

Chapter 12

TRANSPORTATION

SECTION 1. EXISTING CONDITIONS

The City of Gig Harbor is required, under the state Growth Management Act (GMA), to prepare a Transportation Element as part of its Comprehensive Plan. Revisions to the Comprehensive Plan occur periodically to accommodate updated information or changes related to the City of Gig Harbor and the Gig Harbor Urban Growth Area (UGA). **Figure 12-1** shows the current limits of the Gig Harbor UGA and the greater area considered in the transportation demand analysis (“planning area”).

The specific goal of the GMA, with regard to transportation, is to “encourage efficient multi-modal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.” The GMA requires that the local comprehensive plans, including the land use and transportation elements, be consistent and coordinated with required regional programs. In addition, the GMA requires that transportation facility and service improvements be made concurrent with development.

Existing Transportation System

This section of the transportation plan describes the existing transportation system conditions in the study area, including a description of the roadway characteristics, functional classification, traffic volumes, level of service, accidents, and transit service. Planned transportation improvements from the Washington State Department of Transportation (WSDOT) Plan, Pierce County Capital Facilities Element of the Comprehensive Plan, the Pierce County Six-Year Transportation Improvement Program (TIP) and Gig Harbor Six-Year TIP are also described.

Functional Classification and Connectivity

Roadway hierarchy by functional classification provides a network of streets based on distinct travel movements and the service they provide. Roadway layout shall be based primarily on the safety, efficiency of traffic flow, and functional use of the roadway. Functional roadway classifications consist of arterials, major and minor collectors, major and minor local residential streets, private streets, and alleys.

Roadways of all classifications shall be planned to provide for connectivity of existing and proposed streets in relation to adjoining parcels and possible future connections as approved by the Community Development Department. New development roadway systems should be designed so as to minimize pedestrian travel to bus stops.

Arterials are intended for the efficient movement of people and goods and have the highest level of access control. They have limited access and accommodate controlled intersections.

Collectors generally connect commercial, industrial, and residential projects to other collectors, and arterials and have a moderate level of access control. Minor collectors may be used if turn lanes are not required. If the collector connects to another collector or to an arterial, the roadway shall be a major collector. The City will determine if a collector is a major or minor, type I or type II, based on a review of the development potential of all contributing properties, the existing right-of-way if it is an existing roadway, and the necessity of turn lanes. Auxiliary left turn lanes are desired when connecting to arterials and major collectors.

Roadways that are currently functionally classified within the City of Gig Harbor as arterials, major collectors or minor collectors are shown in **Figure 12-2**. The City Traffic Engineer will classify all new roadways. Later in this chapter, revisions to the functional classification map are proposed to provide consistency between the transportation plan map and the transportation capital facilities plan and to identify potential future roadway improvements that likely to be provided by development as the land use plan is implemented.

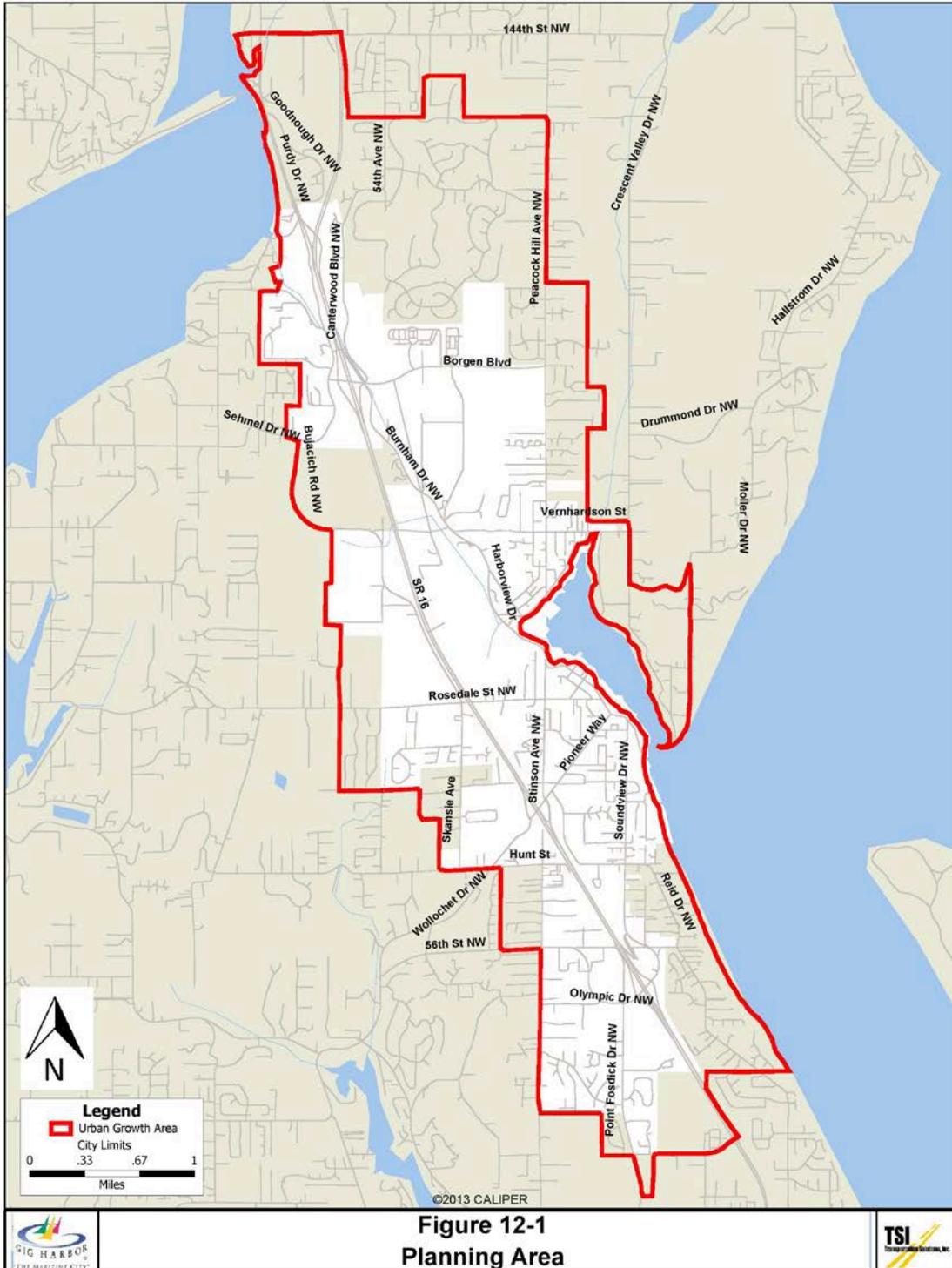
Major and minor local residential streets shall interconnect with each other and with minor collectors and have a minimum level of access control. Alleys in residential neighborhoods are encouraged. If the local residential street connects to a major collector or to an arterial, the street shall be a major local residential. In such developments, connectivity shall be a key design factor, although the internal flow shall be discontinuous to discourage cut-through traffic movement and excessive speed. Traffic calming techniques shall be designed into all residential subdivisions.

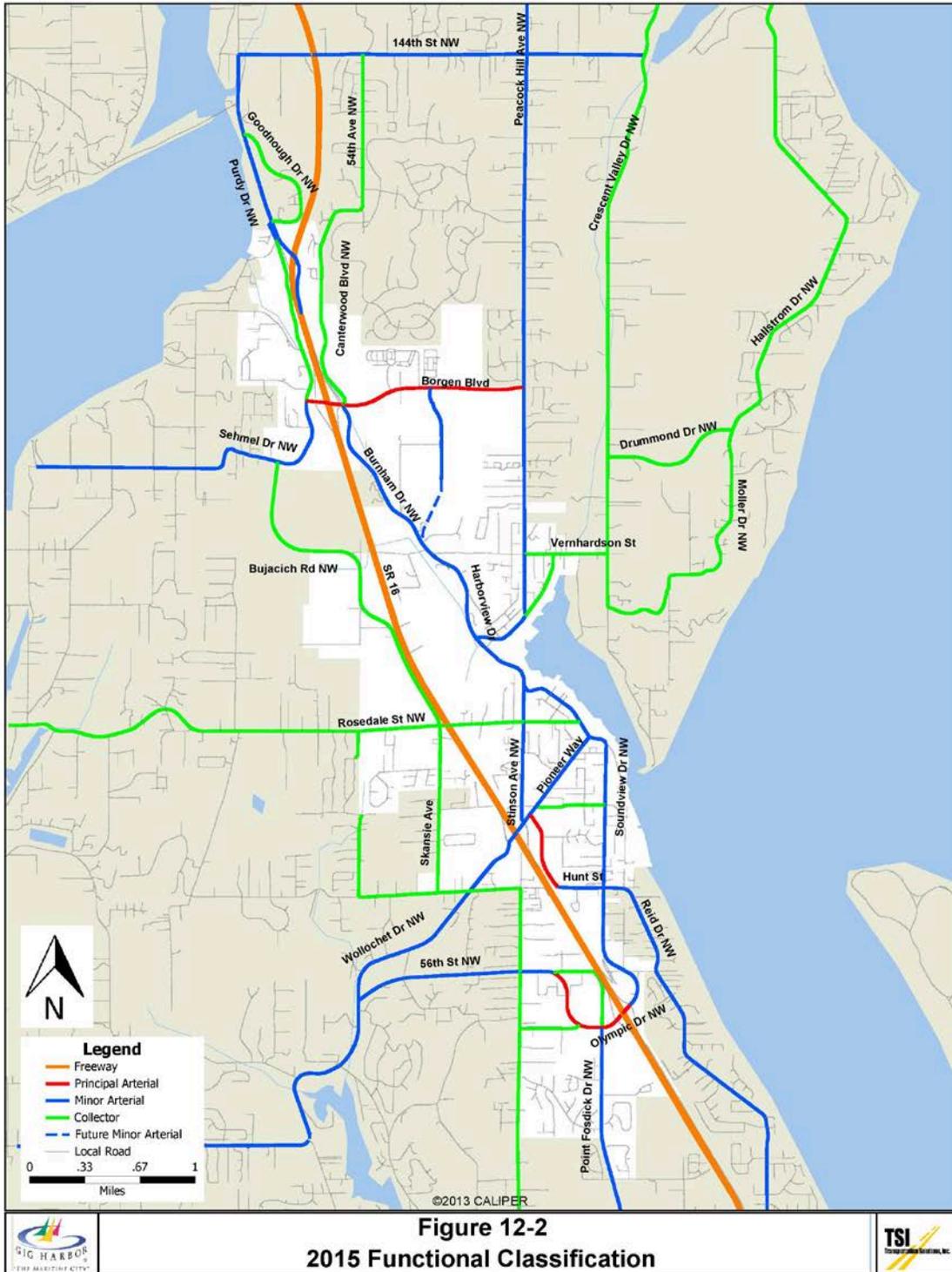
The pedestrian network shall be paramount in the residential roadway network. Minor local residential streets serve as land access from residences and generally connect with major local residential and minor collectors. Safety is always the major consideration when determining intersection locations and connectivity.

State-owned transportation facilities and highways of statewide significance [See also Section 4]

In 1998, the Washington State Legislature enacted the “Level of Service Bill” (House Bill 1487) which amended the Growth Management Act (GMA) to include additional detail regarding state-owned transportation facilities in the transportation element of comprehensive plans. Within Gig Harbor, SR 16 has been designated as a Highway of Statewide Significance (HSS) in WSDOT’s Highway System Plan (HSP). SR 16 provides the major regional connection between Tacoma, Bremerton, and the Olympic Peninsula. It connects to Interstate 5 in Tacoma and to SR 302 in Purdy. Through Gig Harbor, SR 16 is a full limited access four lane freeway with interchanges at Olympic Drive, Pioneer Way and Burnham Drive. It is classified as an urban principal arterial. The level of service established for state facilities in Gig Harbor is LOS D.

The only other state-owned facility within the planning area is SR 302 which connects SR 16 across the Key Peninsula with SR 3 to Shelton. It is a two-lane state highway with managed access control (Class 3) as defined in WAC-468-51 and 468-52.





Local Transportation System

The Harbor area of Gig Harbor and surrounding residences are served by the interchange with SR 16 at Pioneer Way. The southern portion of the city is served by the Olympic Drive NW interchange, and in the northern portion of the city access from SR 16 is provided by the Burnham Drive / Borgen Boulevard interchange.

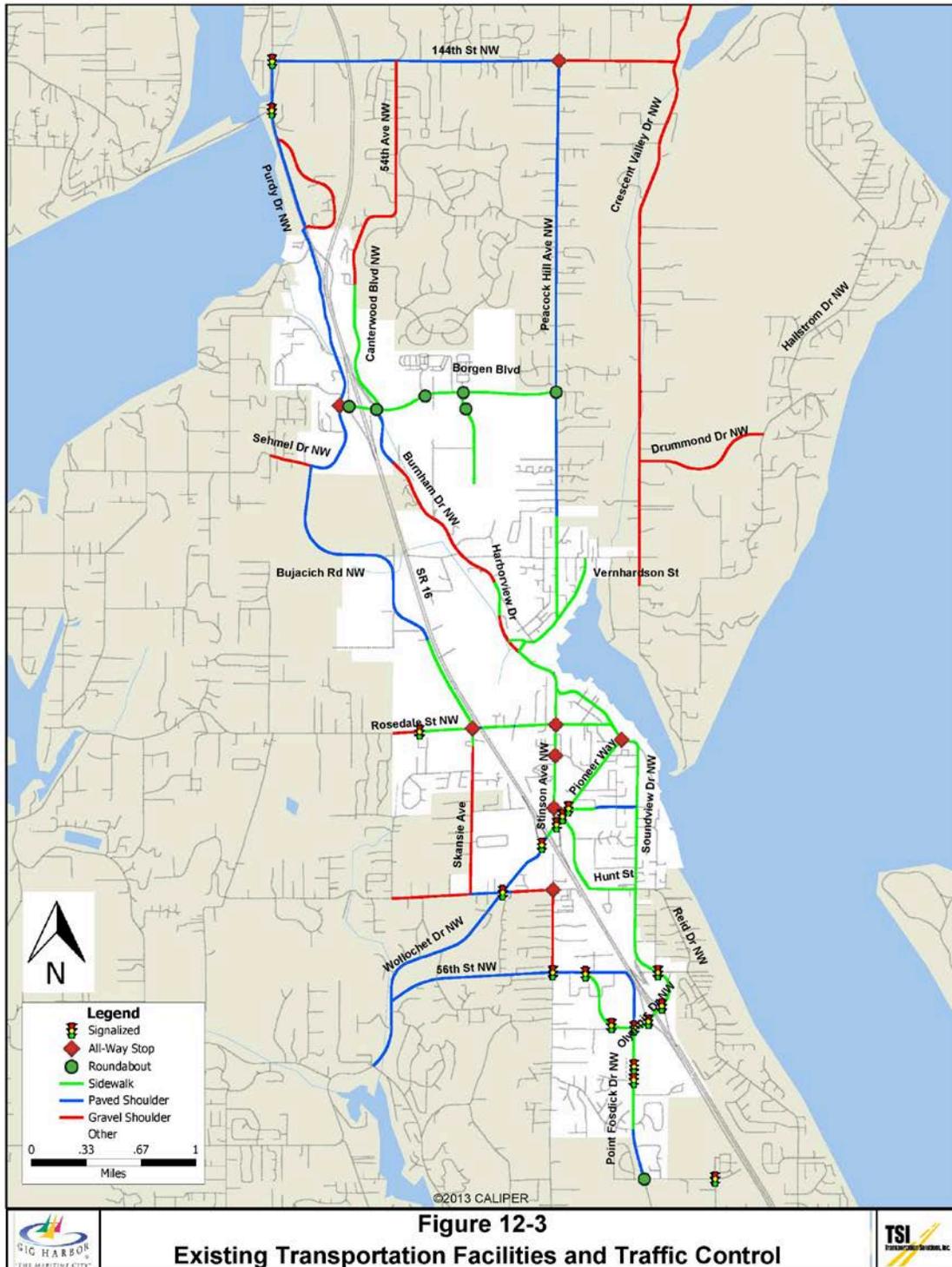
One of the key north-south arterials serving the city and local residences is Soundview Drive, which becomes Harborview Drive through the Harbor and continues north as Burnham Drive and east as North Harborview Drive. Pioneer Way also provides access to residences and the Harbor. Access to the areas in the northern portion of the city and UGA is provided by Peacock Hill Road, Crescent Valley Drive, Burnham Drive NW, and Borgen Boulevard. Outside the city limits to the southwest, Olympic Drive NW/56th Street and Wollochet Drive NW/Fillmore Avenue provide access to residential areas in unincorporated Pierce County.

The roadway characteristics of these arterials in the study area are shown in **Figure 12-3**. The majority of roadways within the city limits are two lanes with a speed limit of 25 mph. The speed is reduced to 20 mph along North Harborview Drive in the Harbor area known as the Finholm area. There are retail shops on both sides of the street in this area, and the reduced speed provides increased safety for pedestrians crossing the street between shops. In addition, Soundview Drive, Kimball Road and Harbor Hill Drive have three lanes (one lane in each direction and a center, two-way, left-turn lane along portions of the roadway) and are currently posted at 25 mph. Outside of the city limits, all other functionally classified roadways within the city limits and the UGA are also two lanes, with the exception of Olympic Drive NW (56th Street NE), Point Fosdick Drive, and Borgen Boulevard, which have five lanes in most sections. The speed limit on these roadways varies between 30 and 35 mph.

Pedestrian and bicycle facilities are an integral part of the transportation network, and the provision for these facilities are incorporated in the transportation improvement program. Currently, sidewalks are provided at least on one side of the roadway on most city arterials. In addition, separate bicycle lanes are provided on various roadways, including Soundview Drive and on portions of Rosedale Street, Point Fosdick Drive, and North Harborview Drive. Parking is allowed in the retail center on Harborview Drive and North Harborview Drive. Combined use paths have been constructed along Harbor Hill Drive. An existing conditions map is located under **Figure 12-13** at the end of this element.

Existing intersection traffic control devices also are indicated on **Figure 12-3**. Within the city, there are signalized intersections at Pioneer Way/Grandview Street, Pioneer Way/Kimball Drive, Olympic Drive/Point Fosdick Drive, Olympic Drive/50th Street, Olympic Drive/56th Street, Point Fosdick Drive/Uptown Avenue, Point Fosdick Drive/48th Street NW, Wollochet Drive/Hunt Street, Olympic Drive/Hollycroft Street, Rosedale Street/Schoolhouse Avenue, and 38th Avenue/56th Street. In addition, the SR 16 northbound and southbound ramps at Olympic Drive, and the SR 16 northbound and southbound ramps at Pioneer Way, are signalized.

The intersections of Borgen Boulevard/51st Street, Borgen Boulevard/Harbor Hill Drive, and Harbor Hill Drive/Costco Road are controlled by two-lane roundabouts. Single lane roundabouts are located at the intersections of Burnham Drive/Sehmel Drive, Borgen Boulevard/Peacock Hill Road and Point Fosdick Drive/36th Street. The SR 16/Burnham Drive northbound and southbound ramps also intersect roundabouts, with a two-lane roundabout at the northbound ramp and a single lane roundabout at the southbound ramp. All other major intersections are stop sign controlled.



Traffic Volumes

A comprehensive set of street and intersection traffic counts was collected in ~~2005~~ 2014. P.M. peak hour traffic volumes (PMPH) are summarized in **Figure 12-4** P.M. peak hour traffic volumes represent the highest hourly volume of vehicles passing through an intersection during the 4-6 p.m. peak period. Since the p.m. peak period volumes usually represent the highest volumes of the average day, these volumes were used to evaluate the worst case traffic scenario that would occur as a result of proposed development.

Intersection Level of Service

LOS is a qualitative term describing the operating conditions a driver will experience while driving on a particular street or highway during a specific time interval. It ranges from LOS A (little or no delay) to LOS F (long delays, congestion).

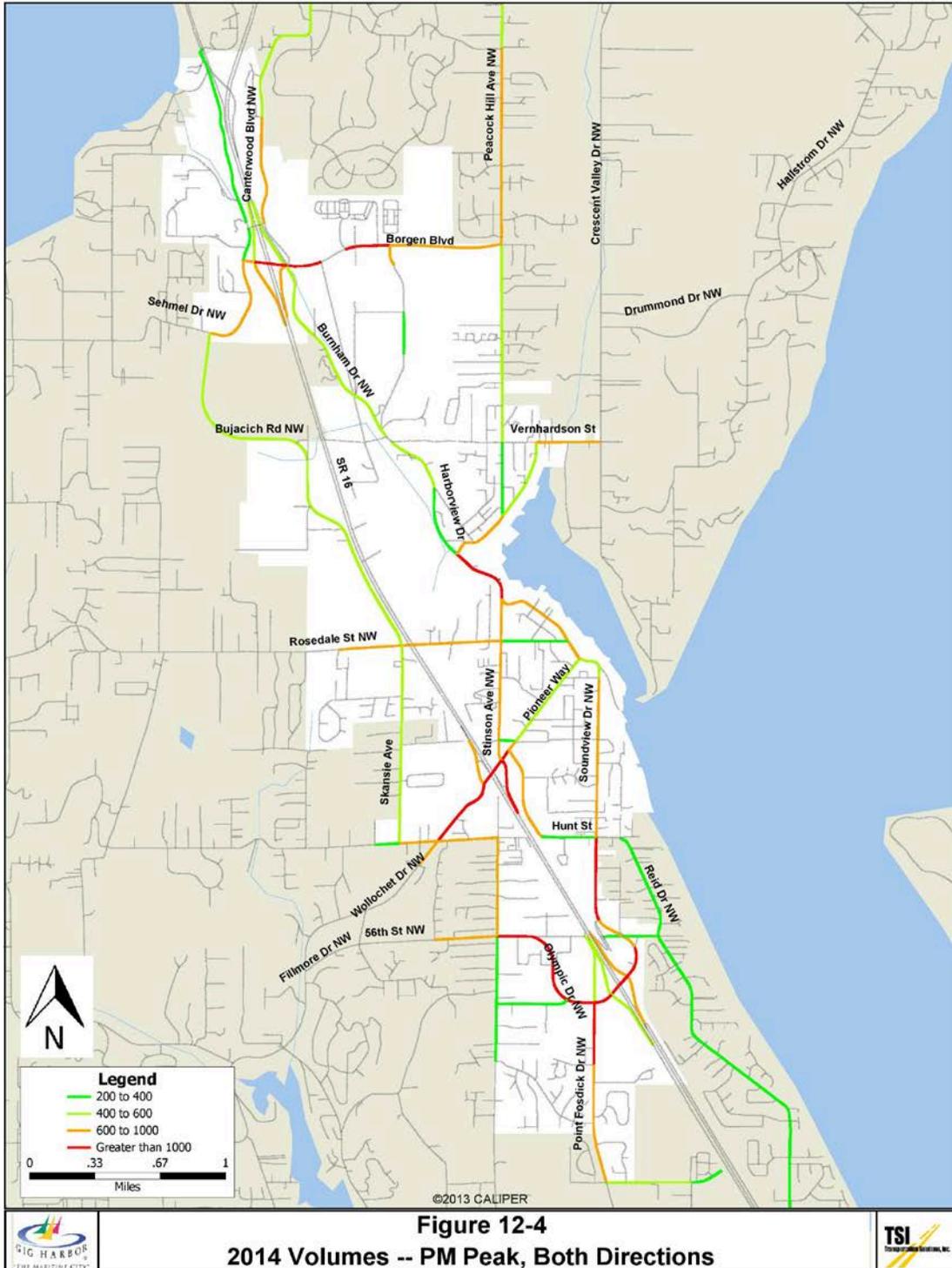
The methods used to calculate the levels of service are described in the 2010 Highway Capacity Manual. The measure of effectiveness for signalized intersections is control delay, which is defined as the sum of the initial deceleration delay, queue move up delay, stopped delay and final acceleration delay.

For unsignalized intersections, level of service is based on an estimate of average stopped delay for each movement or approach group. The evaluation procedure is a sequential analysis based on prioritized use of gaps in the major traffic streams for stop controlled and yield controlled movements (i.e., left turns off of the major street); these two movement types at unsignalized intersections will be referred throughout the remainder of this plan as “controlled movements”.

The 2010 Highway Capacity Manual made substantial changes to the analysis methodology for roundabouts. The initial methodology has been deemed too conservative and often indicates worse LOS than is actually observed in the field. Also, the delay criteria for roundabouts as set to equal the delay criteria for stop signs which are much lower than those for signals. Roundabout in Gig Harbor will be evaluated using the HCM 2010 methodology, adjusted for updated capacities as made available, and using the signalized delay criteria for LOS.

The City of Gig Harbor has adopted a standard of LOS D or better defined as acceptable at all functionally classified intersections with the following exceptions: at the Burnham/Borgen/Canterwood/SR16 roundabout LOS E is acceptable and LOS F is acceptable in the “Harbor Area” as defined in this chapter.

The City of Gig Harbor is required by RCW 36A.070(6)(b) “to prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of the development are made concurrent with the development.”



Transit Service and Facilities

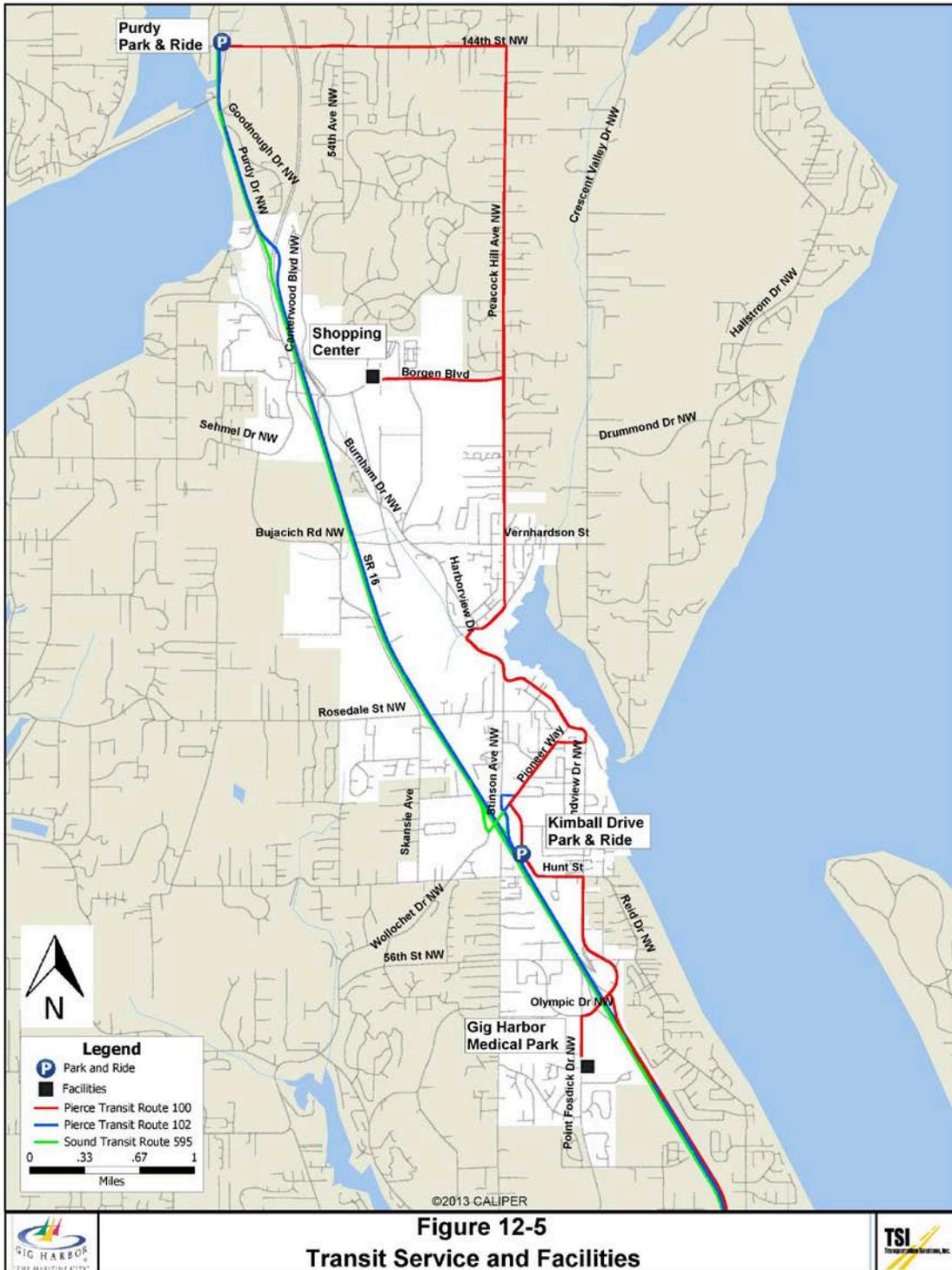
Gig Harbor is served by Pierce Transit and Sound Transit. The three transit routes that currently serve Gig Harbor are shown in **Figure 12-5**.

Route 100 (“Gig Harbor”) extends from the Purdy Park and Ride to the Tacoma Community College Transit Center. The route operates every day of the week. It serves several other park and ride facilities (the Narrows Park and Ride on the Tacoma side of the Narrows Bridge and the Kimball Drive Park and Ride) and several potential transit trip generators, including the Borgen Boulevard retail area (Target, Home Depot, Costco) and the Gig Harbor Medical Park.

Route 102 (“Gig Harbor Express”) provides express bus service from Purdy to Downtown Tacoma via the Kimball Drive Park and Ride (where it connects with Route 100). It operates during weekday peak hours only. It also connects with the Key Peninsula School Bus Connects services operating on Tuesday’s and Thursdays only.

Sound Transit provides direct express service from the Gig Harbor area to downtown Seattle with Route 595 (“Gig Harbor-Seattle Express”). This weekday-only service runs westbound toward Seattle during the early morning peak and eastbound from Seattle to Gig Harbor during the afternoon peak period. This route runs from the North Purdy Park and Ride to downtown Seattle, making stops at the Kimball Drive Park and Ride, the Narrows Park and Ride and the Tacoma Community College Transit Center.

Transit Level of Service in Gig Harbor is established by Pierce Transit and Sound Transit. The City works with both agencies to accommodate transit existing and planned operations in the design of its transportation system.



Planned Transportation Improvements

Based on projections by the Puget Sound Regional Council (PSRC), this area of the state, including the study area, will continue to grow. Specifically, it is expected that residential growth will occur on the Gig Harbor peninsula and job growth will occur in the area between Purdy and Tacoma.

Pierce County Transportation Plan

In order to adequately address the existing and future transportation issues, Pierce County completed the Pierce County Transportation Plan in 1992. The proposed project list was updated in 2000 and incorporated into the Gig Harbor Peninsula Community Plan.

The DRAFT Transportation Plan Preview produced in March 2009 was an attempt to update the Transportation Plan. The Transportation Plan Preview showed a range of potential land use and transportation alternatives for the future. The latter document was not adopted by council but serves as an important template for current and future planning work.

The Traffic Division has reinitiated work in updating the Transportation Plan/Element. Its current work will be closely integrated into the other elements of the Comprehensive Plan, inclusive of land use. The County Comprehensive Plan update will be completed in 2015.

City staff should monitor and participate in the county's transportation planning process to maximize opportunities for a consistent and cohesive transportation system, regardless of the jurisdictional responsibilities.

Pierce County Six-year Transportation Improvement Program (TIP)

The County is required to update its Transportation Improvement Plan (TIP) every year. The TIP is adopted by reference (and is included in this plan element through its inclusion in the 20-year transportation capital facilities plan), and a copy of the current plan can be obtained from the County's Public Works Department.

**Table 12-1
Pierce County 2008-2013 TIP Projects in Vicinity of Gig Harbor**

ID Number	Roadway	From	To	Description	Component	Timing
373	Point Fosdick Drive NW / Stone Drive NW / 34 Ave NW	Intersection		Construct a single lane roundabout with Rapid Rectangular Flashing Beacons (RRFB), illumination, curb, gutter and sidewalks	Engineering	2017
					ROW	2016
					Construction	2017 - 2020
619	62 Ave NW / 144 Street NW	Intersection		Install traffic signal and provide turn lanes	Engineering	2015
					ROW	2015
					Construction	2016
630	38 Ave NW	36 Ave NW	Gig Harbor City Limits	Assess road improvements to compliment City of Gig Harbor project	Engineering	2016 Start
					ROW	Not prog
					Construction	Not prog
635	14 Ave NW Trail	24 St. NW	Cushman Trail	Construct pervious pavement multi-use path	Engineering	2015 Start
					ROW	Not prog.
					Construction	Not prog.
Notes:	ID Number N/O - ROW - Not prog.	This number is used for mapping in the County's TIP. It does not represent a priority ranking. North of Right-of-Way acquisition Project element is not programmed at this time – usually occurs because of funding limitations.				

Gig Harbor Six-year Transportation Improvement Plan (TIP)

The City is required to update its Transportation Improvement Plan (TIP) every year. The TIP is adopted by reference (and is included in this plan element through its inclusion in the 20-year transportation capital facilities plan), and a copy of the current plan can be obtained from the City's Public Works Department.

Washington State Department of Transportation Highway System Plan

The 2007 – 2026 WSDOT Highway System Plan is currently under revision. It is anticipated that the primary long range project in the Gig Harbor vicinity is:

- Widening of SR 16 from four lanes to six creating HOV lanes, interchange improvements, TSM/TDM, and Intelligent Transportation System improvements from Olympic Drive to the Pierce/Kitsap county line.

WSDOT's funded project list includes:

- Frontage Road along SR 16
- Maintenance overlay on SR 16

Puget Sound Regional Council – Transportation 2040

Transportation 2040 is a 30-year action plan for transportation in the central Puget Sound Region (King, Pierce, Snohomish, and Kitsap Counties). The plan identifies investments to support growth and improve transportation services to people and businesses, provides a financing plan for funding transportation improvements, and proposes strategies for reducing environmental impacts. Transportation 2040 establishes three integrated and sustainable strategies: congestion and mobility; environment; and funding. These three strategies are then broken into four major investment categories that pertain to maintaining existing services; enhancing safety and security; improving system efficiency through travel demand management (TDM); and implementing strategic capacity investments for all travel modes and facilities.

Transportation 2040 is an offshoot of the Vision 2040 plan whose fundamental goal is to focus growth in urban areas to maintain and promote the well-being of people and communities, economic vitality, and a health environment. (PSRC 2014)

Concurrency Ordinance

The City of Gig Harbor requires either the construction of or financial commitment for the construction of necessary transportation improvements from the private or public sector within six years of the impacts of a development. Methods for the City to monitor these commitments include:

- The City keeps a concurrency Traffic Model which tracks cumulatively the proposed development within the City. Utilizing the model, the City evaluates the available capacity and corresponding LOS at intersections throughout the City to determine if transportation concurrency is available for the proposed development. The City periodically updates the Traffic Model which includes calibrating to existing conditions and providing current information to document Transportation Capacity Availability.
- Monitoring intersections for compliance with the City’s LOS Standard. The City of Gig Harbor LOS for intersections is LOS D; except for specified intersections in the Harbor Area and North Gig Harbor Study Area.
 - The specific intersections and the 2014 LOS for each in the Harbor are:

• Harborview Drive/Austin	LOS B
• Harborview Drive/Pioneer Way	LOS B
• Harborview Drive/Stinson Avenue	LOS F
• Harborview Drive/Rosedale	LOS B
• North Harborview Drive/Peacock Hill	LOS B
• Harborview Drive/Soundview	LOS B

The above intersections may be allowed to operate at a LOS worse than D, consistent with the pedestrian objectives identified in the Harbor.

- The specific intersections and the LOS for each in the North Gig Harbor Area are:
 - Burnham Drive/Borgen Drive/Canterwood Blvd/SR16 Ramps LOS E

The above intersection shall operate at LOS E or better (80 seconds of delay)

- Identifying facility deficiencies;
- Reviewing comprehensive transportation plan and other related studies for necessary improvements;
- Making appropriate revisions to the Six-Year TIP; and
- Complying with HB 1487 and WSDOT for coordinated planning for transportation facilities and services of statewide significance.

SECTION 2. TRAFFIC FORECASTING AND ANALYSIS

The 2014 City of Gig Harbor travel demand model is a representation of the Gig Harbor area transportation facilities and the travel patterns found on those facilities. The 2014 model contains

inventories of the existing roadway facilities and of all housing, shopping, and employment in the area.

The traffic volumes generated from the 2014 model in the PM peak hour are then compared with the 2014 traffic counts in the PM peak hour. When the model volumes match the traffic counts within acceptable margins, the model can then be used to predict future volumes and test future scenarios. These future scenarios may vary in land use such as number of housing units, employment centers, travel behavior patterns, and roadway improvements. The transportation engineer or planner can use the travel demand model to help evaluate vehicle-miles of travel, roadway capacity, intersection level of service (LOS), and delay; and then make better decisions on roadway improvement projects.

The Gig Harbor model was previously updated in 2011. The 2011 Gig Harbor model was enhanced and re-calibrated to the 2014 condition in the PM peak hour. The calibrated 2014 model was then used as a base to update the concurrency model and develop 2030 travel demand forecasts. The citywide roadway capacity and intersection LOS and delay were evaluated for the PM peak hour for the 2014, pipeline concurrency, and 2030 growth target land use scenarios. DEA 2014

These documents are available from the Public Works Department and herein incorporated by reference.

Methodology

The growth in population and employment in an area provides a basis for estimating the growth in travel. Population growth generally results in more trips produced by residents of homes in the area, and employment growth generally results in more trips attracted to offices, retail shops, schools, and other employment or activity centers. To estimate future traffic volumes resulting from growth, computerized travel demand models are commonly used. In areas where travel corridors are limited, growth factors applied to existing traffic counts can be also an effective approach to traffic forecasting.

In keeping with the requirements of GMA, the transportation demand forecasts utilized to develop this transportation element are consistent with the land use element contained within this comprehensive plan. **Table 12-2** provides a summary of the land use assumptions for the Gig Harbor Urban Growth Area (UGA).

**TABLE 12-2
LAND USE FORECAST ASSUMPTIONS
CITY OF GIG HARBOR**

Model Land Use Input		2014	Pipeline Development 2020	Plan Horizon Year Assumptions (2030)	Increase 2014 to 2030
Housing (Dwelling Units)		3,884	5,792	6,092	2,202
Employment (Employees)		9,321	13,998	14,549	5,228

Source: DEA

Primary Sources of Information

The primary sources of information used to forecast travel demand in Gig Harbor and the surrounding Urban Growth Area (UGA) were the Pierce County Buildable Lands Analysis (2014), staff market knowledge, and the Gig Harbor 2014 Concurrency Model.

The City’s existing Concurrency Model was utilized as a starting point as it incorporates existing conditions (2014) and approved pipeline developments. The Buildable Lands Analysis (2014) and staff market knowledge was used to go through the UGA on a parcel level, and determine what the pipeline and twenty year build out of an area would look like and when it would be likely to occur. This land use information was added to the Concurrency Model to build a pipeline and a 2030 forecast scenario. These forecasts were then used to generate the number and distribution of vehicle-trips that would use the transportation network for each scenario (pipeline and 2030). The traffic models were built using VISUM modeling software. The base year for the transportation forecasts is 2014.

Base Year (2014) Analysis

The validity of a transportation model is demonstrated by asking the model to “forecast” existing traffic conditions. The “forecast” of a base year is compared to the observed existing conditions to indicate the ability of the model to replicate those existing conditions. If that replication is successful, it is accepted that the model will successfully forecast future transportation demand. Details of that model validation process are included in the Gig Harbor 2014 Travel Demand Model Update and Capacity Report – David Evans and Associates and are included herein by reference.

Figure 12-6 provides the observed and “forecast” volumes for 301 counts within the study area. The comparison of the observed and “forecast” volumes is within the industry-accepted guidelines and the model is deemed to be “validated.”

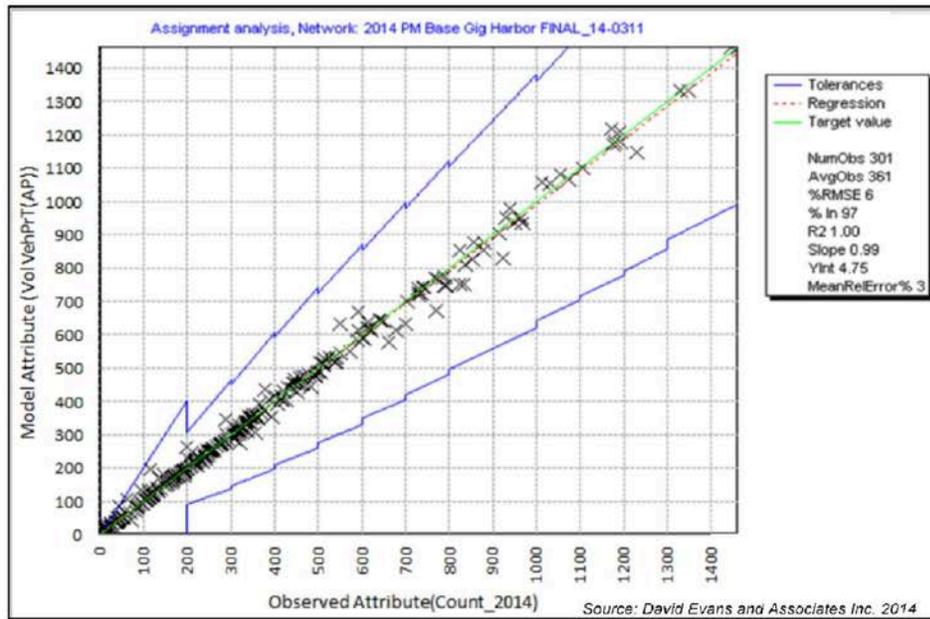


Figure 12-6
2014 Model Validation for PM Peak Hour



North Gig Harbor Traffic Analysis 2005

The North Gig Harbor (NGH) Traffic Mitigation Study 2005 included an analysis of traffic operations in the NGH area and was completed to identify transportation mitigation requirements for three Comprehensive Plan Amendments. The Study identified near term transportation impacts of pipeline development, near term development proposals and buildout of the subarea. Potential long term mitigation measures for the NGH study area were identified. The technical analysis of the study is incorporated herein by reference to provide historical context within the transportation element.

SECTION 3. MOBILITY ANALYSIS

This section of the transportation element presents the forecast of future traffic and the resulting level of service at key locations for both the pipeline horizon (2020) and the long range planning horizon (2030). The results of the mobility analysis are used to recommend a 20-year transportation capital facilities plan (TCFP) for Gig Harbor.

Volume Forecasts

As previously discussed, the transportation model developed for the City of Gig Harbor was used with the land use forecasts to prepare PM peak traffic volume forecasts. The traffic volume forecast for key roadways within Gig Harbor for the pipeline horizon is provided as **Figure 12-7**. The traffic volume forecast for the same roadways for 2030 horizon is provided as **Figure 12-8**.

Transportation Improvement Identification

The traffic volume forecasts were compared on a roadway segment or “link” basis with the capacity of each segment to determine the need for roadway improvements on a link basis. Even when that volume-to-capacity comparison does not indicate deficiency, there may be deficiencies resulting from intersection failures at either or both ends of the link. For that reason, intersection analysis was also conducted at key intersections. The intersections within the UGA were divided into three geographic groupings – North (north of 96th Street NW and west of Peacock Hill Avenue NW), West (south of 96th Street NW and west of SR-16), and East (south of 96th Street NW and east of SR-16) – for ease of data management.

Intersection Levels of Service (LOS) are summarized for the pipeline 2030 horizons in **Table 12-3**. **Table 12-4** identifies the roadway links not meeting the city’s LOS standards at the pipeline horizon and at the 2030 horizon.

**TABLE 12-3
INTERSECTION LEVEL OF SERVICE SUMMARY
PM PEAK – NORTH INTERSECTIONS**

NODE NUMBER	INTERSECTION	2014 BASE YEAR	2020 WITH TIP	2030 WITH TCFP
N-1	Burnham/53rd	B	B	B
N-2	Burnham/50th	A	C	C
N-3	Burnham/Harbor Hill	N/A	A	A
N-4	Burnham/97th	B	B	C
N-5	Borgen/51st	A	B	D ¹
N-6	Borgen/Harbor Hill	A	B	B
N-7	Borgen/Peacock Hill	A	A	B
N-8	Borgen/SR 16 WB	A	A	B
N-9	Burnham/SR 16 EB	A	A	C
N-10	Burnham/Wood Hill	B	B	B
N-11	Burnham/Sehmel	A	B	C
N-12	Sehmel/Bujacich	B	B	B
<i>N-13</i>	<i>Purdy/144th</i>	D	E	F ²
<i>N-14</i>	<i>Purdy/SR 302</i>	C	D	F ²
<i>N-15</i>	<i>Purdy/Goodnough</i>	F	F	F ²
<i>N-16</i>	<i>144th/54th</i>	C	C	F ³
<i>N-17</i>	<i>144th/Peacock Hill</i>	B	B	C
<i>N-18</i>	<i>54th/Canterwood</i>	B	B	C
<i>N-19</i>	<i>Peacock Hill/Canterwood</i>	B	C	C
<i>N-20</i>	<i>Canterwood/Baker</i>	C	C	D

Note: N/A indicates that the intersection does not or would not exist in that case.
Italic intersection names indicate the intersection is not currently under the city’s jurisdiction but is within the UGA.
 TIP – Transportation Improvement Program
 TCFP – Transportation Capital Facilities Plan

¹ New roadway improvements in the TCFP result in increased entering volumes at this intersection and therefore a reduction in the Level-of-Service (LOS). The resulting LOS is acceptable.
² Projected volumes will exceed the operational capacity of the intersection (LOS F). Improvements can be made to address the LOS at this intersection but it is outside of the jurisdiction of Gig Harbor.
³ New roadway improvements in the TCFP result in increased entering volumes at this intersection and therefore a reduction in the LOS. Improvements can be made to address the LOS at this intersection but it is outside of the jurisdiction of Gig Harbor.

TABLE 12-3 (CONTINUED)
Intersection Level of SERVICE SUMMARY
PM PEAK – EAST INTERSECTIONS

NODE NUMBER	INTERSECTION	2014 BASE YEAR	2020 WITH TIP	2030 WITH TCFP
E-1	Burnham / 96th	B	C	B
E-2	Peacock Hill / 96th	B	B	C
E-3	N. Harborview / Vernhardson	B	C	D
E-4	N. Harborview / Peacock Hill	B	B	B
E-5	Harborview / Austin St	B	B	B
E-6	Harborview / Stinson	F	A	A
E-7	Harborview / Rosedale	B	B	B
E-8	Harborview / Pioneer Way	B	C	C
E-9	Stinson / Rosedale	D	C	D
E-10	Stinson / Edwards	C	C	C
E-11	Stinson / Grandview	C	C	C
E-12	Pioneer Way / Judson	C	C	C
E-13	Pioneer Way / Edwards	B	B	A
E-14	Pioneer Way / Grandview	A	A	A
E-15	Pioneer Way / Kimball	B	C	B
E-16	Soundview / Judson	B	B	B
E-17	Soundview / Grandview	B	B	B
E-18	Soundview / 64th	B	A	A
E-19	Olympic / Hollycroft	A	A	a
E-20	Olympic / Spur to Hollycroft	E	N/A⁴	N/A⁴
<i>E-21</i>	<i>Pioneer Way / SR 16 WB</i>	C	C	D
<i>E-22</i>	<i>Pioneer Way / SR 16 EB</i>	C	C	C
<i>E-23</i>	<i>24th / SR 16 WB</i>	C	C	C
<i>E-24</i>	<i>Crescent Valley / Vernhardson</i>	C	D	F
<i>E-25</i>	<i>Reid / Hollycroft</i>	B	C	C
<i>E-26</i>	<i>24th / 14th</i>	B	B	B

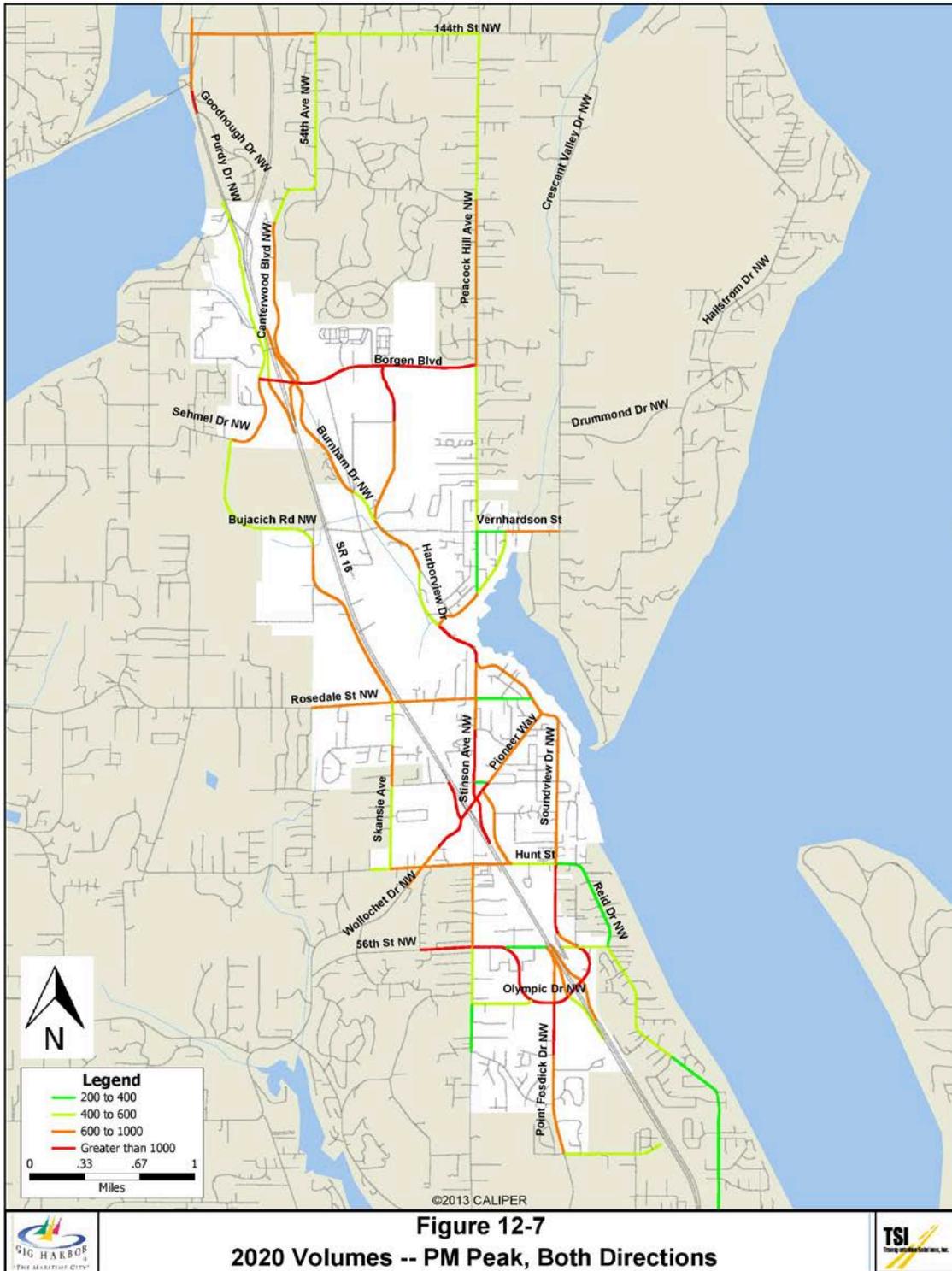
*Note: N/A indicates that the intersection does not or would not exist in that case.
 Italic intersection names indicate the intersection is not currently under the city's jurisdiction but is within the UGA.
 TIP – Transportation Improvement Program
 TCFP – Transportation Capital Facilities Plan*

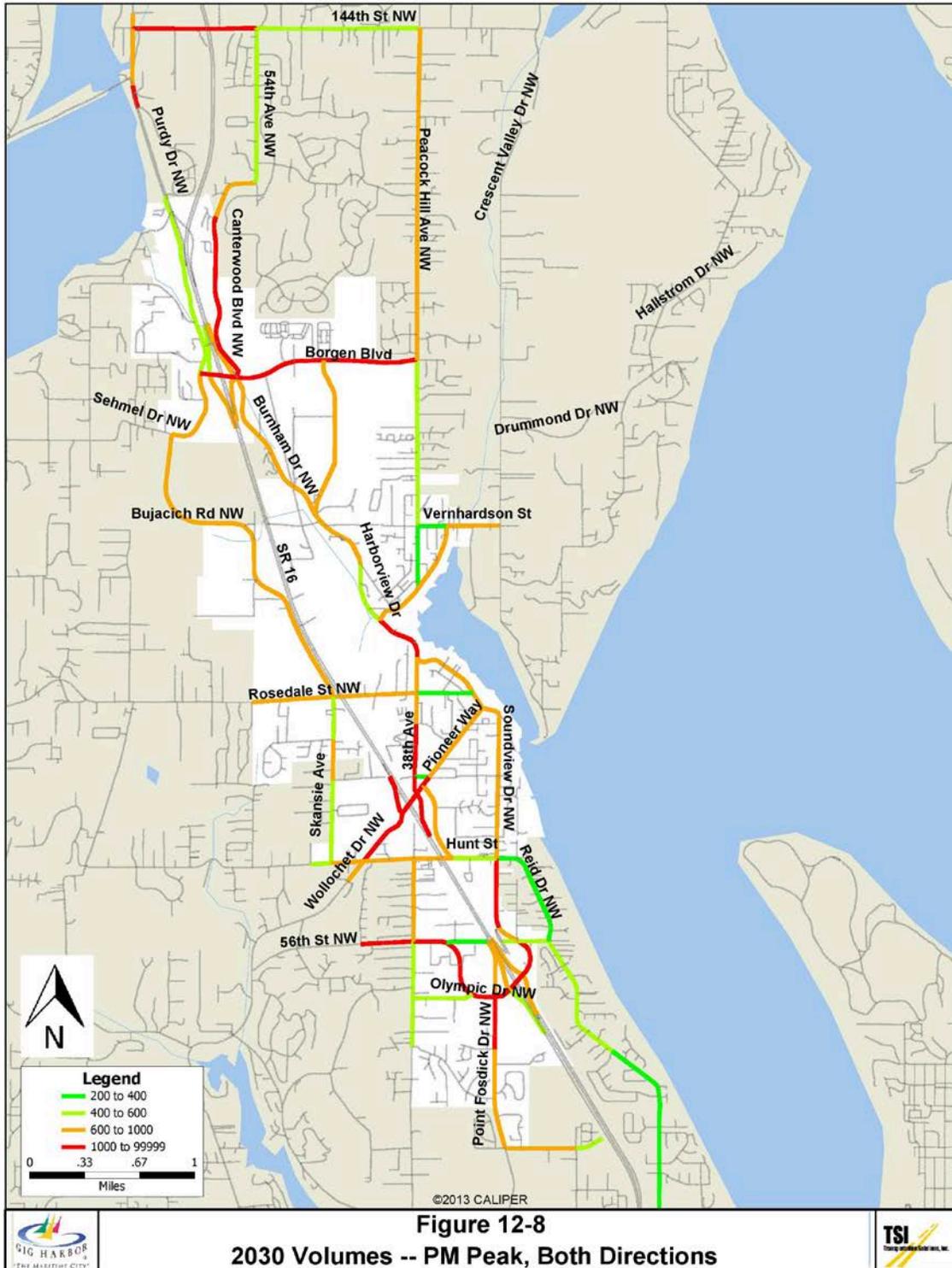
TABLE 12-3 (CONTINUED)
Intersection Level of SERVICE SUMMARY
PM PEAK – WEST INTERSECTIONS

NODE NUMBER	INTERSECTION	2014 BASE YEAR	2020 WITH TIP	2030 WITH TCFP
W-1	Rosedale / Skansie	C	C	B
W-2	Rosedale / Schoolhouse	B	A	B
W-3	Skansie / North Creek	B	B	B
W-4	Wollochet / Wagner	C	C	A
W-5	Wollochet / Hunt	B	C	C
W-6	Hunt / 46 th	C	D	A
W-7	Hunt / 38 th	B	A	A
W-8	Olympic / Point Fosdick	D	D	D
W-9	Olympic / 50 th	B	D	D
W-10	Olympic / 56 th	A	B	B
W-11	56 th / 38 th	B	B	C
W-12	Point Fosdick / Briarwood	B	C	C
W-13	Point Fosdick / 36 th	A	A	A
W-14	38 th / Briarwood	B	B	B
W-15	<i>Wollochet / SR 16 EB</i>	D	E	F
W-16	<i>Olympic / SR 16 EB</i>	B	C	C
W-17	<i>46th / 72nd</i>	B	B	B
W-18	<i>36th / 22nd</i>	B	B	B
W-19	<i>24th / Jahn</i>	F	F	F

*Note: N/A indicates that the intersection does not or would not exist in that case.
 Italic intersection names indicate the intersection is not currently under the city's jurisdiction but is within the UGA.
 TIP – Transportation Improvement Program
 TCFP – Transportation Capital Facilities Plan*

Source: Technical Memo Prepared by TSI/DEA dated March 2015.





**TABLE 12-4
ROADWAY SEGMENTS NOT MEETING LEVEL OF SERVICE PM PEAK**

ROADWAY	FROM	TO	2014 (V/C > 0.85)			2020 (V/C > 0.85)			2030 (V/C > 0.90)		
			VOLUME	CAPACITY	V/C	VOLUME	CAPACITY	V/C	VOLUME	CAPACITY	V/C
Borgen Blvd	Harbor Hill Dr	Peacock Hill Ave	815	1,400	0.58	1,635	1,400	1.17	1,423	1,400	1.02
Burnham Dr NW	Sehmel Dr NW	SR 16 EB ramp	851	1,200	0.71	1,145	1,200	0.95	1,274	1,200	1.06
Harborview Dr	N Harborview Dr	Stinson Ave	1,193	1,600	0.75	1,442	1,600	0.90	1,485	1,600	0.93
<i>144th St NW</i>	<i>Purdy Dr NW</i>	<i>54th Ave NW</i>	729	1,200	0.61	850	1,200	0.71	1,260	1,200	1.05
<i>Purdy Dr NW</i>	<i>144th St NW</i>	<i>Purdy Ln NW</i>	934	1,200	0.78	985	1,200	0.82	1,353	1,200	1.13
<i>Purdy Dr NW</i>	<i>Purdy Ln NW</i>	SR 302	880	1,400	0.63	933	1,400	0.67	1,326	1,400	0.95
<i>Purdy Dr NW</i>	SR 302	<i>Goodnough Dr</i>	1,825	2,800	0.65	2,189	2,800	0.78	2,571	2,800	0.92
<i>Pioneer Way</i>	<i>SR 16 WB Ramp</i>	<i>SR 16 EB Ramp</i>	1,340	1,400	0.96	1,290	1,400	0.92	1,366	1,400	0.98

*Note: Shaded volume cell indicates scenario where volume exceeds roadway link capacity.
V/C in excess of 0.85 for existing or near term conditions indicates that the LOS standard would like not be met under that condition.
V/C is excess of 0.90 for long-term conditions indicates that the LOS standard would likely not be met.
Blank cells in the 2005 Volume column indicates that volumes are not available for the cited roadway.
Italic roadway names indicate the intersection is not currently under the city’s jurisdiction but is within the UGA.*

*Source: Technical Memo Analysis of Gig Harbor 6-Year Transportation Improvement Projects (TIP) and Preliminary Recommendations, February 15, 2008.
Technical Memo, Analysis of Recommended Gig Harbor 20-Year Transportation Facility Plan, July 1, 2008.*

Short-Range Transportation Improvements

As discussed previously, Gig Harbor, as with all Washington State cities and counties, adopts annually a 6-year transportation improvement program (TIP) that addresses safety, mobility and system continuity issues that are either existing or expected within that 6-year window. As required by state law, the TIP is financially constrained to the revenue for capital improvements expected within that 6-year period from all possible sources (taxes, grants and fees). The financial analysis is provided later in this chapter.

Figure 12-9 illustrates the short-range transportation improvement projects needed to meet acceptable levels of service to accommodate the traffic that is estimated to be generated by the pipeline growth forecast. As shown in the previously presented tables, the pipeline transportation improvement projects addresses the unacceptable LOS identified in the pipeline “No Build” scenario while considering the special LOS standard applied in the “Harbor” **Table 12-5** summarizes the short range transportation improvement projects.

Long-Range Transportation Improvements

Long-range improvements to the roadway, bicycle and pedestrian system were identified both by examining level-of-service deficiencies and through inspection of the existing roadway system considering the expected development of Gig Harbor in realization of the land use element of this comprehensive plan. **Figure 12-10** presents the location and extent of the long-range improvements proposed to address projected level-of-service deficiencies and system continuity needs. **Table 12-6** describes and provides cost estimates for the long-range transportation improvements.

**Table 12-5
Gig Harbor Short-Range Transportation Projects**

No.	Roadway	From	To	Project Description	Estimated Cost (Thousands \$)	Component
1	Cushman Trail Phase 5	Borgen Blvd	Purdy	Cushman Trail extension	400	Engineering
					3,600	Construction
2	Harbor Hill Drive	Terminus	Burnham Drive	Complete the extension of Harbor Hill Drive to Burnham Drive.	8,500	Construction
3	Burnham Dr./Harbor Hill Dr.	Intersection		Reconfigure intersection to a modern roundabout	200	Engineering
					1,800	Construction
4	50th St. Ct. NW	KLM Park	38 th Street	Construct new 2-lane roadway with curb, gutter and sidewalks, illumination, storm water system	900	Construction
5	Kimball / Hunt Pavement Preservation	Pioneer Way	Soundview Drive	Overlay or perform pavement preservation within the City Limits	400	Construction
6	Rosedale Drive / Stinson Avenue	Intersection		Construct left-turn pocket on south leg of Stinson for left turns onto WB Rosedale Dr.; Construct right-turn only lane on north leg of Stinson to WB Rosedale	33	Engineering
					327	Construction
7	38 th Avenue	City Limits	56 th Street	Phase I improvements - Complete design & construction of 2-/3-lane section with left turn pockets, bicycle lanes, curbs & gutters on both sides, landscaped planter strips, sidewalk, storm sewer improvements, provisions for future lighting	700	Engineering
					6,300	Construction
8	Burnham Drive	Harbor Hill Drive Extension	SR 16 interchange	Phase I: Reconstruction, including minor widening, curbs, gutters, sidewalks, storm water improvements, landscaped planer strips and lighting.	1,300	Construction
9	Harborview Drive	Burnham Dr.	Pioneer Dr.	Downtown Harbor beautification. Provide landscaping and pedestrian benches at key intersections, install sidewalks.	13	Engineering
					117	Construction
10	Soundview Drive / Hunt Street	Intersection		Construct new traffic signal at the intersection with associated left turn pockets	80	Engineering
					770	Construction

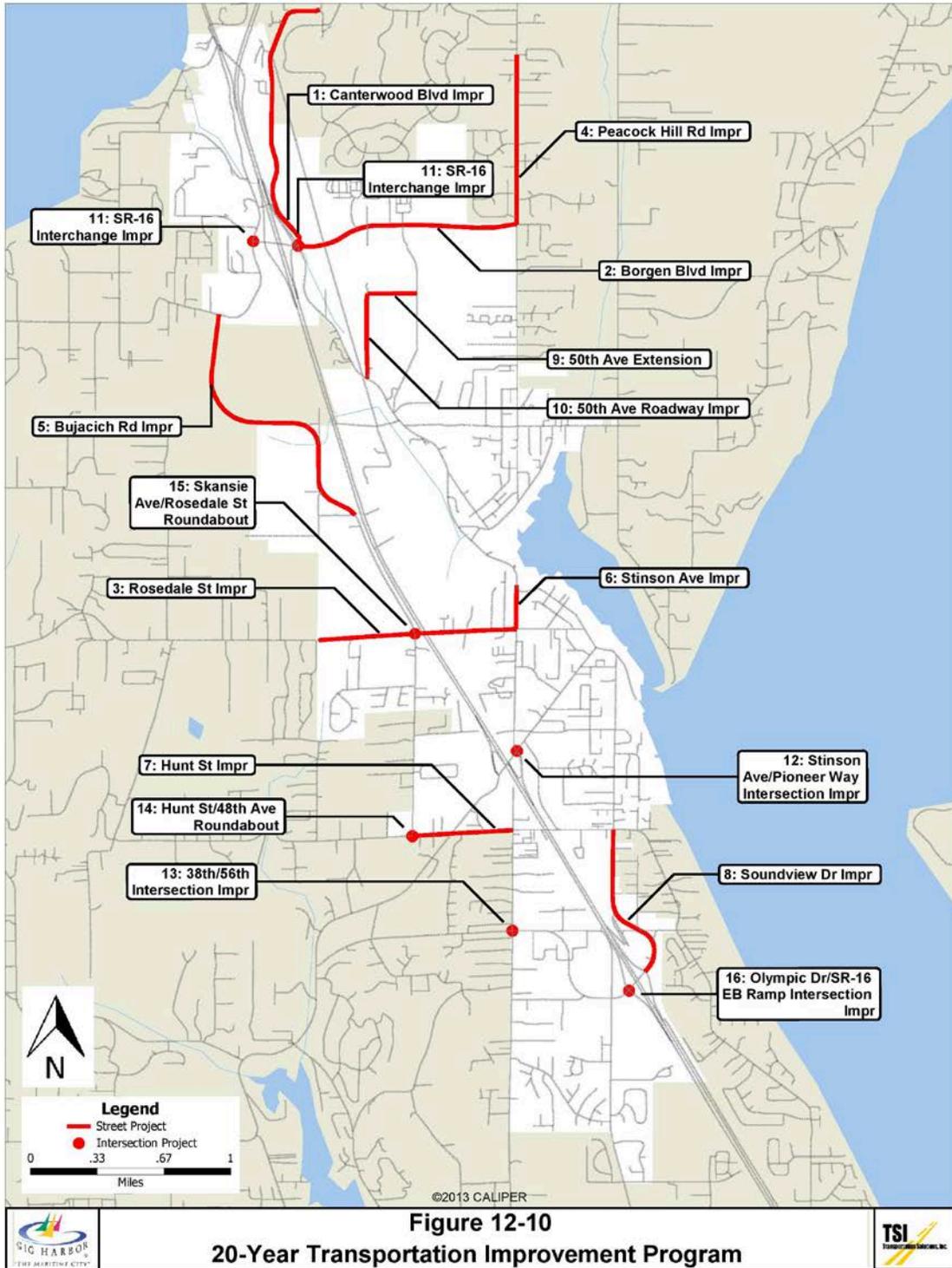
**Table 12-5 (Continued)
Gig Harbor Short-Range Transportation Projects**

No.	Roadway	From	To	Project Description	Estimated Cost (Thousands \$)	Component
11	Wollochet Drive	Hunt Street	Approximately 220 feet from Hunt Street	Widen roadway on one side to provide for 11-foot lane. This project completes corridor improvements provided by development	80	Engineering
					770	Construction
12	SR-16/Olympic Dr.	Intersection		Widen to provide exclusive right-turn lane on east approach. Convert one existing through-lane on east approach to shared through-left turn lane. Adjust signal phasing as required.	200	Engineering
					1,200	Construction
13	Rosedale St. / Skansie Av.	Intersection		Widen to provide left-turn lanes on east and west approaches	35	Engineering
					325	Construction
14	38 th Avenue	56 th Street	Hunt Street	Phase II - Complete design & construction of 2-/3-lane section with left turn pockets, bicycle lanes, curbs & gutters on both sides, landscaped planter strips, sidewalk, storm sewer improvements, provisions for future lighting	700	Engineering
					5,300	Construction
15	Skansie Avenue	Rosedale Street	Hunt Street	Minor widening to provide curb, gutter, storm water improvements, bicycle lanes and sidewalks on both sides of street	900	Engineering
					7,700	Construction
16	SR16 SB ramp/ Burnham Dr	Intersection		Ramp metering	375	Construction
17	Harbor Hill Drive / Borgen Blvd.	Intersection		Construct right-turn slip lane from EB Borgen Blvd to SB Harbor Hill Drive; Construct right-turn slip lane from NB Harbor Hill Drive to EB Borgen Blvd.	70	Engineering
					630	Construction

**Table 12-5 (Continued)
Gig Harbor Short-Range Transportation Projects**

No.	Roadway	From	To	Project Description	Estimated Cost (Thousands \$)	Component
18	Olympic Drive / Hollycroft Street	Intersection		Convert existing 2-way traffic on spur street that connects Olympic Dr with Hollycroft St in the SE quadrant of the intersection to one-way NB traffic. Angled parking to be added to spur to support the park to the SE.	3	Engineering
					27	Construction
19	Vernhardson St.	City Limits	Peacock Hill Av	Pavement restoration and/or overlay, storm sewer, curbs, gutters and sidewalk(s), bicycle lanes (east of N. Harborview Drive)	488	Engineering
20	Wagner Way Traffic Signal	Wagner Way	Wollochet Dr.	Traffic signal at Wollochet Dr and Wagner Way.	39	Engineering
					350	Construction
21	Grandview Phase 1 Improvements	Stinson Ave.	Pioneer Way	Road, stormwater, and lighting improvements.	50	Engineering
					550	Construction
21	Grandview Phase 2 Improvements	Soundview Dr.	McDonald Ave.	Road, stormwater, and lighting improvements.	200	Engineering
					1,000	Construction
22	Hunt Street Undercrossing	Hunt Street	Kimball Street	Construct a new undercrossing connecting both sides of Hunt Street across SR 16	1,000	Engineering
					9,300	Construction
23	Burnham Drive	SR-16 overcrossing		Restripe to 4 lanes	10	Engineering
					90	Construction
24	New pedestrian bridge over SR-16	North of Burnham Drive		New pedestrian bridge over SR-16	200	Engineering
					1,800	Construction

Table 12-5 (Continued) Gig Harbor Short-Range Transportation Projects						
No.	Roadway	From	To	Project Description	Estimated Cost (Thousands \$)	Component
25	Harborview Drive / Stinson Avenue	Intersection		Construct new roundabout	86	Engineering
					772	Construction
26	Harborview Drive / Pioneer Way	Intersection		Intersection improvements	10	Engineering
					90	Construction
27	Hunt Street / 38 th Avenue NW	Intersection		Construct new roundabout	150	Engineering
					1,350	Construction
28	Olympic Drive / Point Fosdick Drive	Intersection		Construct eastbound right turn lane	400 (Funded by developer)	Engineering
						Construction
Estimated Cost Summary (in thousands)					Engineering	\$ 5,567
					Construction	\$56,043
					Total	\$61,610
<i>Note: The numbering of projects should not be considered fully indicative of the relative importance or timing of the projects. Projects are programmed based on known commitments and funding. Depending on future funding opportunities, higher number projects may be constructed sooner than lower number projects.</i>						



**Table 12-6
Gig Harbor Long-Range Transportation Projects**

No.	Roadway	From	To	Project Description	Purpose	Estimated Cost (Thousands \$)
1	Canterwood Boulevard NW	SR-16 WB Roundabout	54 th Avenue NW	Add lanes to existing roadway to provide a 4-through lane cross-section	Address projected LOS deficiency	10,400
2	Borgen Boulevard	Peacock Hill Avenue	Burnham Drive NW	Widen roadway to 7-lane section with raised median and turn pockets at intersections	Address projected LOS deficiency	8,580
3	Rosedale Street NW	Skansie Avenue	58 th Avenue NW	Phase I – Widen to standard	Address projected LOS deficiency Upgrade to urban standards	4,160
		Skansie Avenue	Stinson Avenue	Phase II - Widen	Address projected LOS deficiency	2,990
4	Peacock Hill Avenue	Borgen Boulevard	127 th Street NW	Widen to 5 lane section (with two-way center left-turn lane)	Address projected LOS deficiency. Address existing local street pattern	5,330
5	Bujacich Road NW	Sehmel Drive NW	89 th Street NW	Widen to three-lane section (with two-way center left-turn lane)	Address projected LOS deficiency. Address access requirements of expected development	8,970
6	Stinson Avenue	Rosedale Street NW	Harborview Drive	Implement selected widening for left-turn storage. Project should be refined with operational analysis when programmed on 6-Year TIP. Existing corridor LOS deficiency acceptable under the Harbor LOS policy.	Manage access to preserve existing capacity and avoid widening.	286

Table 12-6 (Continued)
Gig Harbor Long-Range Transportation Projects

No.	Roadway	From	To	Project Description	Purpose	Estimated Cost (Thousands \$)
7	Hunt Street NW	Skansie Avenue	38 th Avenue NW	Widen to 3-lane section (with two-way center left-turn lane).	Address projected LOS deficiency	2,990
8	Soundview Drive	SR-16 WB Ramp	Hunt Street NW	Implement selected widening for left-turn storage and access management program. Project should be refined with operational analysis when programmed on 6-Year TIP.	Address projected LOS deficiency.	910
9	New Road	50 th Avenue	Harbor Hill Drive	C-3 facility identified in the North Gig Harbor Final SEIS. The majority of this roadway is most likely to be provided with development by development.	System completion	1,430
10	50 th Avenue	New Road (C-3)	Burnham Drive	50 th Avenue identified in the North Gig Harbor Final SEIS. The majority of this roadway is most likely to be provided with development by development.	System completion	2,990
<i>Intersection Projects</i>						
No.	Intersection		Project Description	Purpose	Estimated Cost (Thousands \$)	
11	SR 16 / Burnham Interchange Ramp Terminus and SR 16 / Borgen Boulevard Interchange Ramp Terminus		Rebuild interchange per Level III study (on-going) For purposes of this plan, an interchange replacement in place was assumed.	Address projected LOS deficiency	72,800	
12	Stinson Avenue / Pioneer Way		Signal upgrade: - Provide protected left-turns - Widen to add right-turn exclusive lane on east and west approaches Widen for double-left turn lanes on east approach	Address projected LOS deficiency	429	

Table 12-6 (Continued)				
Gig Harbor Long-Range Transportation Projects				
<i>Intersection Projects (Continued)</i>				
No.	Intersection	Project Description	Purpose	Estimated Cost (Thousands \$)
<u>6</u> <u>13</u>	38 th Avenue NW/56 th Street NW	Signal modification to adjust phasing plan (after detailed operational analysis)	Address projected LOS deficiency	195
<u>14</u>	Hunt Street / 48 th Avenue NW	Construct new roundabout	Address projected LOS deficiency	1,500
<u>15</u>	Skansie Avenue / Rosedale Street	Construct new roundabout	Address projected LOS deficiency	1,500
<u>16</u>	Olympic Drive / SR-16 EB Interchange Ramp Terminus	Intersection improvements	Address projected LOS deficiency	Funded by developer
Total Estimated Cost (thousands)				\$125,460

Transportation Capital Facilities Plan (TCFP)

The listing of projects expected to be provided between 2015 and 2030 with cost estimates is the Gig Harbor Transportation Capital Facilities Plan (TCFP). **Figure 12-11** illustrates the location and extent of the TCFP projects. The TCFP includes the projects identified as short and long range transportation improvements.

The performance of the transportation system with the TCFP projects in place has previously demonstrated in Table 12-3.

Project Prioritization

The project numbering for the short and long term projects do not represent the priority for implementation. As part of the Planning Commission process a recommended prioritization was established to guide project development. High and medium priority projects were established based upon the desire to address immediate transportation needs and planned development, with the remaining projects anticipated to occur as long term growth occurs.

This prioritization assists in supporting Policy 12.7.1 through transportation and level of service investments to Centers of Local Importance. With the exclusion of the 38th Avenue project, the projects identified below are either included in a Center of Local Importance or provides through access to a nearby Center of Local Importance.

High Priority Projects

- 2. Harbor Hill Drive Extension (Short Range Project High Priority)
- 5. Rosedale Drive/Stinson Ave Intersection (Short Range Project High Priority)
- 11. Hunt Street Undercrossing (Long Range Project High Priority)

Medium Priority Projects

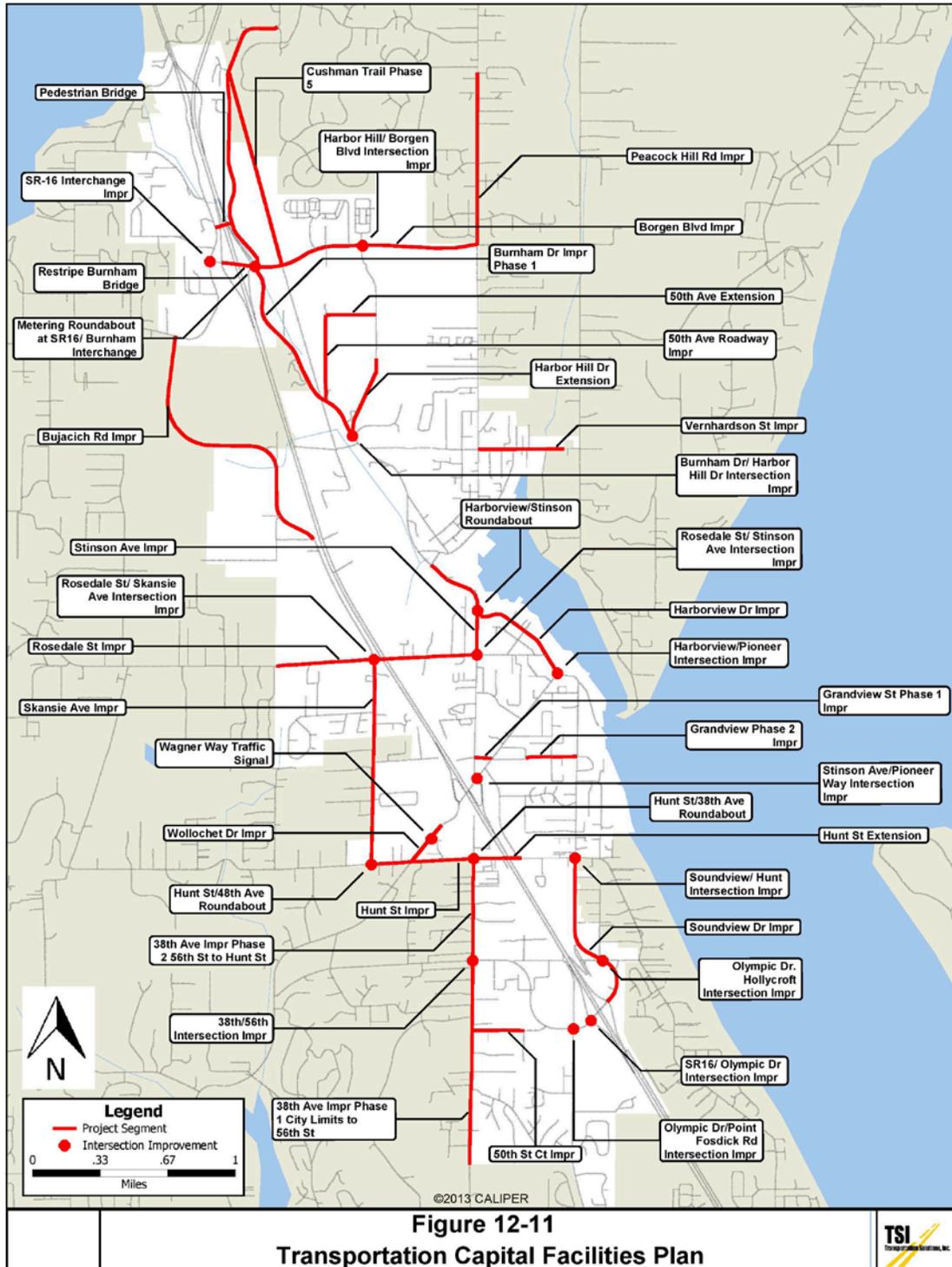
- 11 Olympic Drive/SR 16 (Short Range Project High Priority)
- 5. Bujacich Road NW (Long Range Project High Priority)
- 6. 38th Avenue (Short Range Project High Priority)
- 8. Harborview Drive Improvements (Short Range Project High Priority)
- 16. Stinson Avenue/Pioneer Way (Long Range Project High Priority)

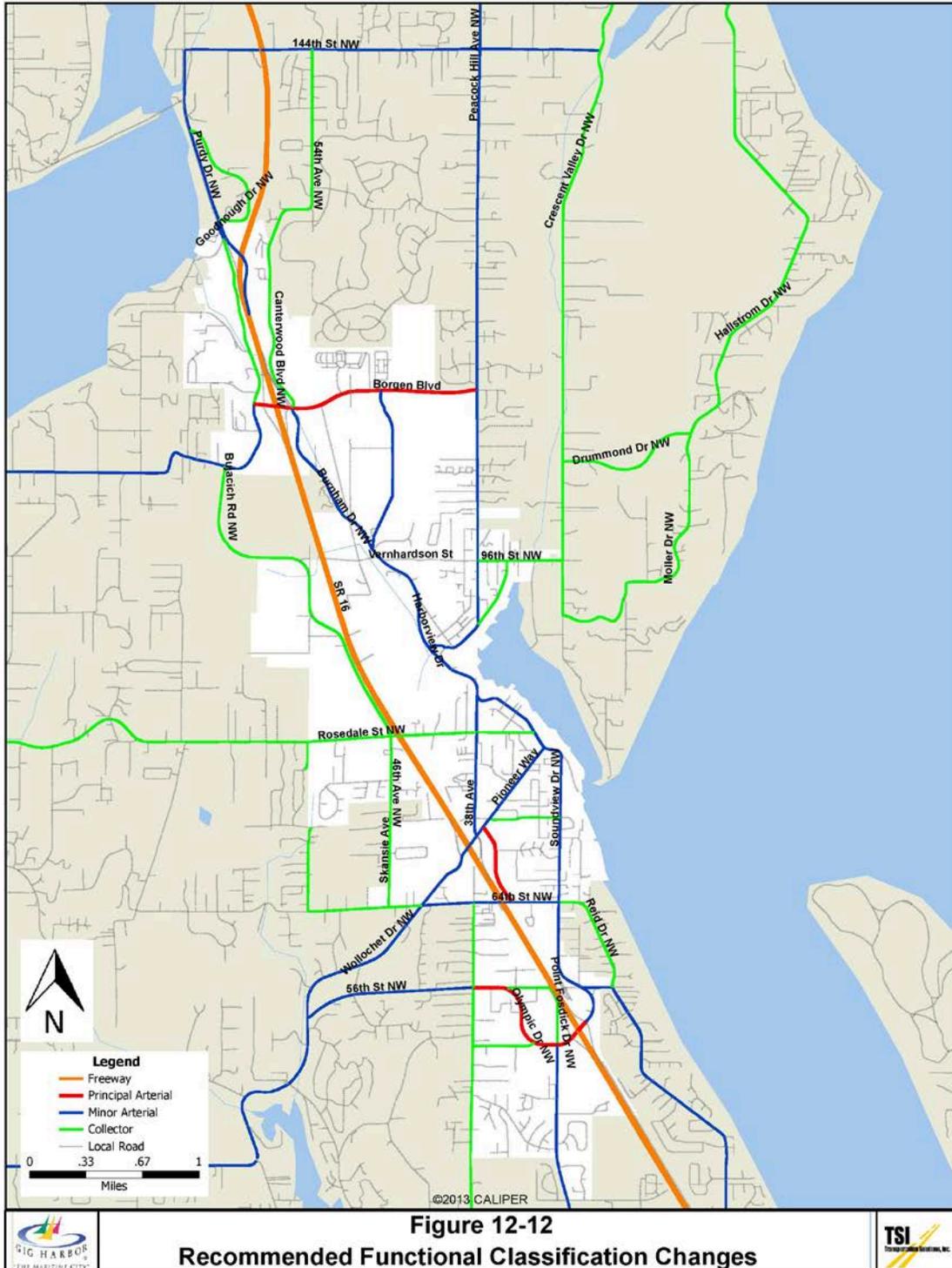
Recommended Arterial Reclassifications To support the land use plan and to facilitate the implementation of the recommended transportation improvements, the following arterial reclassifications are recommended:

- Hunt Street (Kimball Drive to Wollochet Drive NW) – Classify the new undercrossing as a Major Collector. Reclassify existing section from a Minor Collector to Major Collector.
- 56th Street NW (38th Avenue to City Limits) – Reclassify from Major Collector to Arterial
- Hollycroft Street (Olympic Drive to Reid Drive) – Classify as Major Collector.

- Reid Drive NW (64th Street NW/(Hunt Street to Soundview Drive) – Reclassify from Major Collector to Minor Collector.

The City Engineer is authorized by this plan to pursue changes to the federal functional classifications of these roadways to provide consistency with these GMA functional classifications. The recommended arterial classification map is provided as **Figure 12-12**.





SR 16 Burnham Drive Interchange

The North Gig Harbor Traffic Mitigation Study 2005 identified a long range system of transportation improvements to support the buildout of existing and proposed zoning in the NHG Study area. The existing six-legged intersection at Burnham Drive/Borgen Blvd./Canterwood and the SR 16 on and off-ramps was improved to support additional development but may not support all the potential development allowed under current zoning. The study identified a single point urban interchange as a possible solution to the capacity issue. The interchange is not currently on WSDOT's plan for the SR 16 corridor. The City must determine to what extent it can rely on this project when making concurrency determinations. Concurrency approvals may be limited until a specific SR 16/Burnham Drive interchange capacity improvement project is included in the Regional STIP and WSDOT's system plan.

Other Improvements and Strategies

Over the next two decades, the City of Gig Harbor will experience growth resulting in an increase in travel demand to, from, through and within the city. Transportation strategies must be implemented to accommodate this growth, including:

- Transportation Demand Management strategies such as: Commute Trip Reduction, High Occupancy Vehicles (HOV such as van pools, car pools, etc.), work-at-home, remote offices, and flexible work hours.
- Transportation System Management strategies such as integrated policies and planning, Intelligent Vehicle Highway Systems (IVHS), signal coordination, etc.
- Modal shift from private vehicles to transit, vanpools, ~~and~~ carpooling, biking, and walking.
- Enhancements and expansion of non-motorized facilities to encourage walking-and cycling
- Elimination of trips altogether through compute trip reduction.
- Upgrading of existing motorized facilities to maximize vehicle, bicycle and pedestrian mobility.
- Construction of new multi-modal streets.

The above strategies will require close coordination of efforts with the Washington State Department of Transportation, Pierce Transit, Pierce County and Kitsap County. The development of TSM and TDM policies and procedures should be consistent with other surrounding jurisdictions programs and will require public involvement. The "Good to Go" program of electronic tolling on the Tacoma Narrows Bridge offers the potential for WSDOT to

use “congestion pricing” (variable tolls during peak periods). Depending on the structure of the tolling system, it can encourage transit, carpools and vanpools. Gig Harbor should monitor and participate in any discussions of congestion pricing in connection with the Tacoma Narrows Bridge.

Transportation Demand Management goals should be integrated with the development review process and should be a part of any traffic impact assessment and mitigation program. The City Council, Planning Commission and the residents of Gig Harbor value a balance between motorized and non-motorized alternatives to help solve transportation issues in Gig Harbor.

Specific Projects for Transportation Demand Management include:

- Comply with state commute trip reduction program for major employers.
- Develop a comprehensive transit information program with Pierce Transit.
- Work with Pierce Transit to develop a vanpooling and ridematch service.
- Work with the WSDOT to implement the High Occupancy Vehicle lanes on SR 16 and on and off ramps where applicable.
- Work with the WSDOT to integrate the SR 16 queue by-pass on ramps with City streets.
- Develop a comprehensive parking management strategy to integrate parking availability and pricing with any transportation demand management strategy.
- Work with WSDOT and local transit agencies to provide a Park and Ride lot in the vicinity of the SR 16 Burnham Drive interchange.
- Participate in any congestion pricing discussions led by WSDOT or PSRC.

Specific projects for Transportation Systems Management would include:

- Work with the WSDOT to coordinate the SR 16 HOV project, local-state signal coordination, driver information and Intelligent Vehicle Highway Systems with the local street network.
- Develop a signal re-timing and coordination project to reduce delay and congestion at the City’s signalized intersections.

The recommendations for transportation improvements for the City of Gig Harbor address these concerns. The motorized improvements focus on intersections and roadways, while the recommendations for non-motorized travel consist primarily of ways to expand the bicycle

facilities, complete the sidewalk network and evaluate other options. Recommendations for transit are mainly directed to Pierce Transit, which serves the City of Gig Harbor.

Transit

Gig Harbor participates with the local transit agency, Pierce Transit, on a variety of capital projects. This cooperation includes planning, route design, and capital improvement projects. Pierce Transit has begun developing a Long Range Plan (LRP), titled Destination 2040, as part of the Agency's comprehensive long range planning efforts. The document will be used to provide guidance as Pierce Transit begins developing implementation strategies for capital projects and service improvements over both the mid-term (i.e., fiscally constrained and spanning 5-10 years) and long-term (i.e., unconstrained and spanning 11-15 years). Furthermore, the LRP will evaluate current conditions against future population and employment projections for Pierce County, Washington, as well as considering buildable lands, household densities, employment densities, major activity or industrial centers, and any other demographic criteria or data known to generate transit ridership and related demand.

A key component of Destination 2040 is analyzing and presenting five hypothetical fixed route transit network scenarios for incremental annual growth against current conditions. Pierce Transit has also created a scenario for a potential "worse case" reduction in services beyond the agency's control. These six future scenarios will be further used to determine directly related capital improvement projects, infrastructure, and vehicles that would also be required in tandem over both the mid- and long-term. Once the draft LRP becomes available for public review and comment in summer 2015, the agency expects to have projected cost estimates available for each scenario as well.

As a key stakeholder, ongoing participation in this process will guide the agency to planning for more frequent and reliable transit service for the city well into the future.

Gig Harbor's future transportation network is dependent upon success with efficient and effective transit service. Below a preferred contingency list has been identified should additional funding for route expansions become available to better connect the community.

1. Maintain existing routes and connections.
2. In continued partnership with the City, Pierce Transit and local businesses, maintain support of the 'around town' trolley service during summer months.
3. Establish regular daily service between all Centers of Local Importance, with operation at a minimum from 6am to 8pm.
4. Work to establish connections to the Hospital, local parks, Boys and Girls Club/Senior Center, public schools, and local hotels.
5. Continue and expand express lines current serving Gig Harbor. Support increased direct connections throughout the Puget sound and the major employment sites for both the weekday and weekends.
6. Analyze opportunities for a park and ride near the Westside Center of Local Importance.

7. Continue to support site design standards that connect users to the transit services, including but not limited to sidewalks, pathways and trails, crosswalks, wayfinding signs, and bicycle parking facilities.

Marine Transportation

The waterfront and harbor of Gig Harbor are a primary focus area for many of the City’s activities including commercial, retail, industrial, tourism and recreation activities. These activities create generate traffic and parking demand which is concentrated around Harborview and North Harborview arterials.

There is demand for marine improvements in Gig Harbor. Access for public or private marine services should be provided at a central dock location in the Harbor. Continued upgrading and enhancement of the Jerisich Park dock area should be emphasized. The increased use of marine services would also place demands on Harbor parking.

Possibilities of provision of recreational passenger ferry services should be coordinated with private providers. Some discussions have taken place regarding private ferry services to Gig Harbor, and the City should continue to pursue these opportunities. Due to the high costs and parking impacts associated with commuter ferry services, it is not recommended that the city pursue passenger-only ferry services with Washington State Ferries.

Coordinating Transportation and Land Use Planning To Support Transit and Pedestrian Oriented Land Use Patterns

To ensure that this plan is consistent with evolving land use patterns, and to guide land use and new development with respect to transportation that promotes transportation-related goals, the City will work towards:

- Reducing daily vehicle trips and vehicle miles traveled to minimize the demand for constructing costly road improvements;
- Supporting effective public transportation services to help reduce car dependence in the region and serve the needs of people who rely on public transportation;
- Encouraging bicycle and pedestrian travel by providing inviting, safe, convenient and connected routes, education and incentive programs, and support services such as bicycle racks and bicycle lockers;
- Maintaining and improving a network of highways, streets and roads that moves people, goods and services safely and efficiently, minimizes social and environmental impacts, and supports various modes of travel.
- Providing adequate connections and access among all transportation modes city wide.

Non-Motorized Travel

The residential character of Gig Harbor makes non-motorized travel an important aspect of the Transportation Element. A complete pedestrian and bicycle network would link neighborhoods with schools, parks, and retail activity, allowing residents and visitors to walk or bicycle to these areas rather than drive.

Outside of the Harbor and more recently developed residential and commercial areas, sidewalks have been constructed sporadically, resulting in a discontinuous system of walkways for pedestrians. There are even fewer facilities for bicyclists within Gig Harbor; bicyclists must share the traveled lane with motorists. While there are no facilities for equestrians within Gig Harbor, there is generally little demand for equestrian travel.

Gig Harbor road design standards require the provision of facilities for pedestrians and bicyclists on all roadways. As such, much of the non-motorized transportation network will be developed with each and every new or improved roadway identified in this plan. The only off-street facility planned by the city for pedestrians and bicyclists is the Cushman Power Line trail the last phase of the trail within the boundaries of the City of Gig Harbor was completed in 2015. This trail now connects the majority of Centers of Local Importance with a safe non-motorized connection for pedestrians and cyclists.

Additional non-motorized projects are anticipated to be developed using the policies in this plan. The City's level of service for non-motorized (nmLOS) is implemented by providing non-motorized connections between all CoLIs to collaboratively support the movement of people and goods. Please see the short range project list in Table 12-13 that indicates projects to support the nmLOS.

The City has funding and a contract in place to complete a comprehensive non-motorized plan by the end of the year 2015. Upon completion of the non-motorized transportation plan, it will be adopted via reference to this element.

The Harbor

Much of Gig Harbor's commercial, tourist and recreational facilities are located along the waterfront, creating congestion in the Harbor and generating demand for pedestrian amenities and additional parking. Traditional roadway or intersection capacity improvements here would destroy the unique character of the Harbor.

Within the Harbor, defined as Harborview Drive and North Harborview Drive between Soundview Drive and Peacock Hill Avenue, the City has established the LOS on the intersections identified below to the LOS Classification shown below. The City is required by RCW 36.70A.070(6)(b) "to prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or

SECTION 4. HOUSE BILL 1487 COMPLIANCE

The 1998 legislation House Bill 1487 known as the “Level of Service” Bill, amended the Growth Management Act; Priority Programming for Highways; Statewide Transportation Planning, and Regional Planning Organizations. The combined amendments to these RCWs were provided to enhance the identification of, and coordinated planning for, “transportation facilities and services of statewide significance (TFSSS)” HB 1487 recognizes the importance of these transportation facilities from a state planning and programming perspective. It requires that local jurisdictions reflect these facilities and services within their comprehensive plan.

To assist in local compliance with HB 1487, the Washington State Department of Transportation (WSDOT), Transportation Planning Office and the Washington State Department of Community Trade and Development, Growth Management Program, (now Office of Community Development [OCD]) promulgated implementation guidelines in the form of a publication entitled “Coordinating Transportation and Growth Management Planning”.

Together with these entities, the City of Gig Harbor has worked to compile the best available information to include in the comprehensive plan amendment process.

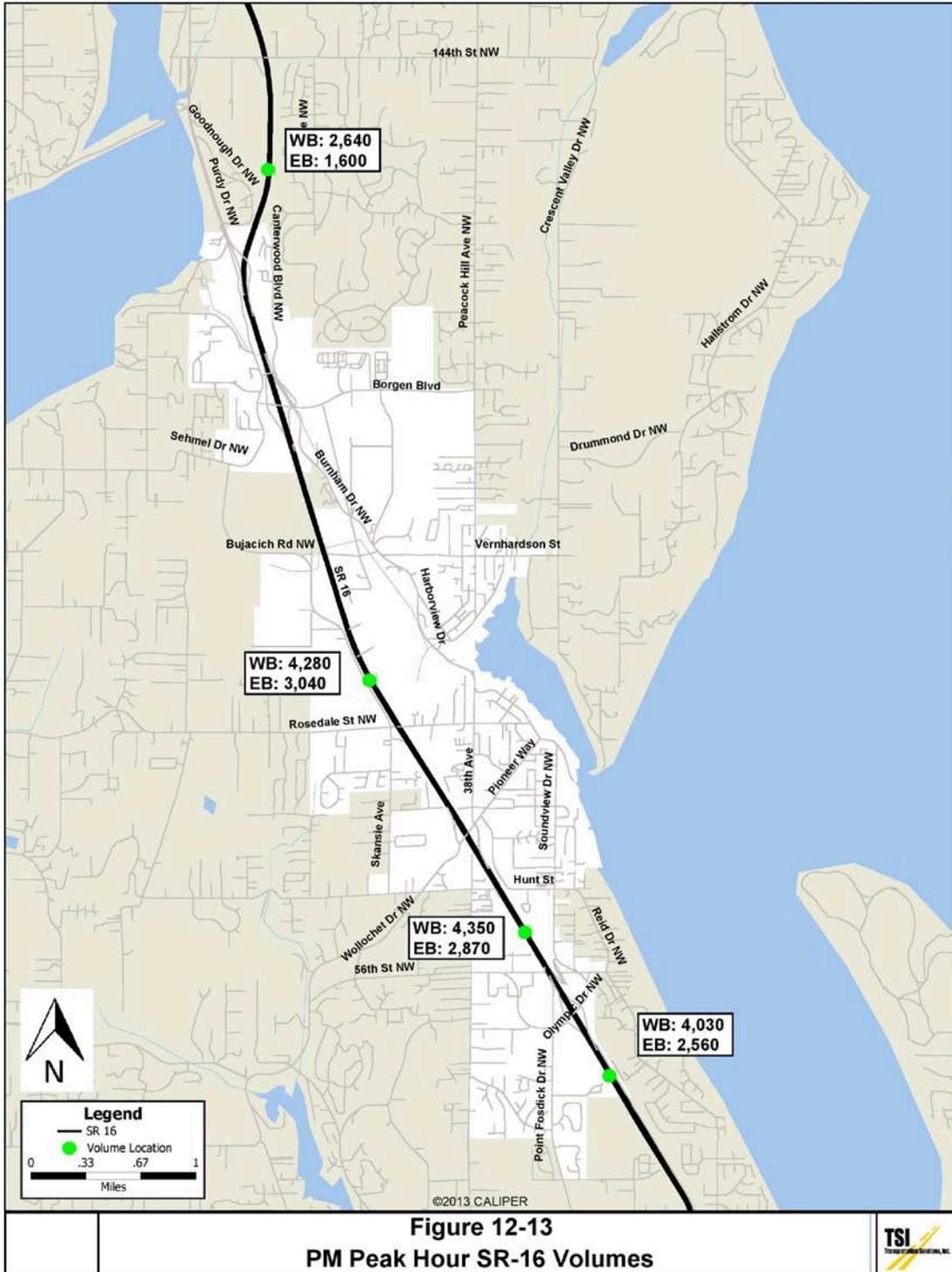
- Inventory of state-owned transportation facilities within Gig Harbor: SR 16 provides the major regional connection between Tacoma, Bremerton and the Olympic Peninsula. It connects to Interstate 5 in Tacoma and to SR 302 in Purdy. SR 302 is the only other state-owned transportation facility within the planning area, connecting SR 16 with SR 3 to Shelton.
- Estimates of traffic impacts to state facilities resulting from local land use assumptions: **Figure 12-13** provides 2030 traffic volumes for SR-16, which is the only state facility within Gig Harbor. The volumes were generated by the Gig Harbor transportation demand model, which includes land use assumptions for 2030 for Gig Harbor.
- Transportation facilities and services of statewide significance: In 1998, the state Legislature enacted HB 1487, more commonly known as the Level of Service or LOS bill, to recognize the importance of specific categories of transportation facilities and services that are of statewide significance. This legislative action amended the Growth Management Act (RCW 36.70A), Priority Programming for Highways (RCW 47.05), and Regional Transportation Planning Organizations (RCW 47.80) to direct further definition and planning through state, regional and local actions. As now codified under RCW 47.06.140, the nine categories of transportation facilities and services of statewide significance include:
 1. The interstate highway system
 2. Inter-regional state principal arterials including ferry connections that serve statewide travel
 3. Intercity passenger rail services

4. Intercity high-speed ground transportation
5. Major passenger inter-modal terminals, excluding all airport facilities and services
6. The freight railroad system
7. The Columbia/Snake navigable river system
8. Marine port facilities and services that are related solely to marine activities affecting international and interstate trade
9. High-capacity transportation systems serving regions as defined in RCW 8M04.015 (in the central Puget Sound, this is the Sound Transit express bus and rail system plus the state HOV system and related supporting facilities).

The first two categories include the interstate highway system and inter-regional state principal arterials and ferry connections. These state system elements were formally defined and designated in 1999 by respective actions of the State Transportation Commission and State Legislature as Highways of Statewide Significance (HSS) and include key ferry routes.

- Highways of statewide significance within Gig Harbor: The Transportation Commission List of Highways of Statewide Significance lists SR 16 as an HSS within the City of Gig Harbor and its growth area. The level of service for state-owned facilities in Gig Harbor is LOS D.
- The North Gig Harbor Traffic Mitigation Study 2005 identified a long range system of transportation improvements to support the buildout of existing and proposed zoning in the NGH Study area. The Study found that SR 16/Burnham Interchange would fail at build out conditions. Additional access to SR 16 at 144th Ave was identified as a possible mitigation measure, and in traffic modeling provided benefits to operations at the Burnham Drive interchange.

The City of Gig Harbor asserts that proposed improvements to state-owned facilities will be consistent with the Regional Transportation Plan (RTP) and the State Highway System Plan within Washington’s Transportation Plan (WTP).



SECTION 5. FINANCIAL ANALYSIS AND CONCURRENCY

The State of Washington’s Growth Management Act (GMA) requires that a jurisdiction’s transportation plan contain a funding analysis of the transportation projects it recommends. The analysis should cover funding needs, funding resources, and it should include a multi-year financing plan. The purpose of this requirement is to insure that each jurisdiction’s transportation plan is affordable and achievable. If a funding analysis reveals that a plan is not affordable or achievable, the plan must discuss how additional funds will be raised, or how land use assumptions will be reassessed.

The City of Gig Harbor is including the financial element in this transportation plan in compliance with the GMA as well as to provide a guide to the City for implementation of this plan.

Federal Revenue Sources

MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by President Obama on July 6, 2012. Funding surface transportation programs at over \$105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005.

MAP-21 is a milestone for the U.S. economy and the Nation’s surface transportation program. By transforming the policy and programmatic framework for investments to guide the system’s growth and development, MAP-21 creates a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.

MAP-21 Overview in Washington

Moving Ahead for Progress in the 21st Century (MAP-21) is the current federal transportation act. The two-year federal act was signed into law by President Obama on July 6, 2012, and covers from October 1, 2013 through September 30, 2014. MAP-21 funds surface transportation programs at over \$105 billion for federal fiscal years (FFY) 2013 and 2014. MAP-21 transforms the policy and programmatic framework for investments to guide the system’s growth and development. MAP-21 creates a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.

In October 2012, Governor Gregoire convened a Steering Committee to recommend how to distribute the highway formula funds between the State and local governments. The Committee met twice and agreed to maintain the current overall split between state and local governments (66% State / 34% Local) for the next two years, with some revisions in individual program distributions.

Current Transportation Revenue Sources

The City of Gig Harbor uses various categories of revenue for street operating and capital improvement, with their sources described below:

Licenses and Permits: The city collects fees for reviewing and issuing right-of-way encroachment permits. These fees are included as a revenue sources for the Street Operation Fund.

Intergovernmental Revenue: Sources of revenue under this category include:

- **Motor Vehicle Fuel Tax (MVFT):** In the past, motor vehicle excise tax (MVET) and motor vehicle fuel tax (MVFT) allocations from the state were major sources of continuing funding for transportation capital improvements. In 1999, initiative 695 removed MVET as a significant funding source, so only the MVFT (“gas tax”) funding has been included as a revenue source since that time. MVFT is a revenue source for the Street Operating Fund.
- **Federal Grants:** The City has applied for and/or received transportation grants through the Surface Transportation Program (STP), Congestion Management and Air Quality (CMAQ) program, Transportation, Community and System Preservation (TCSP) program. The department of Housing and Urban Development (HUD) is also a source of grant funding for certain types of transportation projects. The City continues to track and identify federal grant funding sources and makes application as appropriate for projects that are likely to meet selection criteria for each grant type. As grants are awarded for specific projects, they are included as revenue sources in the Street Capital fund.
- **State Grants:** The Washington State Department of Transportation (WSDOT) administers various funding programs, including Safe Routes to School, Transportation Enhancements and Pedestrian Safety. The State Transportation Improvement Board (TIB) funding program includes Urban Arterial, Arterial Preservations and Sidewalk Programs. The City continues to track and identify appropriate grants and applies for funding for projects likely to meet the selection criteria for each grant type. As grants are awarded for specific projects, they are included as revenue sources in the Street Capital fund.

Charges for Services: The city collects fees for services rendered by staff. Some examples of these services include engineering plan review and construction inspection for private development project within the City limits.

Hospital Benefit Zone (HBZ): In 2006, the state legislature approved Substitute House Bill (SHB) 2670 providing for the creation of benefit zones in which publicly-funded improvements could be financed through bonds and have the bonds repaid using the incremental increase in sales tax within the zone. This legislation was sponsored to support the transportation infrastructure needs of the North Gig Harbor area where a new hospital was being proposed. The legislation provided that a maximum, statewide, of \$2 million in the state’s portion of the “excess” sales and use tax within the benefit zone can be diverted annually to repay bonded debt given that the city matches that amount from other local sources. The “excess” sales and use tax

is defined by establishing the benefit zone and measuring the amount of sales and use tax generated within that benefit zone then comparing that amount to the sales and use tax generated in subsequent years; the increase in sales and use tax revenue is the “excess.”

The City of Gig Harbor established the HBZ jointly with Pierce County in 2006, pursuant to SHB 2670. The base year for the measurement of tax revenue leading to the definition of “excess” tax revenue is 2008. The “excess” was defined in 2009, permitting bond payments, assumed to be \$2 million annually, in 2010. This revenue source can be used for improvements other than transportation so only a portion of the total amount available was included in the revenue forecast. HBZ revenue is included as restricted revenue in both the short and long range forecasts.

Miscellaneous: The city collects transportation impact fees, mitigation payments required as part of the review under SEPA, and other developer contributions to fund related transportation projects. These fees are collected and included as restricted revenue sources for identified transportation projects. The City last updated the Transportation Impact Fees using a rigorous analysis and the best available data in 2007. For future transportation impact fee calculation updates, the City may consider either the short or long range project list along with the corresponding estimated growth.

Transfers: The city transfers funds from other sources, as allowed under State Law, to fund both operating and capital expenditures that are authorized by the City Council.

Other: The city may issue new debt to fund gaps in Street Capital fund revenue as necessary and as authorized by the City Council.

Possible New Revenue Sources

Transportation Benefit District (TBD): A Transportation Benefit District (TBD) is an option authorized by Washington State that cities can use to help fund transportation improvements within an established district. A TBD is an independent taxing district that can impose specific taxes or fees through a vote of the people or through a district board action. Boundaries of a TBD can be independent of City or County boundaries, making them a flexible option to solve either local or more regional transportation issues. The future TBD boundary for Gig Harbor is likely to encompass the entire city limits. The TBD has several revenue options, depending on whether or not it was formed through voter approval.

Revenue options NOT requiring voter approval:

- Annual vehicle fee up to \$20
- Transportation impact fees

Revenue options REQUIRING voter approval:

- Property taxes – excess levy
- Sales tax (up to 0.2%)
- Annual vehicle fee (up to \$100 per vehicle)
- Vehicle tolls

Revenue Forecast

The projected revenues for the City's Street Operation and Street Capital funds are shown in Table 12-9. Approximately 52% of funding for the City's Transportation Capital Facilities Plan will come from Intergovernmental Revenue. The Hospital Benefit Zone is estimated to fund another 13% with Transportation Impact Fees and other miscellaneous revenue funding approximately 7%. The City may consider implementing new revenue sources, such as a TBD (discussed above), if deemed appropriate and necessary in the future. The remainder of the Transportation Capital Facilities Plan will be funded by transfers from other City unrestricted revenue sources and issuing debt as needed. This strategy ensures that the City can accomplish the transportation plan and use the available funding options efficiently.

This forecast was generally prepared by projecting historic trends from the City's financial records. It was then adjusted based on a projected growth of 1% to 3% per year, depending on other known factors that could influence the specific category of revenue.

Table 12-9. Gig Harbor Transportation Revenue Forecast 2015 to 2030

Funding Source	Description	Revenue Forecast			
		Short Range 2015 - 2020	Percent	Long Range 2015 - 2030	Percent
Street Operating Fund - Unrestricted					
Licenses & Permits	Right of way encroachment permit fees	\$ 100,000	1%	\$ 340,000	1%
Intergovernmental Revenue	City Share of motor vehicle fuel tax (MVFT)	\$ 1,042,000	8%	\$ 3,731,000	8%
Charges for Services	Fees for services rendered by transportation operations staff including plan review and construction inspection	\$ 791,000	6%	\$ 2,816,000	6%
Miscellaneous	Other sources of unrestricted revenue	\$ 28,000	0%	\$ 98,000	0%
Transfers/Other	Tranfers to support transportation operations, maintenance and administration	\$ 10,901,000	85%	\$ 40,305,000	85%
TOTAL - Street Operating		\$ 12,862,000	100%	\$ 47,290,000	100%
Street Capital Fund - Restricted					
Intergovernmental Revenue *	Grants	\$ 32,030,000	52%	\$ 65,600,000	52%
Hospital Benefit Zone **	Restricted Revenue - excess sales tax earned within zone used for qualified projects within zone	\$ 6,000,000	10%	\$ 16,000,000	13%
Miscellaneous***	Transportation Impact fees, SEPA Mitigation fees, developer contributions, interest	\$ 2,135,000	3%	\$ 8,552,000	7%
Tranfers In	Transfers to support capital projects	\$ 2,160,000	4%	\$ 7,753,000	6%
Other - New Debt, other new funding sources	Bonds, Low Interest Loans, Possible Transportation Benefit District	\$ 19,285,000	31%	\$ 27,555,000	22%
TOTAL - Street Capital		\$ 61,610,000	100%	\$ 125,460,000	100%

* Includes grants and direct appropriations

** Out of \$2 million per year for total revenue from source, assumes 50% for street capital projects

*** Includes estimated 10% increase in transportation impact fee amounts due to planned TIF update in 2015

Capital Costs for Recommended Improvements

There are numerous improvements within the Gig Harbor Planning Area that are necessary to achieve the City’s adopted motorized and non-motorized levels of service standards. These improvements, including the estimated grant/other funding amounts and local funding share, are listed in the following tables. **Table 12-10** identifies the short range projects and estimated program funding and **Table 12-11** identifies the long range projects and estimated program funding. **Table 12-13** identifies the short range projects specific to non-motorized improvements and **Table 12-14** breaks down the short range list further into capacity and non-motorized components of each project.

Table 12-10. Short Range Project Program/Estimated Grant Funding

No.	Project Name	Total Project Cost	Estimated Grant/Other Funding Amounts	City Share of Total Project Cost
1	Cushman Trail Phases 5	\$4,000,000	\$3,000,000	\$1,000,000
2	Harbor Hill Drive Extension	\$8,500,000	\$6,000,000	\$2,500,000
3	Burnham Dr/Harbor Hill Dr Intersection	\$2,000,000	\$1,000,000	\$1,000,000
4	50th St. Ct. NW Phase 2	\$900,000	\$500,000	\$400,000
5	Pavement Preservation Program (2015 Kimball/Hunt)	\$400,000	\$330,000	\$70,000
6	Rosedale Dr/Stinson Ave Intersection	\$360,000	\$200,000	\$160,000
7	38th Avenue Phase 1	\$7,000,000	\$3,000,000	\$4,000,000
8	Burnham Drive Phase 1	\$1,300,000	\$600,000	\$700,000
9	Harborview Drive Improvements	\$130,000	\$0	\$130,000
10	Soundview Dr/Hunt St Intersection	\$850,000	\$0	\$850,000
11	Wollochet Drive Improvements	\$850,000	\$0	\$850,000
12	SR-16/Olympic Dr	\$1,400,000	\$0	\$1,400,000
13	Rosedale St/Skansie Ave Intersection	\$360,000	\$0	\$360,000
14	38th Avenue Phase 2	\$6,000,000	\$3,000,000	\$3,000,000
15	Skansie Avenue Improvements	\$8,600,000	\$2,000,000	\$6,600,000
16	Meter Roundabout at SR16 / Burnham	\$375,000	\$0	\$375,000
17	Harbor Hill Dr/Borgen Blvd Intersection	\$700,000	\$700,000	\$0
18	Olympic/Hollycroft Spur Improvements	\$30,000	\$0	\$30,000
19	Vernhardson St Improvements	\$488,000	\$400,000	\$88,000
20	Wagner Way Traffic Signal at Wollochet	\$389,000	\$0	\$389,000
21	Grandview Street Phase 2	\$1,120,000	\$500,000	\$620,000
22	Grandview Street Phase 1	\$600,000	\$400,000	\$200,000
23	Hunt Street Crossing (at SR16)	\$10,300,000	\$9,000,000	\$1,300,000
24	Restripe Burnham Bridge to 4 Lanes	\$100,000	\$0	\$100,000
25	Pedestrian Bridge Over SR16	\$2,000,000	\$1,000,000	\$1,000,000
26	Harborview Drive / Stinson Ave	\$858,000	\$0	\$858,000
27	Harborview Drive / Pioneer Way	\$100,000	\$0	\$100,000
28	Hunt Street / 38th Ave	\$1,500,000	\$0	\$1,500,000
29	Olympic Drive / Point Fosdick Drive	\$400,000	\$400,000	\$0
	Total	\$ 61,610,000	\$32,030,000	\$29,580,000

Table 12-11. Long Range Project Program/Estimated Grant Funding

No.	Project Name	Estimated Costs Total Project (Table 12-5)	Estimated Grant/Other Funding Amounts	City Share of Total Project Cost
1	Canterwood Bl (SR16-54th) to 4 lanes	\$ 10,400,000	\$ 4,000,000	\$ 6,400,000
2	Borgen Bl (Peacock to Burnham) 7 lanes	\$ 8,580,000	\$ 4,000,000	\$ 4,580,000
3	Rosedale Street widening	\$ 7,150,000	\$ 4,000,000	\$ 3,150,000
4	Peacock Hill widening 5 lanes	\$ 5,330,000	\$ 4,000,000	\$ 1,330,000
5	Bujacich Rd widening 3 lanes	\$ 8,970,000	\$ 3,000,000	\$ 5,970,000
6	Stinson Ave left turn lane at Harborview	\$ 286,000	\$ -	\$ 286,000
7	Hunt Street widening 3 lanes	\$ 2,990,000	\$ 2,000,000	\$ 990,000
8	Soundview Drive selected It lanes	\$ 910,000	\$ -	\$ 910,000
9	New Road (50th to HHDr)	\$ 1,430,000	\$ 1,000,000	\$ 430,000
10	50th Ave (new rd to Burnham)	\$ 2,990,000	\$ 1,000,000	\$ 1,990,000
11	SR16 / Burnham/Borgen I/CH	\$ 72,300,000	\$ 40,000,000	\$32,300,000
12	Stinson Ave / Pioneer Way	\$ 429,000	\$ 300,000	\$ 129,000
13	38th Ave / 56th St	\$ 195,000	\$ -	\$ 195,000
14	Hunt St / 48th Ave	\$ 1,500,000	\$ 1,000,000	\$ 500,000
15	Skansie Ave / Rosedale St	\$ 1,500,000	\$ 1,000,000	\$ 500,000
16	SR16 / Olympic I/CH EB ramp	\$ 500,000	\$ 300,000	\$ 200,000
	Total	\$ 125,460,000	\$ 65,600,000	\$59,860,000

Summary of Costs and Revenues

The proposed Short and Long Range Transportation Improvements, listed in **Table 12-10** and **Table 12-11**, are estimated to cost \$187,070,000, combined. The costs for these improvements are balanced with the Revenue Forecast shown in **Table 12-9** and are summarized in **Table 12-12**, below.

Table 12-12. Summary of capital costs and revenues

Category	Short Range 2015-2020	Percent of Revenues	Long Range 2015-2030	Percent of Revenues
Projected Revenues	\$61,610,000	100.0%	\$125,460,000	100%
predictable sources	\$42,325,000	69%	\$97,905,000	78%
debt source	\$19,285,000	31%	\$27,555,000	22%
Projected Expenditures	\$61,610,000	100%	\$125,460,000	100%

The proposed financial strategy relies upon updated assumptions for state and federal grant amounts and an assumption that revenues from additional city debt or potential new funding sources are necessary to provide a balanced financial plan. The grant amounts were estimated on a project by project basis instead of using historical grant funding amounts as the basis. This will more accurately estimate the amount of local funds that will be necessary to complete each project. Historically, the City did not have many projects developed to the level where they could compete successfully for grant funding. In the recent past, the City has worked to incrementally develop projects and apply for grant funding with a success rate that is greater than what has historically occurred. The City anticipates continuing this trend by aggressively pursuing grant opportunities as they become available. Additional city debt, in the form of bonds or low interest loans, or potentially establishing a transportation benefit district (discussed earlier in this section) financially balance the plan. The new debt is assumed to be bond debt issued over 20 years at 4.5% interest. However, it should also be noted that the City has not made any assumptions related to other low interest loans such as from Federal or State programs. The City has traditionally been able to tap these sources, and continuing to do so would reduce the need for new bond issues which similarly could produce more favorable terms for the City’s transportation program. Additionally, if state and federal grant availability increases over the planning period the reliance on future debt financing will be reduced.

SECTION 7. GOALS AND POLICIES

The transportation goals contained in this element are:

- GOAL 12.1: CREATE AN EFFECTIVE MULTI-MODAL STREET NETWORK
- GOAL 12.2: MODAL BALANCE
- GOAL 12.3: DESIGN AND CONSTRUCTION STANDARDS
- GOAL 12.4: LEVEL OF SERVICE STANDARDS
- GOAL 12.5: AIR QUALITY
- GOAL 12.6: SUSTAINABLE TRANSPORTATION
- GOAL 12.7: SUPPORT CENTERS AND COMPACT COMMUNITIES

GOAL 12.1: CREATE AN EFFECTIVE MULTI-MODAL STREET NETWORK.

The City of Gig Harbor shall plan for an effective road network system.

- Policy 12.1.1 Complete development of the multi-modal arterial street grid serving the the city.
- Policy 12.1.2 Develop a trans-highway connector across SR-16 at Hunt Street.
- Policy 12.1.3 Maintain a functional classification system which defines each streets principal purpose and protects the streets viability.
- Policy 12.1.4 Develop an arterial and collector street system which collects and distributes area traffic to SR-16.
- Policy 12.1.5 Define a hierarchy of local, collector, and arterial streets which provides methods for connecting and traversing the neighborhoods, districts and other places within the area without overly congesting or depending on the arterial street system or any single intersection.
- Policy 12.1.6 Establish appropriate right-of-way widths, pavement widths, shoulder requirements, bicycle accommodations, curb-gutter-sidewalk standards for major arterials, collectors and local streets.
- Policy 12.1.7 Improve collector streets to provide adequate capacity for present and future projected traffic loads, pedestrian and bicyclist activities.
- Policy 12.1.8 Work with the Harbor property owners to determine an effective parking plan, which increases parking.
- Policy 12.1.9 Provide planning and design assistance in establishing a local parking improvement district for the Harbor.
- Policy 12.1.10 Enhance walkability in the Harbor through sidewalk widening and improved sidewalk connections.
- Policy 12.1.11 Increase pedestrian enjoyment of the Harbor and other centers of local importance in the city through beautification and preservation activities.
- Policy 12.1.12 Improve existing sidewalk, street, and intersection conditions in the city to increase pedestrian, bicycle, and vehicular safety.
- Policy 12.1.13 Encourage additional pedestrian, bicycle, or shared vehicular, bicycle, and pedestrian connections in the city as development and redevelopment occurs to increase the ease of access and create useful and well-designed public ways.

GOAL 12.2: MODAL BALANCE

Create an appropriate balance between transportation modes where each meets a different function to the greatest efficiency.

- Policy 12.2.1 Work with Pierce Transit to satisfy local travel needs within the planning area, particularly between residential areas, the downtown and major commercial areas along SR-16.
- Policy 12.2.2 Work with Pierce Transit to locate Pierce Transit Park and Ride lots in areas which are accessible to transit routes and local residential collectors, but which do not unnecessarily congest major collectors or arterial roads or SR-16 interchanges.
- Policy 12.2.3 Establish a multipurpose trails plan which provides designated routes for pedestrians and bicyclists.
- Policy 12.2.4 Adopt and implement a program which increases public awareness to the city's transportation demand management strategies, including non-motorized

transportation and increased use of local transit. Adopted strategies include a Transportation Demand Management and Commute Trip Reduction Ordinance.

Policy 12.2.5 Promote transportation investments that support transit and pedestrian oriented land use patterns and provide alternatives to single-occupant automobile travel.

Policy 12.2.6 Promote non-motorized connections to the Cushman Trail to improve connectivity between the trail and parks, schools, adjacent neighborhoods, and businesses.

GOAL 12.3: DESIGN AND CONSTRUCTION STANDARDS

Establish design construction standards which provide for visually distinct roadways while providing efficient and cost effective engineering design.

Policy 12.3.1 Adopt and implement street construction standards which consider the objectives of Complete Streets and implement the goals and policies of the City of Gig Harbor Comprehensive Plan Design Element and the City Design Guidelines.

Policy 12.3.2 Identify and classify all arterials per FHWA recommend practice to facilitate grant eligibility and long range planning.

Policy 12.3.3 Provide for an efficient storm drainage system in road design considering the width of road pavement needed to achieve levels of service and utilization low impact development techniques including pervious pavements and biofiltration.

Policy 12.3.4 Implement design standards which provide, where feasible, for a pleasing aesthetic quality to streetscapes and which provide increased pedestrian safety by separating sidewalks from the street edge and adjacent hazards.

Policy 12.3.5 Give high priority to maintenance and preservation of ~~the~~ existing transportation infrastructure over construction of new transportation infrastructure.

Policy 12.3.6 Design, construct, and operate transportation infrastructure to serve all users safely and conveniently, including motorists, pedestrians, bicyclists, and transit users, while accommodating the movement of freight and goods, as suitable to each facility's function and location.

Policy 12.3.7 Work to increase the safety of the transportation system with appropriate design and, in the long term, support the state's goal of zero deaths and disabling injuries.

Policy 12.3.8 Work with Pierce County to require the design and construction of appropriate urban transportation improvements in the UGA's adjacent to the city.

GOAL 12.4: LEVEL OF SERVICE STANDARDS

Policy 12.4.1 The City of Gig Harbor Level of Service Standard for intersections is LOS D, except for the following intersections identified in the Harbor Area

- Harborview Drive/North Harborview Drive
- Harborview Drive/Pioneer Way
- Harborview Drive/Stinson Avenue
- Harborview Drive/Rosedale
- North Harborview Drive/Peacock Hill
- Harborview/Soundview

The above intersections may be allowed to operate a LOS worse than D, consistent with the vehicular, bicycle, and pedestrian objectives identified in the Harbor Area.

Policy 12.4.2 If funding for capacity projects falls short, the Land Use Element, LOS, and funding sources will be re-evaluated. Impact fees should be used to the extent possible under GMA to fund capacity project costs. Alternative revenue sources and/or LOS modifications should be considered before land use density changes are considered.

Policy 12.4.3 Level of service E will be acceptable at the SR 16 westbound ramp terminal roundabout intersection on Burnham Drive, provided that: (a) the acceptable delay at LOS E shall not exceed 80 seconds per vehicle as calculated per customary traffic engineering methods acceptable to the city engineer; and (b) this policy shall cease to have effect if a capital improvement project is added to the Transportation Improvement Program and is found by the City to be foreseeably completed within six years and to add sufficient capacity to the interchange and adjacent intersections so as to achieve a level of service of D or better upon its completion including the impacts of all then-approved developments that will add travel demand to the affected intersections.

Policy 12.4.4 When a proposed development would degrade the LOS below the adopted threshold on a state highway, traffic impact mitigation shall be required based on the recommendation of the City Engineer and consistent with the Washington State Highway System Plan Appendix G: Development Impacts Assessment.

Policy 12.4.5 The City shall maintain a current traffic model to facilitate the preparation of annual capacity reports and concurrency reviews.

Policy 12.5.5 Public and private transportation improvements are required to meet the 2014 Public Works Standards, which require inclusion of a non-motorized feature in the construction and design of new or improved streets.

GOAL 12.5: AIR QUALITY

The City should implement programs that help to meet and maintain federal and state clean air requirements, in addition to regional air quality policies.

Policy 12.5.1 The City's transportation system should conform to the federal and state Clean Air Acts by maintaining conformity with the Metropolitan Transportation Plan of the Puget Sound Regional Council and by following the requirements of WAC 173-420.

Policy 12.5.2 The City should work with the Puget Sound Regional Council, Washington State Department of Transportation, Pierce Transit and neighboring jurisdictions in the development of transportation control measures and other transportation and air quality programs where warranted.

Policy 12.5.3 Encourage and support the use of electric vehicles; provide a broad range of opportunities for vehicle recharge.

GOAL 12.6: SUSTAINABLE TRANSPORTATION

The City should implement programs and construct projects that reduce harmful vehicle emissions, avoid or mitigate impacts to critical areas and wildlife, manage water quality, and provide a safe environment for people to live and travel in.

Policy 12.6.1 Foster a system that reduces the negative effects of transportation infrastructure and operation on the climate and natural environment.

Policy 12.6.2 Support programs and projects that help to reduce Greenhouse Gas emissions consistent with state goals established in RCW 70.235.050 and RCW 70.235.060.

Policy 12.6.3 Seek the development and implementation of transportation modes and technologies that are energy-efficient, improve system performance, and minimize negative impacts to human health.

Policy 12.6.4 Protect the transportation system against natural and manmade disaster, develop prevention and recovery strategies, and plan for coordinated responses by using transportation-related preparedness, prevention, mitigation, response, and recovery strategies and procedures adopted in the emergency management plans and hazard mitigation plans of the County and as well as the Washington State Comprehensive Emergency Management Plan.

GOAL 12.7: SUPPORT CENTERS OF LOCAL IMPORTANCE AND NEIGHBORHOODS

The transportation system will support the city's growth strategy by focusing on connecting centers of local importance and neighborhoods with a highly efficient multimodal transportation network.

Policy 12.7.1 Prioritize investments in transportation facilities and services in centers of local importance that support compact, pedestrian and transit oriented development.

Policy 12.7.2 Promote and implement a network of local street and trail infrastructure that supports walking, bicycling, and transit use to enhance connectivity, and physical activity throughout the city while providing connections between centers of local importance and neighborhoods.

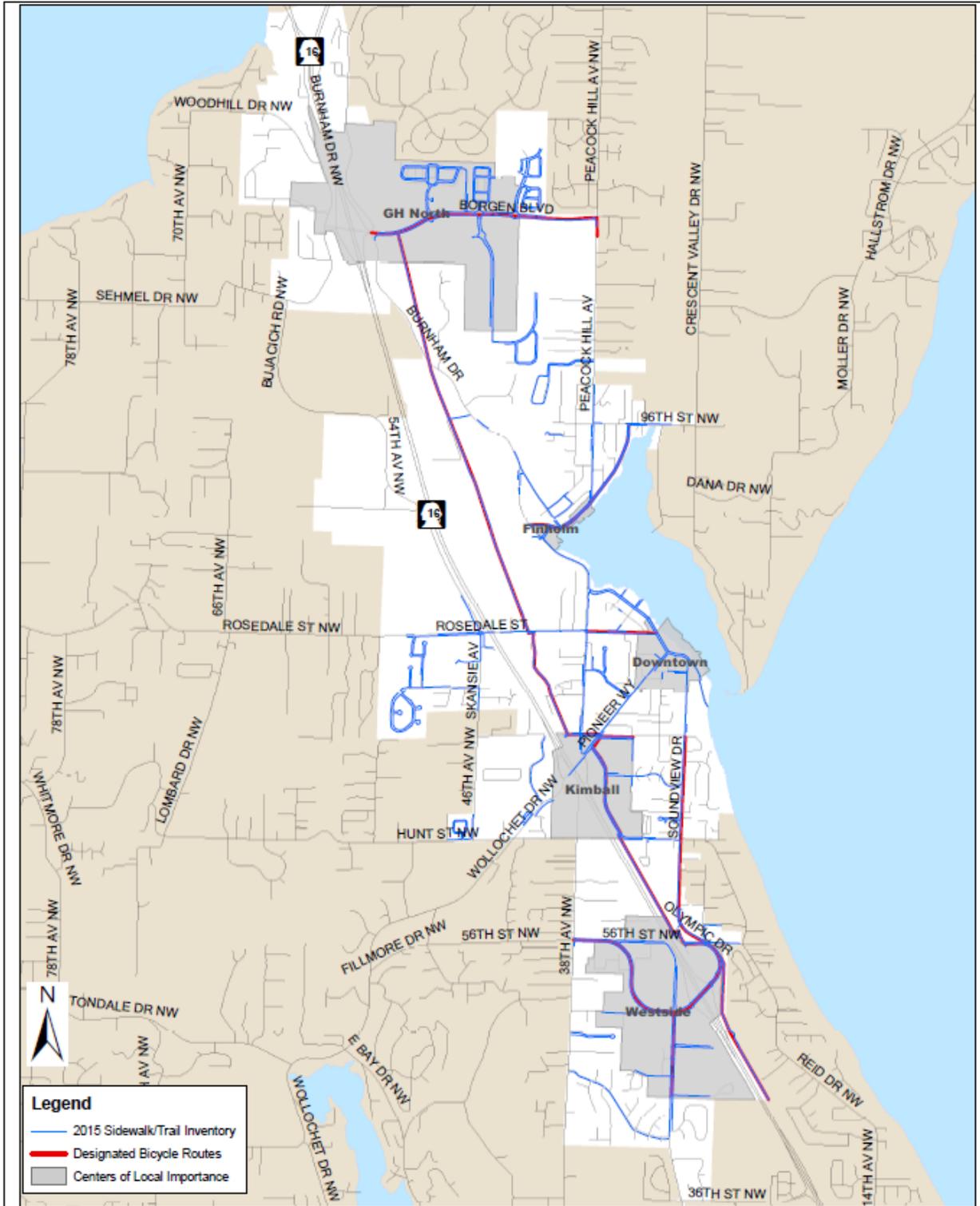


Figure 12-13
Non Motorized Survey - Existing Conditions 2015



Table 12-13 Short Range Projects – Non Motorized Project List

No.	Project Name	Updated Total Project Cost	Estimated Grant/Other Funding Amounts	City Share of Total Project Cost	Non-Motorized Portion		
					% of Project	Share of Total Cost	City Funded Amount
1	Cushman Trail Phases 5	\$4,000,000	\$3,000,000	\$1,000,000	100%	\$4,000,000	\$1,000,000
4	50th St. Ct. NW Phase 2	\$900,000	\$500,000	\$400,000	80%	\$720,000	\$320,000
7	38th Avenue Phase 1	\$7,000,000	\$3,000,000	\$4,000,000	50%	\$3,500,000	\$2,000,000
8	Burnham Drive Phase 1	\$1,300,000	\$600,000	\$700,000	50%	\$650,000	\$350,000
9	Harborview Drive Improvements	\$130,000	\$0	\$130,000	100%	\$130,000	\$130,000
11	Wollochet Drive Improvements	\$850,000	\$0	\$850,000	50%	\$425,000	\$425,000
14	38th Avenue Phase 2	\$6,000,000	\$3,000,000	\$3,000,000	50%	\$3,000,000	\$1,500,000
15	Skansie Avenue Improvements	\$8,600,000	\$2,000,000	\$6,600,000	50%	\$4,300,000	\$3,300,000
19	Vernhardson St Improvements	\$488,000	\$400,000	\$88,000	80%	\$390,400	\$70,400
21	Grandview Street Phase 2	\$1,120,000	\$500,000	\$620,000	80%	\$896,000	\$496,000
22	Grandview Street Phase 1	\$600,000	\$400,000	\$200,000	80%	\$480,000	\$160,000
23	Hunt Street Crossing (at SR16)	\$10,300,000	\$9,000,000	\$1,300,000	20%	\$2,060,000	\$260,000
25	Pedestrian Bridge Over SR16	\$2,000,000	\$1,000,000	\$1,000,000	100%	\$2,000,000	\$1,000,000
26	Harborview Drive / Stinson Ave	\$858,000	\$0	\$858,000	20%	\$171,600	\$171,600
27	Harborview Drive / Pioneer Way	\$100,000	\$0	\$100,000	100%	\$100,000	\$100,000
28	Hunt Street / 38th Ave	\$1,500,000	\$0	\$1,500,000	20%	\$300,000	\$300,000
Subtotal (Short Range Non-Motorized)		\$45,746,000	\$23,400,000	\$22,346,000		\$23,123,000	\$11,583,000

Table 12-14 Short Range Non-Motorized Capacity Elements and Non-Motorized Elements Breakdown

No.	Project Name	Notes	Updated Total Project Cost	Estimated Grant/Other Funding Amounts	City Share of Total Project Cost	Capacity Elements			Non-Motorized Elements		
						% of Project	Share of Total Cost	City Funded Amount	% of Project	Share of Total Cost	City Funded Amount
1	Cushman Trail Phases 5	[1]	\$4,000,000	\$3,000,000	\$1,000,000	0%	\$0	\$0	100%	\$4,000,000	\$1,000,000
2	Harbor Hill Drive Extension	[5]	\$8,500,000	\$6,000,000	\$2,500,000	100%	\$8,500,000	\$2,500,000	0%	\$0	\$0
3	Burnham Dr/Harbor Hill Dr Intersection	[5]	\$2,000,000	\$1,000,000	\$1,000,000	100%	\$2,000,000	\$1,000,000	0%	\$0	\$0
4	50th St. Ct. NW Phase 2	[2]	\$900,000	\$500,000	\$400,000	20%	\$180,000	\$80,000	80%	\$720,000	\$320,000
5	Pavement Preservation Program (2015 Kimball/Hunt)	[5]	\$400,000	\$330,000	\$70,000	100%	\$400,000	\$70,000	0%	\$0	\$0
6	Rosedale Dr/Stinson Ave Intersection	[5]	\$360,000	\$200,000	\$160,000	100%	\$360,000	\$160,000	0%	\$0	\$0
7	38th Avenue Phase 1	[3]	\$7,000,000	\$3,000,000	\$4,000,000	50%	\$3,500,000	\$2,000,000	50%	\$3,500,000	\$2,000,000
8	Burnham Drive Phase 1	[3]	\$1,300,000	\$600,000	\$700,000	50%	\$650,000	\$350,000	50%	\$650,000	\$350,000
9	Harborview Drive Improvements	[2]	\$130,000	\$0	\$130,000	0%	\$0	\$0	100%	\$130,000	\$130,000
10	Soundview Dr/Hunt St Intersection	[5]	\$850,000	\$0	\$850,000	100%	\$850,000	\$850,000	0%	\$0	\$0
11	Wollochet Drive Improvements	[3]	\$850,000	\$0	\$850,000	50%	\$425,000	\$425,000	50%	\$425,000	\$425,000
12	SR-16/Olympic Dr	[5]	\$1,400,000	\$0	\$1,400,000	100%	\$1,400,000	\$1,400,000	0%	\$0	\$0
13	Rosedale St/Skansie Ave Intersection	[5]	\$360,000	\$0	\$360,000	100%	\$360,000	\$360,000	0%	\$0	\$0
14	38th Avenue Phase 2	[3]	\$6,000,000	\$3,000,000	\$3,000,000	50%	\$3,000,000	\$1,500,000	50%	\$3,000,000	\$1,500,000
15	Skansie Avenue Improvements	[3]	\$8,600,000	\$2,000,000	\$6,600,000	50%	\$4,300,000	\$3,300,000	50%	\$4,300,000	\$3,300,000
16	Meter Roundabout at SR16 / Burnham	[5]	\$375,000	\$0	\$375,000	100%	\$375,000	\$375,000	0%	\$0	\$0
17	Harbor Hill Dr/Borgen Blvd Intersection	[5]	\$700,000	\$700,000	\$0	100%	\$700,000	\$0	0%	\$0	\$0
18	Olympic/Hollycroft Spur Improvements	[5]	\$30,000	\$0	\$30,000	100%	\$30,000	\$30,000	0%	\$0	\$0
19	Vernhardson St Improvements	[2]	\$488,000	\$400,000	\$88,000	20%	\$97,600	\$17,600	80%	\$390,400	\$70,400
20	Wagner Way Traffic Signal at Wollochet	[5]	\$389,000	\$0	\$389,000	100%	\$389,000	\$389,000	0%	\$0	\$0
21	Grandview Street Phase 2	[2]	\$1,120,000	\$500,000	\$620,000	20%	\$224,000	\$124,000	80%	\$896,000	\$496,000
22	Grandview Street Phase 1	[2]	\$600,000	\$400,000	\$200,000	20%	\$120,000	\$40,000	80%	\$480,000	\$160,000
23	Hunt Street Crossing (at SR16)	[4]	\$10,300,000	\$9,000,000	\$1,300,000	80%	\$8,240,000	\$1,040,000	20%	\$2,060,000	\$260,000
24	Restripe Burnham Bridge to 4 Lanes	[5]	\$100,000	\$0	\$100,000	100%	\$100,000	\$100,000	0%	\$0	\$0
25	Pedestrian Bridge Over SR16	[1]	\$2,000,000	\$1,000,000	\$1,000,000	0%	\$0	\$0	100%	\$2,000,000	\$1,000,000
26	Harborview Drive / Stinson Ave	[4]	\$858,000	\$0	\$858,000	80%	\$686,400	\$686,400	20%	\$171,600	\$171,600
27	Harborview Drive / Pioneer Way	[2]	\$100,000	\$0	\$100,000	0%	\$0	\$0	100%	\$100,000	\$100,000
28	Hunt Street / 38th Ave	[4]	\$1,500,000	\$0	\$1,500,000	80%	\$1,200,000	\$1,200,000	20%	\$300,000	\$300,000
29	Olympic Drive / Point Fosdick Drive	[5]	\$400,000	\$400,000	\$0	100%	\$400,000	\$0	0%	\$0	\$0
Subtotal (Short Range)			\$ 61,610,000	\$ 32,030,000	\$ 29,580,000		\$ 38,487,000	\$ 17,997,000		\$ 23,123,000	\$ 11,583,000

Notes:

- [1] Separate non-motorized facility.
- [2] Sidewalks and/or bikelanes and/or pedestrian safety are largest component of project.
- [3] Sidewalks and/or bikelanes included as part of vehicular capacity project.
- [4] Essential non-motorized improvements at intersections or grade separated crossing projects that are primarily for vehicular capacity.
- [5] Project is primarily for vehicular capacity.