roadway Projects (North Marysville – East of I-5)**

| ID | Project Name (Project Extents) | Project Descriptions | Project Cost |
|---|---|---|---|
| | ***MID-RANGE*** | | |
| 234.1 | 43rd Ave NE (152nd St NE to City Limits) | Construct 2/3 lane arterial for Smokey Point Master Plan. Including sidewalks, bike lanes, and multiuse trail. | Developer |
| 234.2 | 43rd Ave NE (City Limits to SR 531) | Construct 2/3 lane arterial for Smokey Point Master Plan. Specific alignments to be determined. | Developer & Other Agency |
| 236 | 160th St NE (Smokey Point Blvd to 59th Ave NE) | Construct 2/3 lane arterial for Smokey Point Master Plan. Specific alignments to be determined. Includes sidewalks (both sides, project extent) and Bike lanes (both sides, project extent). | Developer |
| 237.1 | 59th Ave NE (160th St NE to City Limits) | Construct 2/3 lane arterial for Smokey Point Master Plan. Specific alignments to be determined. Includes sidewalks (both sides, project extent) and Bike lanes (both sides, project extent). | Developer |
| 237.2 | 59th Ave NE (City Limits to SR 531) | Construct 2/3 lane arterial for Smokey Point Master Plan. Specific alignments to be determined. | Developer & Other Agency |
| 239 | 164th Street NE (43rd Ave NE to 59th Ave NE) | Construct 2/3 lane arterial for Smokey Point Master Plan. Specific alignments to be determined. Includes sidewalks (both sides, project extent) and Bike lanes (both sides, project extent). | Developer |
| 240 | 54th/55th Ave NE (152nd St NE to 164th NE) | Construct 2/3 lane arterial for Smokey Point Master Plan. Specific alignments to be determined. Includes sidewalks (both sides, project extent), bike route, and bike lanes. See Project #239. | Developer |
| 241 | 47th Ave NE and 157th St NE (164th St NE to 54/55th Ave NE) | Construct 2/3 lane arterial for Smokey Point Master Plan. Specific alignments to be determined. Includes sidewalks (both sides, project extent) and bike routes (both sides, project extent). See Projects #238 and #240. | Developer |
| | ***LONG-RANGE*** | | |
| 231 | 156th/152nd St Connector (Smokey Point Blvd/156th St NE to 51st St NE/152nd St NE) | Construct 4/5 lane arterial including sidewalks (one side, full length) and a multiuse trail (one side, full length). Includes new connector to 152nd St NE to the west at about 47th Ave NE. | $18,440,000 |
| 324 | 152nd St NE (67th Ave NE to SR 9) | ROW preservation for 3 lane arterial. | Other Agency |

**Table 18. New Roadway Projects (Central and Southeast Marysville)**

| ID | Project Name (Project Extents) | Project Descriptions | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 3049 | 87th Ave NE (84th St NE to 98th St NE) | Construct 2/3 lane arterial. | Developer |
| | ***MID-RANGE*** | | |
| 46 | 40th St NE (83rd Ave NE to 87th Ave NE) | Construct 4/5 lane arterial including multi-use trail. | $18,000,000 |
| 243.1 | 87th Ave NE (40th St NE to 60th St NE) | Construct 2/3 lane arterial including parking (both sides), sidewalks (both sides, full length) and bike lanes (both sides, full extent). | Developer |
| 243.2 | 87th Ave NE (60th St NE to SR 528) | Construct 2/3 lane arterial including sidewalks (both sides, full length) and bike lanes (both sides, full extent). | Developer |
| 350 | 38th Dr NE (80th St NE to 88th St NE) | Developer project. Construct connector including sidewalks one side, project extent) and multiuse trail (one side, project extent). | Developer |
| 3037 | 35th St NE (87th Ave NE to SR 9) | Construct 4/5 lane arterial including sidewalks (both sides, project extent) and buffered bike lanes (both sides, project extent). Requires expansion of SR 9/SR 92 intersection. | $4,550,000 |
| | ***LONG-RANGE*** | | |
| 244 | 67th Ave Connector (67th Ave NE/44th St NE to 71st Ave NE/40th St NE) | Construct 2/3 lane arterial including sidewalks (both sides, full length) and bike lanes (both sides, full extent). | $6,170,000 |
| 311 | 54th St/55th Pl (83rd Ave to Whiskey Ridge Trail) | Connector with sidewalks (both sides, project extent), bike lanes (both sides, project extent). | Developer |
| 318 | 44th St NE/East Sunnyside School Rd/42nd St NE (87th Ave NE to SR 9) | Construct 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent). | $4,110,000 |
| 322 | 87th Ave NE (SR 528 to 83rd Ave NE) | Construct 2/3 lane arterial including bike lanes (both sides, project extent) and sidewalks (both sides, project extent). | Developer |
| 323 | Downtown Bypass (State Ave/1st St to 47th Ave/Sunnyside Blvd) | Construct 3 lane arterial including pedestrian facilities. Follows 1st St straight east until 47th, then north on 47th until 3rd, then right to Sunnyside. Design of 3rd St/47th Ave NE intersection may be roundabout and/or may restrict all movements from west leg. | $14,520,000 |
| 3034 | 44th Street (83rd Ave NE to 87th Ave NE) | Construct 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent). | Developer |
| 3036 | 87th Ave NE (Soper Hill Rd to 35th St NE) | Construct 2/3 lane arterial including sidewalks (both sides, full length) and bike lanes (both sides, full extent). | Developer |

**Table 19. Non-Motorized Improvement Projects (North Marysville)**

| ID | Project Name (Project Extents) | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 3025 | 27th Ave NE (172nd St NE to 169th Pl NE) | Construct multiuse trail (one side, project extent) | Developer |
| | ***MID-RANGE*** | | |
| 3013 | Lakewood School Trail (172nd St NE to English Crossing Elementary) | Construct multiuse trail | $480,000 |
| | ***LONG-RANGE*** | | |
| 91 | 11th Ave NE (Forty Five Road to SR 531) | Construct shoulders for pedestrian and bicycle use. | Other Agency |
| 93 | 23rd Ave NE (140th St NE to Forty Five Rd) | Construct shoulders for pedestrian and bicycle use. | Other Agency |
| 94 | 23rd Ave NE (156th St NE to Forty Five Rd) | Construct shoulders for pedestrian and bicycle use. | Other Agency |
| 100 | 67th Ave NE (152nd St NE to Arlington City Limits) | Modify to include bike route and pedestrian facilities. | Other Agency |
| 142 | Forty Five Rd (23rd Ave NE to SR 531) | Construct shoulders for pedestrian and bicycle use. | Other Agency |
| 3011 | Lakewood Railroad Trail (172nd St to 136th Ave NE) | Construct multiuse trail | $2,950,000 |
| 3012 | Twins Lake Park Railroad Crossing (Twin Lake Ave to 161st Pl NE) | Construct multiuse trail crossing of railroad corridor. | $460,000 |
| 3030 | Twin Lakes Ave (169th Pl NE to 164th St NE) | Restripe roadways to include bike lanes through removal of the two-way left turn lanes. | $110,000 |

**Table 20. Non-Motorized Improvement Projects (Central and Southeast Marysville)**

| ID | Project Name (Project Extents) | Project Description | Project Cost |
|---|---|---|---|
| | ***SHORT-RANGE*** | | |
| 347 | 51st Ave NE (84th St NE to Grove St) | Construct sidewalks on both sides of road and bike lanes | $5,670,000 |
| 348.1 | Grove St (State Ave to Cedar Ave) | Construct continuous sidewalk along one side of roadway. Construct bike lane. | $1,790,000 |
| 3005 | Armar Rd (Grove St to 47th Ave NE) | Construct sidewalks on both sides of road | $3,260,000 |
| 3010 | Bayview Trail (84th St NE to Centennial Trail ) | Construct multiuse trail connection to Centennial Trail. | $500,000 |
| 3043 | Sunnyside Blvd (40th St NE to 36th St NE) | Add sidewalk | $350,000 |
| 3044 | 116th St NE (east of State Ave to 47th DR NE) | Add sidewalk | $450,000 |
| | ***MID-RANGE*** | | |
| 342 | 53rd Ave NE (SR 528 to 61st St NE) | Construct multiuse trail (one side, project extent) | $150,000 |
| | ***LONG-RANGE*** | | |
| 2 | 47/48th Dr NE (84th St NE to 100th St NE) | Construct sidewalk and bicycle boulevard. | $2,470,000 |
| 139 | Sunnyside School Road (83rd Ave NE to 87th Ave NE) | Convert roadway into multiuse trail | $25,000 |
| 308 | Densmore Rd/Sunnyside School Rd (87th Ave NE to Soper Hill Rd) | Convert roadway into multiuse trail | $500,000 |
| 309 | Bayview Trail (Soper Hill Rd to SR 528) | Construct multiuse trail along PSE Corridor (approximately 80th St NE) | $3,510,000 |
| 314 | Beach Ave (Grove St to Cedar Ave) | Construct sidewalk (both sides, project extent) and bike boulevard (both sides, project extent) | $1,990,000 |
| 333 | 80th St NE (51st Ave NE to 60th Dr NE) | Develop into bicycle boulevard with multiuse trail connection from 59th Ave NE to 60th Dr NE. No vehicular connection included. | $4,170,000 |
| 334 | 60th Dr NE (Grove St to 88th St NE) | Construct bicycle boulevard | $1,320,000 |
| 344 | 60th Pl NE (1st/Ash to West of I-5) | Coordinate with Tulalip Tribes to construction bicycle lanes under I-5. | $160,000 |
| 345 | 80th St NE (Cedar Ave to 51st Ave NE) | Construct sidewalks and bike lanes | $7,840,000 |
| 348.2 | Grove St (Cedar Ave to Ash Ave) | Construct continuous sidewalk along one side of roadway. Construct bike lane from Cedar Ave to Beach Ave. | $1,010,000 |
| 349 | 1st Street (State Ave to Ash Ave) | Construct bike lanes from State Ave to Ash Ave. | $110,000 |
| 3009 | Ebey Waterfront Trail (1st St to 58th Dr NE) | Construct multiuse trail | $700,000 |
| 3047 | Delta Ave Woonerf (4th St to 8th St) | Reconstruct street to Woonerf. Add pedestrian signal crossing at SR 528 (See Downtown Master Plan). | $2,610,000 |

# Chapter 5. Financing Program

The multimodal improvement projects and programs provide the blueprint for improving the transportation system to meet existing and future travel demands in and around the City of Marysville. Like most communities, the costs of the desired transportation system improvements and programs will exceed the available revenues. The financing program presented in this section is intended to provide a framework for decisions on which projects and programs are funded and when they may be able to be built. A summary of the estimated costs of the transportation projects and program is presented and compared to estimated revenues for implementing the projects and programs. The financing program also includes a discussion of options for additional funding to help implement the projects and programs over the life of the plan.

## 5.1 Project and Program Costs

Table 21 summarizes the costs of the recommended transportation improvement projects and programs. These cover capital improvements, maintenance and operations, and bond debt services. The costs are summarized for the short-range (2015-2020), mid-range (2020-2026), and long-range (2027-2035) time periods based on the project timelines presented in Tables 8 to 20. The cost summary includes projects identified within the City of Marysville's jurisdiction. The project and program costs are presented in constant 2015 dollars.

**Table 21. Transportation Project and Program Costs (2015-2035)**

| | Short-Range Costs[1] (2015-2020) | Mid-Range Costs[1] (2021-2026) | Long-Range Costs[1] (2027-2035) | Total Costs[1] (2015-2035) |
|---|---|---|---|---|
| Capital Projects | $91,001 | $204,065 | $368,509 | $663,575 |
| Maintenance & Ops | $35,250 | $38,310 | $65,730 | $139,290 |
| Bond Debt Service[2] | $10,390 | $9,560 | $3,570 | $23,520 |
| **Total** | **$136,641** | **$251,935** | **$437,809** | **$826,385** |

Sources: City of Marysville, Transpo Group
1. All costs in $1,000s of 2015 Dollars
2. Includes principal and interest costs between 2015 and2035 for three previously issued transportation bonds.

Planning level cost estimates were developed for the capital improvements presented in the Transportation Systems Plan section of the Transportation Element. Cost estimates were prepared based upon average unit costs for recent transportation projects within the City. They include estimates for engineering design, right-of-way, and construction costs. More detailed costs of individual projects will be developed as the improvements are programmed for design and implementation. The final costs will fluctuate from the planning level estimates, but they provide a reasonable basis for the financing plan of the Transportation Element.

Maintenance and operations (M & O) programs cover street overlays and other miscellaneous sidewalk and safety improvement programs on City streets. The M & O costs were projected based on recent expenditures and the 2015 City budgets. A 1.8 percent annual growth rate was applied between 2016 and 2035 to account for expected population growth.

The debt service category covers the remaining principal and interest on bonds that the City issued to help fund several transportation projects. Issuance of new bonds in the future is not

currently anticipated. Bonds do not add revenues, but simply allow the City to advance the timeline for key projects. Bond expenditures include total outstanding balance (principal and interests) as of 2015. The projects that are partially funded with bonds include:

- State Avenue
- I-5/156th Street NE Overcrossing
- SR 9/SR 92 Break-in Access
- Other street construction projects

A total of roughly $664 million (in 2015 dollars) would be needed to fully fund the capital improvements under the jurisdiction of the City of Marysville. Other projects under the jurisdiction or lead of WSDOT, Snohomish County or the City of Arlington would be needed as part of this plan but are not included in the City's financial analysis. The costs of these projects would be in addition to the City's.

In addition to capital costs, annual maintenance and operations programs result in nearly $140 million between 2015 and 2035. Paying off existing bonds adds another $23.5 million to the transportation system costs from 2015 to 2035. Combined, the 2015-2035 Transportation Element would require approximately $826 million in 2015 dollars.

## 5.2 Revenue Projections

Funding sources for transportation projects include various fees and tax revenues, grants, bonds, developer contributions and traffic impact fees. The estimates were based on revenues allocated to transportation funding during the last five years and discussions with City staff. Estimates of potential revenues from each source were projected for two scenarios. The TRENDS scenario generally reflects recent growth trends in the City's revenues, population and employment. This likely represents a conservative assessment of available revenues from these sources. The HIGH scenario applies a higher growth rate to existing revenues to estimate future funding compared to the TRENDS scenario. The higher growth rate is based on the revised 2035 household and employment forecasts used in preparing the travel forecasts for the Transportation Element. The HIGH scenario does not represent the maximum funding that could be generated, but provides a less conservative projection for the long-range planning horizon than the TRENDS scenario.

Table 22 summarizes projected revenues for the TRENDS and HIGH scenarios. Based on these assumptions, the City would generate almost $368 million (in 2015 dollars) over the life of the plan under the TRENDS scenario. This would increase to $479 million under the HIGH scenario. The assumptions and results for each group of funding sources are presented below.

**Table 22. Transportation Funding Revenue Projections (2015-2035)**

| Revenue Source | TRENDS Scenario Total[1] | HIGH Scenario Total[1] |
|---|---|---|
| Real Estate Excise Tax (REET) | $37,870 | $42,100 |
| Sales & Use Taxes | 0 | 0 |
| Motor Vehicle Fuel Tax (MVFT) | 32,070 | 35,650 |
| Miscellaneous | 38,600 | 38,600 |
| Grants | 24,140 | 43,080 |
| Bonds | 0 | 0 |
| Transportation Benefit District (TBD) | 53,020 | 58,940 |
| Traffic Impact Fees (TIF) | 19,860 | 97,630 |
| Developer Construction | 162,718 | 162,718 |
| **Total** | **$368,278** | **$478,718** |

Sources: City of Marysville, Transpo Group
1. All revenues in $1,000s of 2015 Dollars

## 5.2.1 Tax Revenues

The City currently directs revenues from two primary tax funds toward transportation improvements and programs. These are Real Estate Excise Taxes (REET) and Motor Vehicle Fuel Taxes (MVFT). The 2008 Transportation Element also assumed that sales and use taxes (SUT) would continue to be used by the City to help fund transportation projects and programs. Between 2004 and 2010 the City had directed an average of $1.3 million per year of SUT revenues toward funding transportation projects and programs. In 2011, the City discontinued directly allocating SUT to transportation. This was, in part, due to the recession in the late 2000s which reduced the total SUT collections.

During the recession, REET revenues directed by the City to transportation declined dramatically from an average of $1.7 million per year between 2004 and 2009 to an average of $850,000 between 2010 and 2012. In 2013 and 2014, the City directed $1.3 million and $1.7 million of REET revenues to transportation projects and programs, respectively. The 2015 budget is for $1.5 million in REET revenues for transportation projects.

MVFT collections in the City increased from approximately $800,000 in 2009 to $1.1 -$1.3 million per year between 2010 and 2014. The large increase is directly related to the major annexation that the City completed in 2009. The annexation added approximately 20,000 residents to the City bringing the population to about 57,000 residents.

Under the TRENDS scenario, the combined REET and MVFT funds are projected to generate approximately $70 million in revenues between 2015 and 2035 (in 2015 dollars). The TRENDS projections presented in Table 22 are based on increasing the City's 2015 budgeted revenues by the forecast annual population growth rate assumed in the travel demand forecasts (1.8 percent per year). The City may see higher or lower growth in the annual REET revenues depending on the actual real estate transactions in the City and the City's share of state fuel taxes. The HIGH revenue projection assumes that the REET and MVFT revenues will increase at a higher rate (2.8 percent per year) based on the 2015-2035 forecast growth in household and employment used in developing the 2015 Transportation Element. Under the HIGH scenario the REET and MVFT could generate up to $80 million in tax for transportation projects through 2035.

### 5.2.2 Miscellaneous

In addition to the above tax revenues, the City directs other funding toward transportation improvements and programs. These miscellaneous funds include items such as inspection fees, a portion of stormwater management fees related to street work, and some general fund revenues for transportation. Using the average of approximately $1.8 million per year in transportation funding from miscellaneous revenues between 2010 and 2015, these funds are estimated to generate $38.6 million over the life of the plan, in 2015 dollars. This value is assumed for both the TRENDS and HIGH scenarios.

### 5.2.3 Grants

The City has successfully secured grants for transportation projects. Between 2004 and 2015, the City has secured an average of $1.8 million per year in various transportation grants. This average increased to $1.9 million per year between 2010 and 2015. The TRENDS analysis assumes that the City will only receive grants at the rate of one-half the recent historical rate, or $950,000 per year. Under the HIGH scenario prior the revenue projections assume that the City will receive grants, on average, at $1.9 million per year. This would result in $20-$25 million (in 2015 dollars) in funding by 2035. Both the TRENDS and the HIGH scenario also include the City's anticipated grant revenue of $5.2 million as noted in its budget for 2015. The TRENDS forecast results in $24 million and the HIGH scenario results in approximately $43 million in grant revenues between 2015 and 2035.

Funding through grants is tied to specific programs and types of projects. Several grant programs target transportation projects that support regional economic growth, mobility, and other travel models. Many of the projects identified in the Transportation Systems Plan support regional needs and would likely be eligible for some grant funding.

The Surface Transportation Program (STP) is one of the most flexible federal grant programs. STP funding can be used for highway and bridge projects, transit capital projects, and funding for bicycle, pedestrian, and recreational trail improvements. They also can be used for public transportation capital improvements, car and vanpool projects, fringe and corridor parking facilities, and inter-city or intra-city bus terminals and bus facilities. STP funds also can be applied to surface transportation planning activities, wetland mitigation, transit research and development, and environmental analysis. STP funds also can be used for transportation control measures.

The Congestion Mitigation and Air Quality (CMAQ) program is a federally funded program administered through the Puget Sound Regional Council (PSRC). CMAQ funds projects and programs in air quality non-attainment and maintenance areas, which reduce transportation related emission. CMAQ grants cannot be used to fund general purpose roadway projects.

The State Transportation Improvement Board (TIB) currently provides funding for urban areas in Washington through three grant programs:

- **Urban Arterial Program (UAP)** – funds projects that address safety, growth & development, physical condition and mobility.
- **Urban Sidewalk Program (SP)** - provides funding for sidewalk projects that improve safety and connectivity.

- **Arterial Preservation Program (APP)** - provides assistance for roadway paving/overlays for cities/agencies with less than $2 billion assessed valuation. Marysville exceeds the maximum assed valuation criteria and therefore, is not eligible for this program.

The TIB projects are selected on a competitive basis. Each of the three programs has distinct criteria to rank the projects for funding. Once selected, TIB staff stays involved through grant oversight and helping bring projects to completion.

WSDOT administers various grants which fund non-motorized transportation improvements. The Safe Routes to Schools Program funds projects which are targeted at reducing collisions between vehicular and non-motorized road users and improving the accessibilities of schools to children on foot or bike. The WSDOT Pedestrian and Bicycle Program funds projects which promote healthy living through active transportation, improves non-motorized user safety, reduces vehicular travel, and has community support

### 5.2.4 Bonds

Bonds do not result in additional revenues, but allow the City to fund and construct projects earlier than they would be able to under their current revenue options. The interest on these bonds results in increased costs, as shown in Table 21.

The City of Marysville has issued bonds for funding public transportation projects. Two transportation bond packages that are will have debt service and principal payments being paid back were issued in 2007. These bonds cover funding for improvements to State Avenue, the 156th Street NE overcrossing of I-5, the SR 9/SR 92 break-in-access to support the Sunnyside Subarea Plan, and other street projects. In 2013, the City issued bonds for funding additional improvements along State Avenue.

Although the City does not anticipate issuing new bonds in the near future, it remains an option available for accelerating funding some of the capital improvement projects included in this Transportation Element over the life of the plan. However, use of bonds would add to the total cost of the improvements due to interest.

### 5.2.5 Traffic Impact Fees

The Growth Management Act (GMA) allows agencies to develop and implement a traffic impact fee (TIF) program to help fund some of the costs of transportation facilities needed to accommodate growth. State law (Chapter 82.02 RCW) requires that TIFs be:

- Related to improvements to serve new developments and not existing deficiencies
- Assessed proportional to the impacts of new developments
- Allocated for improvements that reasonably benefit new development
- Spent on facilities identified in the Capital Facilities Plan.

The City of Marysville has adopted a transportation impact fee program defined in Chapter 22D.030 (Traffic Impact Fees and Mitigation) of the City's Municipal Code. As part of the 2008 Transportation Element, the City updated the TIF based on the revised transportation improvement projects and cost estimates, and the anticipated growth through 2035. The maximum TIF rate was calculated at $6,800 per net-new PM peak hour trip generated. The

City adjusted the maximum trip rate based on other tax revenues and also adopted a discount. These resulted in a residential fee of $6,300 per PM peak hour and a commercial rate of $2,220 per PM peak hour trip. In July 2012, the City adjusted the fees to $5,300 (residential) and $1,870 (commercial), a 16 percent reduction. The reduction expires in July 2015, at which time the prior rates per new PM peak hour trip of $6,300 (residential) and $2,220 (commercial) will be in place.

As part of the 2015 Transportation Element, the traffic impact fee program calculation was updated to reflect the revised growth forecasts and impact fee project costs. The updated methodology and findings are described in more detail in Appendix A (Traffic Impact Fees) of this Transportation Element. Appendix A identifies the specific improvement projects and costs included in the TIF. The new maximum rate was calculated to be $6,881 per net-new PM peak hour trip generated. This is within the maximum allowable difference from the previous rate so no changes are needed in City ordinances to account for this change.

The range of potential impact fee revenues from the impact fee program is based on both the historical data (for the TRENDS) and the forecast growth (HIGH scenario). The impact fees for the TRENDS scenario are based on the 2015 budget estimate of $800,000 per year, increased by 1.8% per year through 2035. The 2015 budget estimate reflects the average revenues from TIF funds between 2010 and 2015. This would generate approximately $20 million in funding between 2015 and 2035.

Applying the 2015 impact fee rates that will be in place in late July 2015 of $6,300 for residential and $2,220 for commercial trip ends to the forecast housing and employment growth could generate up to $97 million in TIF revenues between 2015 and 2035. This is nearly $78 million greater than the estimate based on extrapolating the City's budget projection for 2015 by forecast population growth. The actual TIF revenues will be directly tied to the level of growth that occurs. The TIF allows the City to better match funding for growth-related improvements to the pace of growth.

The City will not actually collect all of the TIF funds because developers will be asked to construct some of the projects. Where a developer is conditioned to construct all or a portion of a TIF project, the City will provide credits, consistent with GMA requirements.

### 5.2.6 Developer Commitments

The City also implements its transportation improvements by requiring developers to construct frontage improvements, to mitigate their traffic impacts pursuant to the State Environmental Policy Act (SEPA), and/or to meet concurrency requirements. The City requires developments to fund and construct certain roadway improvements as part of their projects. These typically include constructing abutting local streets and arterials to meet the City's design standards. These improvements can include widening of pavement, drainage improvements, curbs, gutters, bicycle facilities and sidewalks.

The City evaluates impacts of development projects under SEPA. The SEPA review may identify adverse transportation impacts that require mitigation. These could include impacts related to safety, traffic operations, non-motorized travel, transit access, or other transportation issues. Many of these developer-funded improvements are also identified as specific projects in the Transportation Element or as part of the circulation roadways.

Per GMA, the City requires an evaluation of transportation concurrency for development projects. The concurrency evaluation may identify impacts that make the facilities operate below the City's level of service standard. To resolve any deficiencies, the applicant can propose to fund and/or construct improvements to provide an adequate level of service. Alternatively, the applicant may decide to wait for the City, another agency, or another developer to fund and/or construct the needed improvements.

Several of the projects identified in the Transportation Element would be totally or partially funded by developer contributions exclusive of the TIF program. The plan identifies several new arterials and collectors that will be primarily constructed as part of adjacent developments. These would not be part of the TIF program. Table 22 estimates that $163 million of improvements would be funded through developer construction, exclusive of the TIF program under either the TRENDS or HIGH scenarios.

### 5.2.7 Transportation Benefit District

The 2008 Transportation Element identified the formation of a Transportation Benefit District (TBD) as an option for helping fund transportation projects and programs. In December 2013, the City Council voted to create a citywide TBD. The TBD Board is comprised of the City Council. The Board put forth a ballot measure in April 2014 to enact a 0.2% increase in the sales tax collected in the City to fund transportation projects for 10 years. The TBD sales tax was approved by the voters. The TBD will be dissolved when all of the indebtedness of the district, and all of the district's responsibilities have been met; however, the TBD will need to be dissolved within 20-years of the adoption date, unless the City Council takes further action to extend it. This would occur in 2034.

The TBD funding would be used to fund specific projects related to street pavement preservation projects located throughout the City. In addition, the TBD revenues will be used to fund several specific sidewalk and roadway shoulder improvement projects. The City has identified $2.1 million in TBD funding for the projects in its 2015 budget. For the TRENDS forecasts of TBD revenues, the 2015 budget was increased by 1.8 percent per year through 2035 based on projected population growth rate. The HIGH funding projection applies a 2.8 percent annual increase in TBD funding based on the combined forecasted growth rate of households and employment used in the travel demand model.

### 5.2.8 Other Agency Funding

The City of Marysville will need to continue to partner with WSDOT, Snohomish County, City of Arlington, City of Lake Stevens and Tulalip Tribes to fund and implement projects identified in the Transportation Element. Funding of improvements along I-5 and SR 9 are expected to come mostly from WSDOT. A major new project that the City is currently working with WSDOT is the addition of new ramps to/from the north at SR 529 and I-5. The City has prepared a Draft Interchange Justification Report (IJR) in cooperation with WSDOT for this improvement project. In addition, the City has identified construction of a full interchange with I-5 at the 156th Street NE overcrossing that the City constructed since the 2008 Transportation Element was adopted; the interchange was identified in the 2008 Transportation Element. Also consistent with the 2008 Transportation Element are improvements at three existing interchanges along I-5 (at SR 528, 88th Street, 116th Street and 156th Street). All of these interchange improvements (and the new interchanges) are being considered for funding by the state legislature during the 2015 session. The 2015 Transportation Element also identifies improvement projects along SR 9 that would be under the jurisdiction of WSDOT.

The City will need to continue to partner with Snohomish County, adjacent cities and the Tulalip Tribes to fund other transportation projects that benefit this part of the region. One strategy for partnering would be Interlocal Agreements with these agencies on impact fees or other possible funding mechanisms.

## 5.3 Financing Strategy

As noted in Table 21, in order to fully fund the transportation improvement projects and programs, the City would need approximately $826 million (in 2015 dollars) between 2015 and 2035. The TRENDS and HIGH funding scenarios result in approximately $368 to $479 million (in 2015 dollars) in revenues or developer funding for the same time period, respectively. This would be a shortfall of $347 to $458 million (in 2015 dollars) over the life of the plan.

### 5.3.1 Time Horizon Analyses

As discussed in the Transportation Systems Plan section, each project has been assigned to a relative time period for implementation. The time period analysis takes into account the relative project priority, availability of funding, and proximity to forecast growth throughout the City. Table 23 summarizes the allocation of project and program costs for each of the three time horizons as presented in Tables 8 to 20:

- Short-range (2015-2020)
- Mid-range (2021-2026)
- Long-range (2027-2035)

Table 23 also allocates the forecast revenues and developer funding to the three time periods. Forecast revenues from each of the funding sources are evenly spread over the 21-year planning period, with one exception. The funding associated with developer construction of non-impact fee projects has been matched with the project timing. If a developer constructs the improvement in a different time horizon, both the revenues and the costs would shift to the other time period. This would not significantly affect the City's financial strategy.

**Table 23. Financing Summary by Planning Time Horizon**

| | Short-Range[1] (2015-2020) | Mid-Range[1] (2021-2026) | Long-Range[1] (2027-2035) | Total[1] (2015-2035) |
|---|---|---|---|---|
| **A. Projected Revenues[1,2]** | | | | |
| TRENDS Scenario | $69,530 | $188,350 | $110,398 | $368,278 |
| HIGH Scenario | 101,130 | 219,950 | 157,638 | 478,718 |
| **B. Total Project and Program Costs[1,3]** | | | | |
| Total Costs | 136,641 | 251,935 | 251,935 | 826,385 |
| **C. Difference (A minus B)[1,4]** | | | | |
| TRENDS Scenario | (67,111) | (63,585) | (327,411) | (458,107) |
| HIGH Scenario | (35,511) | (31,985) | (280,171) | (347,667) |

Sources: City of Marysville, Transpo Group
1. All costs in $1,000s of 2015 Dollars
2. From Table 21
3. From Table 22
4. Subtract project and program costs from project revenues; parenthesis denotes funding deficit.

The shortfall in funding under either the TRENDS or HIGH scenarios would primarily affect the ability of the City to fund additional capital improvements during the next six years. The City is obligated to fund its debt service requirement to bond holders. The City also is committed to funding the maintenance and operations programs needed to preserve the integrity, safety, and efficiency of its existing transportation system. In addition, the TBD will fund the preservation and sidewalk/shoulder improvements identified in the voter approved package.

The most critical part of the funding program is the short-range time period. These improvements are focused on addressing existing deficiencies and safety issues. Furthermore, some of these improvements will add capacity needed to maintain the City's LOS standards to meet concurrency requirements for the next several years.

As shown in Table 23, the revenues in the short-range time horizon (2015-2020) will be approximately $36 to $67 million less than the total costs. The City will seek additional funding to close the gap between short-range revenues and costs. These could include seeking additional grants, joint agency funding, formation of local improvement districts (LIDs), or additional SEPA mitigation/frontage improvements for development projects. The City also could consider reducing the adjustments to its TIF rates to generate additional revenues. If additional funding is not secured, the City could construct some of the projects in phases to help defer costs to beyond 2020. The City also could modify project level designs to help reduce costs.

Revenues for the mid-range horizon (2021-2026) are $32 to $64 million less than the identified project costs for that 6-year period. The City can implement similar strategies for these projects as described for the short-range horizon. It is likely that several key projects identified for the mid-range time horizon will be deferred to beyond 2026, unless significant new or expanded funding sources are identified. The success of programs to shift travel to other modes also can reduce, or delay, the needs for some of the improvements. If development occurs at a slower rate than anticipated in the 2035 travel forecast, some of these capacity and arterial upgrade improvements also will not be needed as soon. Furthermore, the City may simply defer these improvements until funding is available.

The long-range (2026-2035) funding program is projected to have a deficit of $280 to $327 million. This deficit would increase if projects are delayed from the short- and mid-range time horizons. The City will have a better idea of actual growth and impact fee revenues and potential additional revenues from state funding packages. Projects may be dropped, or delayed, in the plan. The City also could shift more of the costs to development projects.

The City has decided to keep the improvement projects that would not be funded with the existing revenues in the Transportation Element so they could be included as part of development projects or future funding strategies.

### 5.3.2 Reassessment Strategy

Although the financing summary recognizes the potential for a $350 to $460 million (in 2015 dollars) shortfall over the life of the plan, the City is committed to reassessing their transportation needs and funding sources each year as part of its Six-Year Transportation Improvement Program (TIP). This allows the City to match the financing program with the short term improvement projects and funding. The plan also includes goals and policies to

periodically review land use growth, adopted level of service standards, and funding sources to ensure they support one another and meet concurrency requirement.

In order to implement the Transportation Element, the City will consider the following principals in its transportation funding program:

- As part of the development of the annual Six-Year Transportation Improvement Program, the City will balance improvement costs with available revenues;
- Review project design standards to determine whether costs could be reduced through reasonable changes in scope or deviations from design standards;
- Fund improvements or require developer improvements as they become necessary to maintain LOS standards to meet concurrency;
- Explore ways to obtain more developer contributions to fund the improvements;
- Coordinate and partner with WSDOT, Tulalip Tribes, Snohomish County and local cities and vigorously pursue grants from state and federal agencies to fund and implement improvements to I-5 and SR 9.
- Work with Snohomish County to develop multi-agency grant applications for projects that serve growth in the City and its UGA;
- Review funding strategy to see if the transportation impact fees should be revised to account for the updated capital improvement project list and revised project cost estimates;
- If the actions above are not sufficient, the City could consider changes in its level of service standards and/or possibly limit the rate of growth in the City as part of future updates of its Comprehensive Plan;
- Lower priority projects in the Transportation Element may be slid to beyond 2035 or deleted from the program.

The City of Marysville will use the annual update of the Six-Year Transportation Improvement Program (TIP) to re-evaluate priorities and timing of projects. Throughout the planning period, projects will be completed and priorities will be revised. This will be accomplished by annually reviewing traffic growth and the location and intensity of land use growth in the City and the UGA. The City will then be able to direct funding to areas that are most impacted by growth or to arterials that may fall below the City's level of service (LOS) standards. The development of the TIP will be an ongoing process over the life of the Plan and will be reviewed and amended annually.

# Chapter 6. Goal and Policies

The overall goal of the City of Marysville Transportation Element is:

> *"The City will have a safe, cleaner, integrated, sustainable, and highly efficient multimodal transportation system that supports the City land use plan and regional growth strategy and promotes economic and environmental vitality and improves public health."*

The following policies provide guidance in implementing the plan. The policies build from State requirements, the regional Vision 2040 policies, Snohomish County's Countywide Planning Policies, and City of Marysville objectives. They are organized into the following categories:

- Transportation System Efficiency and Safety
- Public Involvement and Agency Coordination
- Land Use and Economic Development
- Mobility Options
- Sustainable Transportation Systems and the Environment
- Levels of Service Standards and Concurrency Program
- Financing and Implementation

## 6.1 Transportation System Efficiency and Safety

Policy T-1: Maintain and operate the transportation system to provide safe, efficient, and reliable movement of people, goods, and services using a variety of travel modes.

Policy T-2: Protect the investment in the existing system and lower overall life-cycle costs through effective maintenance and preservation programs.

Policy T-3: Maintain and improve the safety of the transportation system for all travel modes.

Policy T-4: Reduce the need for new capital improvements through investments in operations, demand management strategies, and system management activities that improve the efficiency of the current system.

Policy T-5: Implement an Intelligent Transportation System (ITS) along the City's principal arterials and accesses to the regional highway system to enhance the efficiency of the City's transportation system. The City's ITS should be coordinated with other agencies to assure compatibility and reduce operational costs.

Policy T-6: Strategically expand capacity and increase efficiency of the transportation system to move goods, services, and people to and from, and within the City and its urban growth

area. Focus on investments that produce the greatest net benefits to people and minimize the environmental impacts of transportation.

Policy T-7: Construct transportation improvements based on adopted design standards, by roadway function, to meet the multimodal needs of the City. Allow variances to the standards when it is not practical or cost-effective to meet the standards, as determined by the Director of Public Works.

Policy T-8: Apply access management practices to arterials to improve the safety and operational efficiency of the system.

Policy T-9: Ensure the freight system meets the needs of regional and local distribution.

Policy T-10: Work with WSDOT, Community Transit, and other agencies to ensure compatibility of traffic signal timing to improve efficiency of travel.

## 6.2 Public Involvement and Agency Coordination

Policy T-11: Encourage and solicit public participation from transportation advocacy groups, such as Healthy Communities, in the planning, design, and implementation of a multimodal transportation system.

Policy T-12: Work with WSDOT and other stakeholders to improve multimodal access to the regional highway system.

Policy T-13: Coordinate the planning, implementation, and operation of a safe and efficient multimodal transportation system with stakeholders including WSDOT, PSRC, Snohomish County, neighboring cities and counties, the Tulalip Tribes, and transit providers.

## 6.3 Land Use and Economic Development

Policy T-14: Give funding priority to transportation improvements that serve growth centers and manufacturing and industrial centers, as allocated by the Regional Growth Strategy.

Policy T-15: Prioritize investments in transportation facilities and services that support compact, pedestrian- and transit-oriented densities and development.

Policy T-16: Make transportation investments that improve economic and living conditions so that industries and skilled workers continue to be retained and attracted to the region.

Policy T-17: Maintain and improve the existing freight transportation system to increase reliability and efficiency and to prevent degradation of freight mobility.

Policy T-18: Coordinate with the railroads and trucking industry to improve the safety and efficiency of freight movement and reduce the impacts on other travel modes. Coordinate planning with railroad capacity expansion plans and support capacity expansion that is compatible with local plans.

Policy T-19: Implement grade-separated railroad crossings at Grove Street and to work with others to get a grade-separated railroad crossing at 156th Street NE (west of freeway) into County.

Policy T-20: Apply livable urban design principles for growth centers and transit areas.

Policy T-21: Implement transportation programs and projects in ways that prevent or minimize negative impacts to low income, minority, and special needs populations.

Policy T-22: Continue to review and update the City's truck route plan to help assure efficient truck routing to/from the freeway system and major destinations and minimizing the impacts on neighborhoods.

## 6.4 Mobility Options

Policy T-23: Protect the investment in the existing and future street system and associated facilities (e.g., sidewalks, transit stops, landscaping) through an ongoing street maintenance and preservation program as well as incorporating the concept of "Complete Streets" as supported by the National Complete Streets Coalition.

Policy T-24: Identify a timeline and secure funding for completion of an Americans with Disabilities Act (ADA) Title II Self-Assessment and Transition Plan.

Policy T-25: Promote and incorporate bicycle and pedestrian travel as important modes of transportation by providing facilities and reliable connections.

Policy T-26:Continue to upgrade and enhance the non-motorized system based on appropriate design criteria to encourage walking and bicycling as a safe and efficient mobility option for all-ages.

Policy T-27: Improve local street patterns – including their design and how they are used – for walking, bicycling, and transit use to enhance communities, accessibility, connectivity, and physical activity.

Policy T-28:Support pedestrian and bicyclist education and safety programs such as Safe Routes to Schools and Healthy Communities.

Policy T-29:Encourage the connection of streets when considering subdivision or street improvement proposals, unless topographic or environmental constraints would prevent it. Limit the use of cul-de-sacs, dead-end streets, loops, and other designs that form barriers in the community. Recognize that increasing roadway and non-motorized connections can reduce traffic congestion and increase neighborhood unity.

Policy T-30: Ensure mobility choices for people with special transportation needs, including persons with disabilities, the elderly, the young, and low-income populations.

Policy T-31:Work with Community Transit to expand transit and paratransit service to/from and within the City.

Policy T-31:Coordinate with Community Transit and other jurisdictions on Commute Trip Reduction programs for major employers in Marysville and the region. Monitor and expand on program to meet the goals and requirements of the Commute Trip Reduction Act.

Policy T-32: Work with Community Transit, WSDOT, and other stakeholders to locate, construct and operate transit centers, Park & Ride and park-and-pool lots.

## 6.5 Sustainable Transportation Systems and the Environment

Policy T-33: Design transportation facilities to fit within the context of the built or natural environments in which they are located.

Policy T-34: Develop a system that encourages active transportation and minimizes negative impacts to human health and promotes a healthy community.

Policy T-35: Support implementation of transportation modes and technologies that reduce pollution and greenhouse gas emissions and improve system performance.

Policy T-36: Protect the transportation system against disaster, develop prevention and recovery strategies, and plan for coordinated responses. Develop and coordinate prevention and recovery strategies and disaster response plans with state, regional, and local agencies to protect against major disruptions to the transportation system.

Policy T-37: Identify and preserve rights-of-way for future transportation system needs.

## 6.6 Level of Service Standards and Concurrency

Policy T-38: Establish concurrency standards for the City based on the Level of Service of intersecting arterials and signalized intersections during weekday PM peak hour per the latest version of the Highway Capacity Manual (HCM), Transportation Research Board.

Policy T-39:Set the acceptable level of service (LOS) for signalized intersections and intersections of two (or more) arterials as follows:

- LOS E mitigated for:
    - SR 529/State Avenue/Smokey Point Boulevard within the City of Marysville
    - 4th Street/64th Street NE (SR 528) within the City
    - 88th Street NE (east of I-5 to 67th Avenue)
- LOS D for:
    - All other intersections of two or more arterials within the City

Policy T-40:Set the acceptable level of service (LOS) for unsignalized intersections as follows:

LOS D. However, on a case-by-case basis the City may allow the level of service for traffic movements from the minor street at a two-way, stop controlled intersection to operate below the adopted standard if the Public Works Director (or designee) determines that no significant safety or operational impact will result.

Policy T-41: Implement a transportation concurrency management program consistent with the six (6) year horizons of GMA and the City TIP to ensure adequate transportation facilities are concurrent with development.

Policy T-42: Monitor travel speeds along key corridors to support project development, priorities, and reporting (but not for concurrency purposes).

Policy T-43: Consider establishing a multimodal level of service standard.

## 6.7 Financing and Implementation

Policy T-44 Develop the annual Six-Year Transportation Improvement Program (TIP) so it is financially feasible, leverages available City funding, and is consistent with the Comprehensive Plan.

Policy T-45: Pursue grants for funding a range of multimodal transportation improvements.

Policy T-46: Ensure growth mitigates its impacts through payment of transportation impact fees, State Environmental Policy Act (SEPA) conditions, concurrency, and other development regulations.

Policy T-47: Partner with other agencies to fund regional transportation improvement projects needed to serve the City.

Policy T-48: Work with adjoining agencies to mitigate development traffic impacts that cross jurisdictional boundaries.

Policy T-49: Support use of Local Improvement Districts (LID) or other public/private funding for upgrading existing transportation facilities.

Policy T-50: Maintain a transportation database to measure operations and safety, of the transportation system for use in defining improvement projects and priorities.

Policy T-51: Continue to follow the reassessment strategy identified in the Transportation Element if funding falls short.

# Appendix A:
# Traffic Impact Fee (TIF) Methodology

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# APPENDIX A: Traffic Impact Fees (TIF)

The City of Marysville has adopted a transportation impact fee program defined in Chapter 18B (Traffic Impact Fees and Mitigation) of the City's Municipal Code. The ordinance was updated in May 2007 to revise the calculation of the City's traffic impact fees resulting from changes in the 2008 Capital Facilities Plan.

A detailed update of the traffic impact fee program was prepared based on the 2015 Transportation Element of the Comprehensive Plan. The forecast year for the Transportation Element was set at 2035. The long-range horizon year allows the City to better plan for and size transportation facilities that will be needed as the City grows.

The TIF analysis included the following steps:

1. Identify growth-related improvement projects and eligible TIF costs
2. Define TIF service area(s)
3. Calculate potential maximum TIF rates
4. Apply adjustments to the rate to reflect differences in taxes paid by commercial versus residential development and policy direction from the City Council.

## Growth-Related Improvement Projects and TIF Costs

Under GMA, the impact fees can be imposed upon new development for public facilities needed to serve new growth. The impact fees' improvements must be reasonably related to the new development. The resulting fees should represent a proportionate share of the costs of the facilities and must be used on facilities that reasonably benefit the new development.

GMA allows the impact fee program to include future growth-related improvements. It also allows for inclusion of costs for previously constructed improvements to the extent the projects serve growth.

The following summarizes the projects and costs included in the City of Marysville 2015 TIF program.

### 2015 Transportation Element Growth-Related Projects

The list of transportation improvement projects recommended in the 2015 Transportation Element (see Tables 8 to 20) needed to support growth forecasts through 2035 was reviewed to identify the projects eligible for inclusion in the Traffic Impact Fee program. These projects were identified as being needed to support growth in the City, as well as regionally generated traffic. These projects primarily included selected new roadways, major widening projects, minor widening improvements, and intersection improvements needed to provide system capacity and maintain the City's LOS standards. The TIF projects do not include improvements that the City expects to fund through other separate developer contributions (frontage improvements, SEPA mitigation, or concurrency requirement). The TIF projects also do not include improvements that only resolve existing deficiencies, such as constructing a missing segment of a sidewalk or resolving a safety problem.

Attachment 1 presents the transportation improvement projects recommended in the 2015 Transportation Element update that are TIF eligible. The attachment also shows the share of

the project costs that is TIF eligible. They include projects located within the existing City limits and the UGA.

## Previously Completed Growth-Related Transportation Projects

Over the past several years, the City has constructed several growth-related transportation projects. These improvements have been included in the City's previous TIF programs and are included in the 2015 update. Tables A1 and A2 summarizes the improvements and their costs. The combined projects total approximately $82 million.

**Table A1 – Previously Completed TIF Projects and Costs (Prior to 2008)**

| Project | Description | Project Cost[1] |
|---|---|---|
| State Avenue (Ebey Slough to Grove Street) | Widen lanes (12-ft. outside and 11-ft. inside). Move the traffic signal from 5th Street to 6th Street; and remove left-turn lanes at the intersections of 5th Street and 7th Street | $9,500,000 |
| 67th Avenue NE and 84th Street NE | Install traffic signal | $250,000 |
| 116th St NE (I-5 to State Avenue) | Widen to 5 lanes and add a right-turn lane for eastbound traffic | $3,018,000 |
| State Avenue (116th Street NE to 136th Street NE) | Widen to 3 lanes with curb, gutter and sidewalk on west side, and an 8-ft. shoulder on the east side | $7,100,000 |
| **Subtotal** | | **$19,868,000** |

Sources: City of Marysville, Transpo Group
1. Costs from 2008 Transportation Element

**Table A2 – Previously Completed TIF Projects and Costs (2008 to 2015)**

| Project | Description | Project Cost[1] |
|---|---|---|
| Ingraham Blvd (68th Ave NE to 74th Ave NE) | Construct 4/5 lane arterial including bicycle and pedestrian facilities. | $5,585,239 |
| Ingraham Blvd (81st Ave NE to 83rd Ave NE) | Construct 4/5 lane arterial including bicycle and pedestrian facilities. | $2,057,055 |
| Lakewood Triangle Access (Twin Lakes to State Ave) | Construct 4/5 lane arterial including bicycle and pedestrian facilities. Project includes I-5 overcrossing at 156th St NE and connects Twin Lakes Blvd. and State Ave. Project can be built in phases. | $20,169,630 |
| 51st Ave NE (84th St NE to 88th St NE) | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $3,759,265 |
| State Avenue (136th St NE to 152nd St NE) | Widen to 4/5 lane arterial including pedestrian facilities. | $10,781,000 |
| SR 528 (Allen Creek to East of 67th Ave NE) | Widen to 4/5 lane arterial including pedestrian facilities. | $524,000 |
| Ingraham Blvd (74th Ave NE to 81st Ave NE) | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. | $5,250,830 |
| Jennings Park Entrance Improvements (Jennings Park Entrance and 53rd Ave NE/SR 528) | Realign Jennings Park Entrance driveway with 53rd Ave NE, and install traffic signal when warranted. | $464,750 |
| 172nd St NE & 27th Ave NE | Construct turn lane(s) and modify traffic signal. | $1,098,487 |
| 88th St NE & 67th Ave NE | Construct turn lane(s) and modify traffic signal. | $841,789 |
| Grove St & 67th Ave NE | Construct turn lane(s). | $180,534 |
| 88th St NE & 51st Ave NE | Construct turn lanes and install traffic signal when warranted. Short term fixes include the addition of a EB left turn lane and traffic signal. | $1,326,341 |
| 156th St NE & Smokey Point Blvd | Construct turn lane(s) and install traffic signal when warranted. | $1,384,841 |
| 88th St NE & 55th Ave NE | Construct turn lanes and install traffic signal when warranted. Short term fixes include the addition of a EB left turn lane and traffic signal. | $990,288 |
| Grove St & Alder Ave (43rd Ave NE) | Install traffic signal. | $200,000 |
| SR 9 & SR 92 | Construct turn lane(s) and modify traffic signal. (SEE Project 59) | $300,000 |
| SR 528 & 47th Ave NE[3] | Intersection improvements included as part of an associated roadway widening project. | $169,000 |
| 3rd St & 47th Ave NE[3] | Construct turn lane(s) and modify traffic signal. | $521,000 |
| SR 528 & 83rd Ave NE | Construct turn lane(s) and install traffic signal when warranted. | $1,232,221 |
| SR 528 & 87th Ave | Construct turn lane(s) and install traffic signal when warranted. | $1,262,641 |
| 116th St NE & 38th Ave NE | Construct turn lane(s) and modify traffic signal. | $726,404 |
| 108th St NE & 51st Ave NE | Construct turn lane(s) and install traffic signal when warranted. | $1,599,956 |
| **Subtotal** | | **$62,488,271** |

Sources: City of Marysville, Transpo Group

### Debt Service Interest

The City of Marysville has issued three bonds to allow it to advance funding for several growth-related improvements. The interest on these bonds owed by the City is included in the TIF program. The City is paying off three bonds issued in 2003, 2007, and 2013. The total interest due for these two bonds is $8,785,200 as shown on Table A3, is included in the 2015 TIF program.

**Table A3 – Bond Debt Service Summary**

| Bond Year | Total Bond Proceeds | Total Bond Interest |
|---|---|---|
| 2003 | $3,157,500 | $881,900 |
| 2007 | $8,045,000 | $4,435,700 |
| 2013 | $9,005,000 | $3,497,600 |
| **Total** | **$20,207,500** | **$8,785,200** |

Sources: City of Marysville, Transpo Group

### Summary of Impact Fee Eligible Costs

The total maximum potential impact fee funding is summarized in Table A4. The revised TIF program includes $452 million in costs through 2035.

**Table A4 – Summary of Impact Fee Eligible Costs**

| | Traffic Impact Fee Eligible Cost |
|---|---|
| Capital Projects Completed Prior to 2008[1] | $19,868,000 |
| Capital Projects Completed 2008 to 2015 | $62,490,000 |
| Capital Projects (2015 to 2035) | $360,710,000 |
| Bond Debt Service | $8,790,000 |
| **Total** | **$451,858,000** |

Sources: City of Marysville, Transpo Group
1. Cost from 2008 Transportation Element

## Service Areas

As part of the 2008 TIF program update, the City evaluated the option of using multiple service areas for its TIF program. A concept of four districts (three within the City and one for the UGA) was evaluated. The analysis showed that the differences between the maximum allowable fee rates for each district were relatively small (within 25% of the average). It was determined that this range did not justify the application of a multi-service area system. The City and its UGA are considered as a single service area for purposes of the 2015 TIF program calculation.

## Maximum Impact Fee Rates

The travel forecasting model was applied to disaggregate the 2035 travel forecasts into existing traffic and growth-related traffic. The model resulted in a forecast of 35,666 new PM peak hour growth trip ends between 2007 and 2035 for the City and its UGA.

The model was used to separate the growth traffic into trips that have either an origin or destination within the City, versus growth in through traffic. Approximately $245 million of the TIF eligible cost (54.3%) was identified as being related to growth trips that have an origin or destination (or both) within the City or its UGA. Growth in regional traffic through the City and

its UGA accounted for the remaining $206 million (45.7%) of the costs. This reflects the large regional impact of traffic on the Marysville transportation system.

The 2015 Maximum Possible Impact Fee is calculated by dividing the total TIF cost allocation ($245,410,000) by the total new PM peak hour trip ends (35,666), resulting in $6,881 per new PM peak hour growth trip end. The resulting maximum possible impact fee is $6,881 per PM peak hour trip.

## Impact Fee Adjustments

The City has chosen to adjust the maximum impact fee per new PM peak hour trip. Two adjustments are made. First, an adjustment to the TIF fees is made to account for the higher tax revenues generated by commercial properties compared to residential developments. The second adjustment reduces the overall TIFs based on policy direction to decrease the potential cost share for new developments.

### Tax Revenue Differential

In 2005, the City evaluated the relative tax revenues generated by commercial and residential properties within the City. The results showed that commercial properties generated substantially higher taxes for the City compared to residential properties.

The City updated and refined the evaluation as part of the 2008 Traffic Impact Fee Program. The process takes into account total sales taxes, general property taxes, and real estate excise tax (REET) revenues based on the 2008 budget. The revenues of each of these services were allocated to commercial and residential properties. The total tax revenues for commercial and residential properties were then converted to rates per $1,000 in assessed valuation and tax revenues per acreage. The two factors were used because they take into account both developed and undeveloped properties.

Ratios of the commercial and residential tax revenues per $1,000 in assessed valuation and per acre were averaged. The average of the ratios helps balance the impacts of developed and undeveloped properties and the overall higher density of commercial developments.

This process results in a ratio of commercial properties generating 2.84 times the tax revenues of residential properties. To balance this difference, this factor is inverted resulting in the ratio of traffic impact fees for residential development to commercial development being 2.84. Applying this ratio to the $6,800 maximum trip rate per growth PM peak hour trip end (2008 TIF calculation) for residential development results in a commercial impact fee rate of $2,400 per new PM peak hour trip end. Because the 2015 maximum TIF rate of $6,881 is essentially unchanged from the 2008 rate of $6,800, no changes are needed in the relative residential and commercial TIF rates.

### Impact Fee Discount Adjustment

The City has elected to reduce the maximum allowed impact fee of $6,800 for residential and $2,400 for commercial developments. The 2008 discount rate was set at 7 percent, maintaining the residential rate at the 2007 rate of $6,300 per new PM peak hour trip end. This results in the commercial rate being $2,220 per new PM peak hour trip end.

The final proposed impact fee rates based on the 2015 program are:

- Residential $6,300 per new PM peak hour trip end
- Commercial $2,220 per new PM peak hour trip end

Attachment 1
Completed Projects (2008 Costs)

| Map ID | Project Name | Project Limits | Project Description | 2008 Project Cost | 2008 TIF Cost |
|---|---|---|---|---|---|
| 45.1 | Ingraham Blvd | 68th Ave NE to 74th Ave NE | Construct 4/5 lane arterial including bicycle and pedestrian facilities. | $5,585,239 | $5,585,239 |
| 45.3 | Ingraham Blvd | 81st Ave NE to 83rd Ave NE | Construct 4/5 lane arterial including bicycle and pedestrian facilities. | $2,057,055 | $2,057,055 |
| 48 | Lakewood Triangle Access | Twin Lakes to State Ave | Construct 4/5 lane arterial including bicycle and pedestrian facilities. Project includes I-5 overcrossing at 156th St NE and connects Twin Lakes Blvd. and State Ave. Project can be built in phases. | $20,169,630 | $20,169,630 |
| 53 | 51st Ave NE | 84th St NE to 88th St NE | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $3,759,265 | $3,759,265 |
| 39 | State Avenue[3] | 136th St NE to 152nd St NE | Widen to 4/5 lane arterial including pedestrian facilities. | $10,781,000 | $12,013,000 |
| 40 | SR 528 | Allen Creek to East of 67th Ave NE | Widen to 4/5 lane arterial including pedestrian facilities. | $524,000 | $524,000 |
| 45.2 | Ingraham Blvd | 74th Ave NE to 81st Ave NE | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. | $5,250,830 | $5,250,830 |
| 341 | Jennings Park Entrance Improvements | Jennings Park Entrance and 53rd Ave NE/SR 528 | Realign Jennings Park Entrance driveway with 53rd Ave NE, and install traffic signal when warranted. | $464,750 | $464,750 |
| 1003 | 172nd St NE & 27th Ave NE | Intersection | Construct turn lane(s) and modify traffic signal. | $1,098,487 | $1,098,487 |
| 1014 | 88th St NE & 67th Ave NE | Intersection | Construct turn lane(s) and modify traffic signal. | $841,789 | $841,789 |
| 1016 | Grove St & 67th Ave NE | Intersection | Construct turn lane(s). | $180,534 | $180,534 |
| 1022 | 88th St NE & 51st Ave NE | Intersection | Construct turn lanes and install traffic signal when warranted. Short term fixes include the addition of a EB left turn lane and traffic signal. | $1,326,341 | $1,326,341 |
| 1024 | 156th St NE & Smokey Point Blvd | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,384,841 | $1,384,841 |
| 1038 | 88th St NE & 55th Ave NE | Intersection | Construct turn lanes and install traffic signal when warranted. Short term fixes include the addition of a EB left turn lane and traffic signal. | $990,288 | $990,288 |
| 1039 | Grove St & Alder Ave (43rd Ave NE) | Intersection | Install traffic signal. | $200,000 | $200,000 |
| 1059 | SR 9 & SR 92 | Intersection | Construct turn lane(s) and modify traffic signal. (SEE Project 59) | $300,000 | $300,000 |
| 2018 | SR 528 & 47th Ave NE[3] | Intersection | Intersection improvements included as part of an associated roadway widening project. | $169,000 | $604,000 |
| 2021 | 3rd St & 47th Ave NE[3] | Intersection | Construct turn lane(s) and modify traffic signal. | $521,000 | $917,000 |
| 2032 | SR 528 & 83rd Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,232,221 | $1,232,221 |
| 2068 | SR 528 & 87th Ave | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,262,641 | $1,262,641 |
| 1035 | 116th St NE & 38th Ave NE | Intersection | Construct turn lane(s) and modify traffic signal. | $726,404 | $726,404 |
| 1020 | 108th St NE & 51st Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,599,956 | $1,599,956 |

| | | | | | |
|---|---|---|---|---|---|
| Completed in 2008 | State Avenue (Ebey Slough to Grove Street) | N/A | Widen lanes (12-ft. outside and 11-ft. inside). Move the traffic signal from 5th Street to 6th Street; and remove left-turn lanes at the intersections of 5th Street and 7th Street | $9,500,000 | $9,500,000 |
| Completed in 2008 | 67th Avenue NE and 84th Street NE | N/A | Install traffic signal | $250,000 | $250,000 |
| Completed in 2008 | 116th St NE (I-5 to State Avenue) | N/A | Widen to 5 lanes and add a right-turn lane for eastbound traffic | $3,018,000 | $3,018,000 |
| Completed in 2008 | State Avenue (116th Street NE to 136th Street NE) | N/A | Widen to 3 lanes with curb, gutter and sidewalk on west side, and an 8-ft. shoulder on the east side | $7,100,000 | $7,100,000 |
| | | | **Total** | **$80,293,271** | **$82,356,271** |

Removed Projects (2008 Projects)

| Map ID | Project Name | Project Limits | Project Description | 2008 Project Cost | 2008 TIF Cost |
|---|---|---|---|---|---|
| 319 | 172nd St (SR 531) | 27th Ave NE to 11th Ave NE | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. | $11,640,473 | $11,640,473 |
| 140 | E Sunnyside School Road | 87th Ave NE to East Sunnyside School Road/Densmore Road | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $588,331 | $588,331 |
| 141 | E Sunnyside School Road | East Sunnyside School Road/Densmore Road to SR 9 | Reconstruct and widen to 2/3 lane arterial including pedestrian facilities. | $882,497 | $882,497 |
| 1044 | 40th St & Sunnyside Blvd | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $893,009 | $893,009 |
| 1045 | 40th St & 71st Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $946,088 | $946,088 |
| 343 | 53rd Ave NE at Sunnyside Blvd | Intersection | Install traffic signal when warranted. | $503,620 | $503,620 |
| 1037 | 100th St NE & 48th Dr NE | Intersection | Install traffic signal when warranted. | $464,750 | $464,750 |
| 1055 | 156th St NE & 152nd St Connector | Intersection | Install traffic signal when warranted per Smokey Point Master Plan. | $464,750 | $464,750 |
| 2035 | 1st St & State Ave | Intersection | Construct turn lane(s) and modify traffic signal. | $606,119 | $606,119 |
| | | | **Total** | **$16,989,637** | **$16,989,637** |

No Changes (2008 Costs)

| Map ID | Project Name | Project Limits | Project Description | 2008 Project Cost | 2008 TIF Cost |
|---|---|---|---|---|---|
| 18 | 51st Ave NE | 108th St NE to 136th St NE | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $11,977,128 | $11,977,128 |
| 177.1 | 27th Ave Extension | 140th St NE to 156th Ave NE | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $20,692,415 | $20,692,415 |
| 351 | Sunnyside Blvd & 52nd St NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,157,059 | $1,157,059 |
| 1012 | 108th St Ne & 67th Ave NE | Intersection | Contsrtuct turn lane(s) and install traffic signal when warranted. | $923,839 | $923,839 |
| 1013 | 100th St NE & 67th Ave NE | Intersection | Contsrtuct turn lane(s) and install traffic signal when warranted. | $400,000 | $400,000 |
| 1017 | 152nd St NE & 51st Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,482,790 | $1,482,790 |
| 1028 | 116th St NE & State Ave | Intersection | Construct turn lane(s), modify traffic signal, add second WB thru lane, and extend EB right-turn lane. | $1,517,978 | $1,517,978 |
| 1033 | 116th St NE & I-5 SB Ramps5 | Interchange | Construct single-point urban interchange (SPUI) | $40,600,000 | $500,000 |
| 1043 | 52nd St (Evans Rd) & 67th Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $464,750 | $464,750 |
| 1046 | Soper Hill Rd & Sunnyside Blvd | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,424,826 | $1,424,826 |
| 1047 | Soper Hill Rd & 83rd Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $943,488 | $943,488 |
| 1050 | 156th St NE & I-5 Ramps5 | Interchange | Construct single-point urban interchange (SPUI) | $40,600,000 | $1,500,000 |
| 1051 | 164th St NE & 51st Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,149,707 | $1,149,707 |
| 1052 | 160th St NE & 51st Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,149,707 | $1,149,707 |
| 1053 | 157th St & 51st Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,149,707 | $1,149,707 |
| 1054 | 156th St NE & 43rd Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,149,707 | $1,149,707 |
| 1056 | 152nd St NE & 43rd Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $945,939 | $945,939 |
| 1057 | 152nd St NE & 54th/55th Ave | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $923,839 | $923,839 |
| 2008 | 88th St NE & State Ave | Intersection | Add thru lanes, turn lanes, and modify traffic signal. | $894,719 | $894,719 |
| 2017 | SR 528 & State Avenue | Intersection | Construct turn lane(s) and modify traffic signal. | $1,084,740 | $1,084,740 |
| | | | **Total** | **$130,632,338** | **$51,432,338** |

No Changes (2015 Costs)

| Map ID | Project Name | Project Limits | Project Description | 2015 Project Cost | 2015 TIF Cost |
|---|---|---|---|---|---|
| 18 | 51st Ave NE | 108th St NE to 136th St NE | Reconstruct and widen to 2/3 lane arterial including bike lanes (8,400 ft) and sidewalks (12,000 ft). | $16,740,000 | $16,740,000 |
| 177.1 | 27th Ave Extension | 140th St NE to 156th Ave NE | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $28,010,000 | $28,010,000 |
| 351 | Sunnyside Blvd & 52nd St NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,580,000 | $1,580,000 |
| 1012 | 108th St NE & 67th Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,180,000 | $1,180,000 |
| 1013 | 100th St NE & 67th Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $400,000 | $400,000 |
| 1017 | 152nd St NE & 51st Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $1,570,000 | $1,570,000 |
| 1028 | 116th St NE & State Ave | Intersection | Construct turn lane(s), modify traffic signal, add second WB thru lane, and extend EB right-turn lane. | $1,810,000 | $1,810,000 |
| 1043 | 52nd St (Evans Rd) & 67th Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $590,000 | $590,000 |

| | | | | | |
|---|---|---|---|---|---|
| 1046 | Soper Hill Rd & Sunnyside Blvd | Intersection | Construct turn lane(s) and install traffic signal or roundabout when warranted. | $1,690,000 | $1,690,000 |
| 1051 | 164th St NE & 51st Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,390,000 | $1,390,000 |
| 1052 | 160th St NE & 51st Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,390,000 | $1,390,000 |
| 1053 | 157th St & 51st Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,390,000 | $1,390,000 |
| 1054 | 156th St NE & 43rd Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,410,000 | $1,410,000 |
| 1056 | 152nd St NE & 43rd Ave NE | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,220,000 | $1,220,000 |
| 1057 | 152nd St NE & 54th/55th Ave | Intersection | Construct turn lane(s) and add traffic signal when warranted per Smokey Point Master Plan. | $1,190,000 | $1,190,000 |
| 2008 | 88th St NE & State Ave | Intersection | Add thru lanes, turn lanes, and modify traffic signal. | $950,000 | $950,000 |
| 2017 | SR 528 & State Avenue | Intersection | Construct turn lane(s) and modify traffic signal. | $1,110,000 | $1,110,000 |
| 1033 | 116th St NE & I-5 SB Ramps | Interchange | Construct single-point urban interchange (SPUI). TIP #39 | $18,000,000 | $500,000 |
| 1050 | 156th St NE & I-5 Ramps | Interschange | Construct urban interchange. | $40,000,000 | $1,500,000 |
| | | | **Total** | **$121,620,000** | **$65,620,000** |

Modified Projects (2008 Costs)

| Map ID | Project Name | Project Limits | Project Description | 2008 Project Cost | 2008 TIF Cost |
|---|---|---|---|---|---|
| 38 | State Avenue | 116th St NE to 136th St NE | Widen to 4/5 lane arterial including pedestrian facilities. | $11,613,030 | $11,613,030 |
| 42 | State Avenue | 100th St NE to 116th St NE | Widen to 4/5 lane arterial including pedestrian facilities. | $17,115,202 | $17,115,202 |
| 43 | Sunnyside Blvd | 47th Ave NE to South of 52nd St NE | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. Include traffic control and intersection geometry improvements where needed. | $15,540,356 | $15,540,356 |
| 44 | 40th St NE | Sunnyside Blvd to 83rd Ave NE | Reconstruct and widen to 2/3 lanes, and construct missing segments for 2/3 lane arterial including pedestrian facilties. | $13,100,000 | $13,100,000 |
| 46 | 40th St NE | 83rd Ave NE to SR 9 | Construct 4/5 lane arterial including pedestrian facilities. | $18,000,000 | $18,000,000 |
| 50.1 | 88th St NE | State Ave to 51st Ave | Widen to 4/5 lane arterial including pedestrian facilities. Bike lanes may be included in project or along separate but parallel corridor. | $16,765,853 | $16,765,853 |
| 50.2 | 88th St NE | 51st Ave to 67th Ave | Widen to 4/5 lane arterial including pedestrian facilities. Bike lanes may be included in project or along separate but parallel corridor. | $24,158,966 | $24,158,966 |
| 51 | 152nd St NE4 | 51st Ave to 67th Ave NE | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. | $10,803,741 | $7,202,854 |
| 67 | 51st Ave NE | 88th St NE to 108th St NE | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $7,461,724 | $7,461,724 |
| 68 | 51st Ave NE | 136th St NE to 152nd St NE | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $6,979,310 | $6,979,310 |
| 71 | 84th St NE | 83rd Ave NE to SR 9 | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. | $4,226,820 | $4,226,820 |
| 101 | 67th Ave NE | 88th St NE to 108th St NE | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $7,589,140 | $7,589,140 |
| 102 | 71st Ave NE | Sunnyside Blvd/Soper Hill Road to 40th St NE | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $4,588,984 | $4,588,984 |
| 159.1 | Soper Hill Road | 71st Ave NE to 83rd Ave NE | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $6,189,983 | $6,189,983 |
| 159.2 | Soper Hill Road | 83rd Ave NE to SR 9 | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $3,035,906 | $3,035,906 |
| 160 | Sunnyside Blvd | 71st Ave NE to 40th St | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $6,983,226 | $6,983,226 |
| 177.2 | 27th Ave Extension | Twin Lakes to 172nd St NE | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $11,828,235 | $11,828,235 |
| 231 | 156th/152nd St | Smokey Point Blvd to 51st St | Construct 4/5 lane arterial including bicycle and pedestrian facilities. | $17,821,570 | $17,821,570 |
| 233.1 | 51st Ave NE | 152nd to 160th | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. | $7,180,407 | $7,180,407 |
| 233.2 | 51st Ave NE | 160th to Arlington City Limits | Widen to 4/5 lane arterial including bicycle and pedestrian facilities. | $4,265,820 | $4,265,820 |
| 242 | 156th St NE Extension[2] | 31st (SEE 177) to 23rd Ave | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $11,233,505 | $5,616,752 |
| 244 | 67th Ave Connector | 67th Ave NE/44th St NE to 71st Ave NE/40th St NE | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $4,707,459 | $4,707,459 |
| 302 | Sunnyside Blvd | South of 52nd Ave NE to 40th St | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $4,588,984 | $4,588,984 |
| 305.1 | 67th Avenue | 44th St NE to SR 528 | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $7,765,973 | $7,765,973 |
| 310.1 | 52nd Street | Sunnyside Blvd to 67th St | Reconstruct and widen to 2/3 lane arterial including bicycle and pedestrian facilities. | $1,529,661 | $1,529,661 |
| 312 | 87th Ave | Soper Hill Rd to 35th St | Reconstruct and widen to 2/3 lane arterial including pedestrian facilities. | $2,580,630 | $2,580,630 |
| 318 | 44th Street | 83rd Ave to East Sunnyside School Road/Densmore Road | Construct 2/3 lane arterial including bicycle and pedestrian facilities. | $3,137,440 | $3,137,440 |
| 323 | Downtown Bypass | State Ave/1st Street to 47th Ave/Sunnyside Blvd | Construct 4/5 lane arterial including pedestrian facilities. | $31,477,989 | $31,477,989 |

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|---|---|---|---|---|---|
| 325 | 84th Street & State Avenue/Rail Crossing | Intersection | Construct rail crossing at 84th St NE and install traffic signal. Close adjacent rail crossings. | $2,212,516 | $2,212,516 |
| 339 | Intelligent Transportation System Program | City-wide | Implement Intelligent Transportation Systems Program to improve signal coordination and management, roadway monitoring and response, ITS device management, and data collection. System to include communications equipment, traffic signal equipment, video surveillance and monitoring, video detection, satellite traffic management center. | $421,000 | $421,000 |
| 352 | City Center Access Improvement Projects | City Center | Construct intersection,arterial, or interchange improvements recommended as part of City Center Access Study. | $20,000,000 | $20,000,000 |
| 1002 | 172nd St NE & 19th Ave NE | Intersection | Construct turn lane(s) and install traffic signal when warranted. | $742,784 | $742,784 |
| 1036 | 100th St NE & Shoultes Rd | Intersection | Intersection/operational improvements to be coordinated with State Ave/100th St intersection. | $380,250 | $380,250 |
| 2117 | 88th St NE & 36th Ave NE | Intersection | Construct turn lane(s) and modify traffic signal. | $839,339 | $839,339 |
| | | | **Total** | **$306,865,803** | **$297,648,163** |

Modified Projects 2015 Costs)

| Map ID | Project Name | Project Limits | Project Description | 2015 Project Cost | 2015 TIF Cost |
|---|---|---|---|---|---|
| 38 | State Avenue | 116th St NE to 136th St NE | Widen to 4/5 lane arterial including sidewalks (8,000 ft). | $3,500,000 | $3,500,000 |
| 42 | State Avenue | 100th St NE to 116th St NE | Widen to 4/5 lane arterial including sidewalks (one side, project extent) with a culvert. Potential overhead utility costs covered by others. Cost estimate based on city estimate. Build new culvert over Quilceda Creek. | $10,479,701 | $10,479,701 |
| 43 | Sunnyside Blvd | 47th Ave NE to South of 52nd St NE | Widen to 4/5 lane arterial including sidewalks (3,000 ft) and multiuse trail (7,000 ft). Include traffic control and intersection geometry improvements where needed. | $18,350,000 | $18,350,000 |
| 44 | 40th St NE | Sunnyside Blvd to 83rd Ave NE | Reconstruct and widen to 2/3 lanes, and construct missing segments for 2/3 lane arterial including sidewalks (12,000 ft) and bike lanes (both sides, full extent) | $13,100,000 | $13,100,000 |
| 46 | 40th St NE | 83rd Ave NE to 87th Ave NE | Construct 4/5 lane arterial including multi-use trail (2,000 ft). | $18,000,000 | $18,000,000 |
| 50.1 | 88th St NE | State Ave to 51st Ave | Include sidewalks (4,200 ft) and parallel bike facilities along 84th St, 92nd St and State Ave (bike route 6,000 ft, bike boulevard 3,000 ft, multiuse trail 1,400 ft) | $7,950,000 | $7,950,000 |
| 50.2 | 88th St NE | 51st Ave to 67th Ave | Widen to 2/3 lanes including sidewalks (5,900 ft) and bike lanes (5,500 ft) | $12,490,000 | $12,490,000 |
| 51 | 152nd St NE | 51st Ave to City Limits | Widen to 4/5 lane arterial including sidewalk (one side project extent) and multiuse trail (project extent) | $7,930,000 | $5,286,931 |
| 67 | 51st Ave NE | 88th St NE to 108th St NE | Reconstruct and widen to 2/3 lane arterial including sidewalks (9,500 ft) and bike lanes (5,900 ft). | $9,030,000 | $9,030,000 |
| 68 | 51st Ave NE | 136th St NE to 152nd St NE | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $9,500,000 | $9,500,000 |
| 71 | 84th St NE | 83rd Ave NE to SR 9 | Widen to 2/3 lanes arterial including Construct multi-use trail (2,000 ft). | $2,090,000 | $2,090,000 |
| 101 | 67th Ave NE | 88th St NE to 108th St NE | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike routes (both sides, project extent) | $6,850,000 | $6,850,000 |
| 102 | 71st Ave NE | Sunnyside Blvd/Soper Hill Road to 40th St NE | Reconstruct and widen to 2/3 lane arterial including sidewalks (2,800 ft) and bike lanes (both sides, project extent) | $4,810,000 | $4,810,000 |
| 159.1 | Soper Hill Road | 71st Ave NE to 83rd Ave NE | Reconstruct and widen to 2/3 lane arterial including sidewalks (7,200 ft) and bike lanes (both sides, project extent) | $7,680,000 | $7,680,000 |

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|---|---|---|---|---|---|
| 160 | Sunnyside Blvd | 71st Ave NE to 40th St | Reconstruct and widen to 2/3 lane arterial including sidewalks (8,600 ft) and bike lanes (both sides, project extent) | $8,860,000 | $8,860,000 |
| 231 | 156th/152nd St Connector | Smokey Point Blvd (156th St NE) to 51st St (152nd St NE) | Construct 4/5 lane arterial including sidewalks (one side, full length) and a multiuse trail (one side, full length) | $18,440,000 | $18,440,000 |
| 233.1 | 51st Ave NE | 152nd to 160th | Construct 2/3 lane arterial including sidewalks (both side, full length) and bike lanes (both side, full length) | $6,200,000 | $6,200,000 |
| 233.2 | 51st Ave NE | 160th to Arlington City Limits | Construct 2/3 lane arterial including sidewalks (both side, full length) and bike lanes (both side, full length) | $3,680,000 | $3,680,000 |
| 242 | 156th St NE Extension | 27th to 23rd Ave | Construct 2/3 lane arterial including sidewalks (one side, project extent) and multiuse trail (one side, project extent). Includes new grade separate crossing of railroad tracks | $12,330,000 | $6,165,000 |
| 244 | 67th Ave Connector | 67th Ave NE/44th St NE to 71st Ave NE/40th St NE | Construct 2/3 lane arterial including sidewalks (both sides, full length) and bike lanes (both sides, full extent) | $6,170,000 | $6,170,000 |
| 302 | Sunnyside Blvd | South of 52nd Ave NE to 40th St | Reconstruct and widen 2/3 lane arterial including sidewalks (5,600 ft) and bike lanes (both sides, full extent) | $5,620,000 | $5,620,000 |
| 305.1 | 67th Avenue | 44th St NE to SR 528 | Reconstruct and widen 2/3 lane arterial including sidewalks (4,900 ft) and bike lanes (5,700) | $7,660,000 | $7,660,000 |
| 306 | 44th Street | 67th Ave NE to 83rd Ave NE | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $7,460,000 | $3,730,000 |
| 310.1 | 52nd Street | Sunnyside Blvd to 67th St | Reconstruct and widen to 2/3 lane arterial including sidewalks (500 ft) and buffered bike lanes (500 ft new, 2,000 restriped) | $1,220,000 | $1,220,000 |
| 312 | 87th Ave NE | 35th St to 40th St | Reconstruct 4/5 lane arterial including, sidewalks (both sides, full length) and buffered bike lanes (both sides, full extent) | $6,650,000 | $6,650,000 |
| 318 | 44th St NE/East Sunnyside School Rd/42nd St NE | 87th Ave NE to SR-9 | Construct 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $4,110,000 | $4,110,000 |
| 323 | Downtown Bypass | State Ave/1st Street to 47th Ave/Sunnyside Blvd | Construct 3 lane arterial including pedestrian facilities. Follows 1st St straight east until 47th, then north on 47th until 3rd, then right to Sunnyside. Sunnyside/47th may be a roundabout. | $14,520,000 | $14,520,000 |
| 352 | City Center Access Improvement Projects | City Center | City Center Access Study (excluding I-5 Interchange) | $500,000 | $500,000 |
| 1002 | 172nd St NE | 19th Ave to 16th Dr | Construct new traffic signal at 16th Dr, new 2-lane roundabout at 19th Ave, and intersection improvements at 19th Dr (per Lakewood Subarea Plan) | $3,240,000 | $3,240,000 |
| 1027 | 128th St NE & State Ave | Intersection | Add turn lanes to east leg | $650,000 | $650,000 |
| 1036 | State Ave, 100th St NE & Shoultes Rd | Intersection | Double lane roundabout | $4,500,000 | $4,500,000 |
| 2117 | 88th St NE | 36th Ave NE to NB I-5 on-ramp | Adds new westbound lane. | $1,900,000 | $1,900,000 |
| 3026 | 27th Ave NE | 169th Pl NE to 25th Ave NE | Construct 2/3 lane arterial with sidewalks (one side, project extent) and multiuse trail (one side, project extent) | $2,150,000 | $2,150,000 |
| 3015 | 172nd St NE (SR 531) | 27th Ave NE to 19th Ave NE | Widen roadway to 4/5 lane arterial with 20 ft planted buffer and multiuse trails (both sides, project extent) | $8,560,000 | $8,560,000 |
| 3016 | 172nd St NE (SR 531) | 16th Dr NE to 11th Ave NE | Upgrade roadway to a 2/3 lane roadways (1,300 ft) including multiuse trail (3200 ft) | $3,290,000 | $3,290,000 |
| 3018 | 172nd St NE & 23rd Ave NE | Intersection | Construct 2 lane roundabout | $2,000,000 | $2,000,000 |
| 3028 | 25th/27th Ave NE | 164th St NE to 156th St NE | Construct 2/3 lane arterial with sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $9,320,000 | $9,320,000 |

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|---|---|---|---|---|---|
| 3037 | 35th St NE | 87th Ave NE and SR 9 | Construct 4/5 lane arterial including sidewalks (both sides, project extent) and buffered bike lanes (both sides, project extent) | $4,550,000 | $4,550,000 |
| 3039 | 156th St and 27th Ave NE | Intersection | Construct new 2-lane roundabout | $2,000,000 | $2,000,000 |
| | | | **Total** | **$277,339,701** | **$264,801,632** |

New Projects (2015 Costs)

| Map ID | Project Name | Project Limits | Project Description | 2015 Project Cost | 2015 TIF Cost |
|---|---|---|---|---|---|
| 3004 | SR 528 | 83rd Ave NE to 87th Ave NE | Widen to 4/5 lanes including sidewalks (both sides, project extent) and buffered bike lanes (both sides, project extent) | $4,900,000 | $4,900,000 |
| 3014 | 19th Ave NE | 172nd to City Limits | Reconstruct and widen to 2/3 lane arterial including sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $2,190,000 | $2,190,000 |
| 3024 | 19th Ave NE/ 169th Pl | 172nd St NE to 27th Ave NE | Construct 2/3 lane arterial with sidewalks (both sides, project extent) and bike lanes (both sides, project extent) | $9,320,000 | $9,320,000 |
| 3027 | 23rd Ave NE | 172nd St NE to 25th Ave NE | Construct 2/3 lane arterial with sidewalks (6,000 ft), bike lanes (2,500 ft) and multiuse trail (500 ft) | $13,880,000 | $13,880,000 |
| | | | **Total** | **$30,290,000** | **$30,290,000** |

# TIF Costs

| | 2008 | 2015 |
|---|---|---|
| **Completed** | $82,356,271 | - |
| **Modified** | $297,648,163 | $264,801,632 |
| **New** | - | $30,290,000 |
| **Removed** | $16,989,637 | - |
| **No Change** | $51,432,338 | $65,620,000 |
| | $448,426,409 | $360,711,632 |

| Bond Year | Total Bond Proceeds | Total Bond Interest |
|---|---|---|
| 2013 | $ 3,157,500.00 | $ 881,946.87 |
| 2007 | $ 8,045,000.00 | $ 4,435,714.50 |
| 2013 | $ 9,005,000.00 | $ 3,467,550.00 |
| | $ 20,207,500.00 | $ 8,785,211.37 |