



**Planning Commission
Regular Meeting
Thursday, September 8, 2016
6:00 – 7:00 PM
Council Chamber
280 Madison Ave N
Bainbridge Island, WA 98110**

AGENDA

- 6:00 PM CALL TO ORDER**
Call to Order, Agenda Review, Conflict Disclosure
- 6:05 PM PUBLIC COMMENT**
Accept public comment on off agenda items
- 6:10 PM [ISLAND-WIDE TRANSPORTATION PLAN](#)**
Briefing
- 6:30 PM ORDINANCE 2016-30: CODE CHANGES RELATED TO 2016
COMPREHENSIVE PLAN UPDATE**
Study session
- 6:50 PM 2016 COMPREHENSIVE PLAN
SEPTEMBER OPEN HOUSES AND PUBLIC HEARINGS**
Review open house and public hearing format
- 6:55 PM NEW/OLD BUSINESS**
- 7:00 PM ADJOURN**

****TIMES ARE ESTIMATES****

Public comment time at meeting may be limited to allow time for Commissioners to deliberate. To provide additional comment to the City outside of this meeting, e-mail us at pcd@bainbridgewa.gov or write us at

**For special accommodations, please contact Jane Rasely, Planning & Community
Development 206-780-3758 or at jrasely@bainbridgewa.gov**

ISLAND WIDE TRANSPORTATION PLAN

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CHAPTER 1 INTRODUCTION



The City of Bainbridge Island is a unique community with a unique set of transportation needs. The City, which encompasses the entire island, is primarily residential but includes a variety of land uses and intensities of development from the urban Winslow area to farmlands and suburban communities. Each of these land uses has different transportation needs that ideally would be addressed separately; however, the entire roadway system operates as a system.

The backbone of the transportation system is the SR-305 corridor that runs from the Bainbridge Island ferry terminal north to the Agate Pass Bridge. This State facility not only provides regional travel to and from the Island, but also is an important connection for local traffic needs. The Island's transportation system is truly multimodal, with commute, school, recreation, and shopping trips being commonly taken by, foot, bicycle, bus, auto, and ferry. While Winslow and other more urban areas have sidewalks, bicycle lanes, and widened shoulders, which facilitate non-motorized movement, there are many areas of the City where pedestrians and bicyclists must share the vehicle travel lanes or walk on narrow, unimproved shoulders. Non-motorized issues have been discussed as part of the City of Bainbridge Island's Non-Motorized Transportation Plan, which serves as a sub-element to this Plan.

Traffic has increasingly become an issue for the community. Traffic from residential and economic growth has resulted in increased roadway volumes, oftentimes coupled with high vehicle speeds and congestion at intersections. This traffic increases conflicts with non-motorized users. In addition, the release of the ferry and other commuter traffic creates a surge of vehicles onto the highway and the entire roadway system. During peak commute hours and tourist season, the highway can be overwhelmed resulting in congestion and delays.

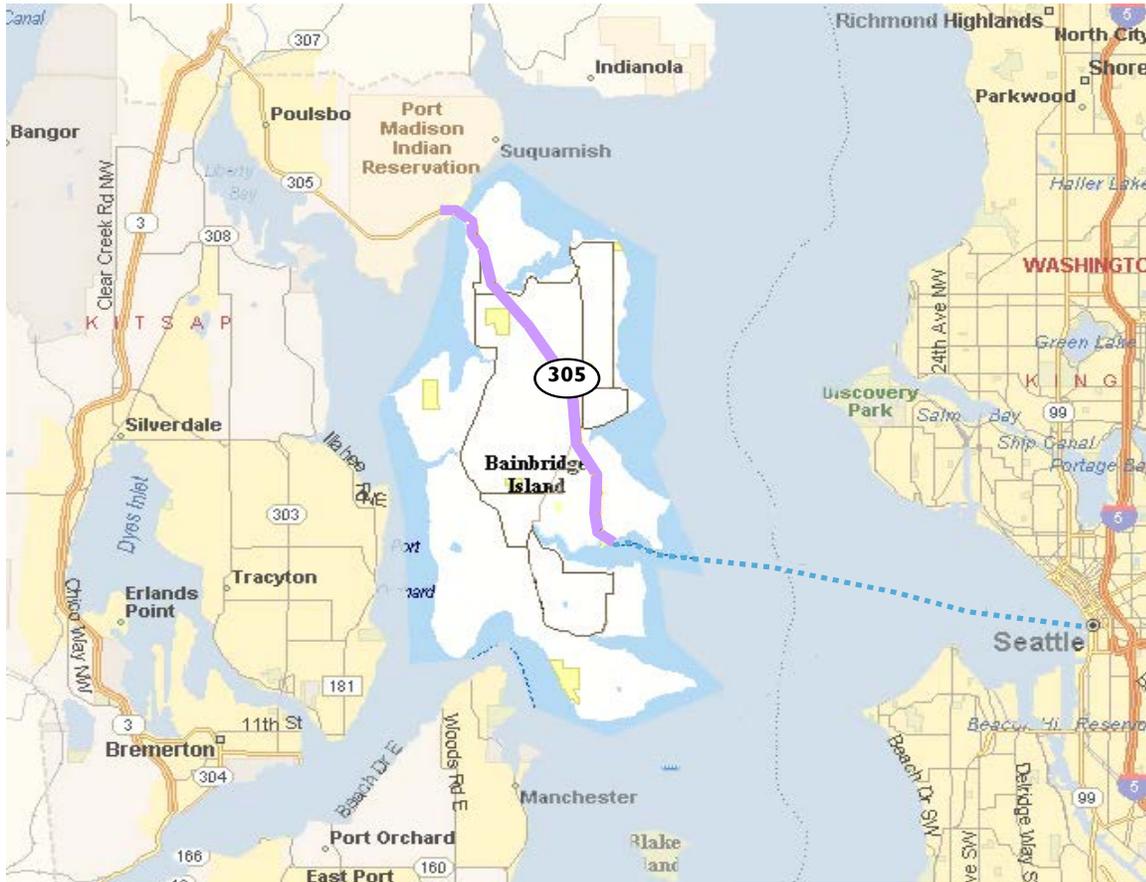
Plan Purpose

The Island Wide Transportation Plan (IWTP) represents an update and expansion of the 2004 Island-wide Transportation Study (IWTS) and the Transportation Element of the Comprehensive Plan. The IWTP focuses on the issues and desires of the Bainbridge Island community to develop a transportation system that will accommodate vehicle traffic patterns, within its multimodal environment. Figure 1-1 shows the study area and primary transportation features in relationship to the surrounding region.

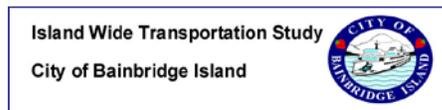
The purpose of this effort is to provide an in-depth Plan of the existing and future traffic patterns to determine future transportation needs and solutions. The effort will include the development of a transportation model based on recent traffic counts, land use data, and roadway information that has allowed the analysis of existing and future travel needs. The emphasis in the model is to identify congested areas and the improvements needed to accommodate existing future vehicle traffic in light of the needs of all of the Island's transportation modes of travel.



Figure I-1
Planning



Credit: Microsoft Expedia





The IWTP incorporates information from other transportation planning efforts in order to provide a consistent approach to transportation problems. The IWTP uses information from the Winslow Master Plan, Non-Motorized Transportation Plan, and Comprehensive Plan to provide a single document that directs transportation planning efforts throughout the community.

Planning History

Bainbridge Island is planning under the Growth Management Act (GMA), and has prepared a Comprehensive Plan in accordance with the requirements of GMA. In 1994, the City's Transportation Plan provided discussion and analysis of the transportation needs of the Island, with the exception of the Winslow subarea that would be studied separately. The final study was adopted and incorporated in the Transportation Element of the City's 1994 Comprehensive Plan. Since that time, a number of Comprehensive Plan updates have occurred to clarify, modify, or revise various sections of the study, including those in the Transportation Element.



In 1995, the Winslow Master Plan, as a sub-element of the Comprehensive Plan, provided focus of the transportation needs in the Winslow and ferry terminal areas. In 2002, a Non-Motorized Transportation Plan was adopted which proposes a transportation system to meet the needs of pedestrians, bicyclists, and other non-motorized transportation users.

Each of these efforts had been developed with extensive effort and time by members of the community through steering committees, public participation, workshops, and surveys. Their influence is part of this plan and represents the values and thoughts of the community.

Relationship to Comprehensive Plan

The City of Bainbridge Island has developed its Comprehensive Plan under the requirements of the Growth Management Act (GMA). The GMA requires that jurisdictions identify existing transportation system characteristics, establish level of service ratings, identify existing and future deficiencies, develop improvement projects and strategies to mitigate deficiencies, and analyze projected revenues to ensure that necessary improvements will be constructed concurrent with demand.

In 1997, the State of Washington amended the GMA. One of the important provisions of the amendment was that all jurisdictions must update their Comprehensive Plans by 2002 and periodically thereafter to ensure that changes within the community are reflected in the plan.

The City is currently undergoing an update to its Comprehensive Plan, to be completed in 2016. The Island-wide Transportation Study (now IWTP) was last updated in 2004, and is being updated concurrently with the update of the Comprehensive Plan.

The IWTP addresses and provides a detailed analysis of a variety of transportation issues affecting the community. Elements of the IWTP will be used to develop the Transportation Element included as part of the updated Comprehensive Plan. It is intended that the IWTP will be adopted by Council as a reference document to Transportation Element in the Comprehensive Plan.



The Transportation Element of the Comprehensive Plan provides for transportation policy. This includes identification of transportation issues, establishing a comprehensive vision for transportation, and setting overarching goals. The IWTP provides the technical data and analysis to facilitate transportation planning and provides for implementation of the vision and goals established in the Transportation Element.

Plan Update

The Study was last updated in 2003 and accepted in 2004 by the City Council. The development of the original Study involved an expensive consultant led effort with considerable public outreach.

The City's Non-Motorized Transportation Advisory Committee (NMTAC) and Staff have worked together to evolve the City's level of thinking for non-motorized planning. This work has been reflected in Comprehensive Plan updates. Future updates will provide an opportunity to formalize these on-going efforts and build upon the original 2003 effort.

The NMTAC and Staff recognize the huge effort that was involved with creating the original Island-wide Transportation Study. This study is comprehensive and is still largely relevant today. Those involved also recognize that to repeat an endeavor of that scale will take considerable volunteer and staff time as well as financial resources. At this time, the City has been very successful in procuring grant funding to provide for the delivery of a number of significant capital improvements including the Sound to Olympics (STO) Trail, the Wing Point Way Reconstruction, and the Wyatt Way Reconstruction projects. The priority for resources at this time is best spent in implementation as these improvements include grant funds with local match components.

Public involvement of the Plan will be limited to comments taken at regular NMTAC meetings during the development of the update and at the time the draft plan is presented to the Planning Commission for comment.

It is envisioned that this update will be accomplished by Staff working with the NMTAC to review and comment on a chapter by chapter basis. The City has engaged the services of Transportation Solutions Incorporated (TSI) to support the City Council in considering implementation of Transportation Impact Fees. This effort involves extensive traffic counts and the creation of a transportation model. TSI's scope of services includes updating information and exhibits in the update.

Plan Organization

The Island Wide Transportation Plan is organized in nine chapters. These correspond to the goals and policies developed by the Steering Committee to guide the Plan. Each chapter addresses one or more of the Plan goals and discusses how the policies were implemented by the City for each goal. The chapters are as follows:



- Chapter 1: Introduction
- Chapter 2: Sustainability and Quality of Life
- Chapter 3: Operations and Mobility
- Chapter 4: SR305
- Chapter 5: Safety and Maintenance
- Chapter 6: Non-motorized Transportation
- Chapter 7: Other Transportation Systems
- Chapter 8: Financing

A matrix is provided below showing where in the IWTP the information is contained to address Growth Management Act requirements for transportation planning in accordance with RCW 36.70A.070(6).

<u>Table 1 -1, GMA requirements for Transportation Planning.</u>	
Land use assumptions used in estimating travel. (i)	Refer to Chapter 3.
Estimated traffic impacts to State owned transportation facilities. (ii)	Refer to Chapter 4.
Inventory of transportation facilities and services. (iii-A)	Refer to Figure 3-1, Roadway Classifications, Figure 7-1, Ferry Routes and Figure 7-5 Kitsap Transit Routes.
Level of service standards for locally owned arterials and transit routes. (iii-B)	Refer to Chapter 3 and Chapter 7.
Level of service standard for state highways. (iii-C)	Refer to Chapter 3.
Actions to correct current level of service deficiencies. (iii-D)	Refer to Chapters 3 and 4.
Traffic forecasts. (iii-E)	Refer to Chapters 3 and 4.
Identification of needs to meet future local and state system demands. (iii-F)	Refer to Chapters 3 and 4.
Probable funding capacity (iv-A)	Refer to Chapter 8.



Multi-year financing plan to meet road and transit level of service standards over the next 6 years. (iv-B)	Refer to Chapter 8.
Probable funding shortfalls and strategies to address funding needed to meet or reassess level of service standards. (iv-C)	Refer to Chapter 8.
Assessment of impacts of plan on neighboring jurisdictions. (v)	Refer to Chapters 3, 4, and 7.
Demand Management Strategies. (vi)	Refer to Chapter 7.
Non-Motorized element planned improvements. (vii)	Refer to Chapter 6 and 8.

CHAPTER 2

SUSTAINABILITY AND QUALITY OF LIFE



One of the most important issues to the Bainbridge Island community is the relationship between the transportation system elements and the character of the community, livability, public health, and the environment. This chapter discusses each of these elements of the transportation system, identifies how this Plan responds to these issues, and provides examples of transportation system features that illustrate these concepts. This chapter is intended to provide additional context to support the transportation issues, policies, and goals in the Transportation Element of the Comprehensive Plan.

Transportation plays a large role in the quality of life of Bainbridge Island residents. The ferry terminal to Seattle and the Agate Pass Bridge are the only two options for traveling off the island. Bainbridge is largely a bedroom community of Seattle and Kitsap County and many Islanders commute off-island by ferry or by bridge. Lengthy commute times by ferry or being stuck in traffic on SR305 mean spending hours away from family, friends, and activities. Speeding and cut-through traffic makes neighborhood streets feel unsafe. Reliable and efficient transportation on and off island is important to balance jobs and housing and maintaining the quality of life for Island residents.

Poor quality or non-existent bicycle and pedestrian facilities can be a deterrent to residents walking or bicycling for transportation, connecting to transit, traveling to schools and parks, as well as for recreational purposes. Non-motorized facility networks provide options for active modes of transportation allowing residents to make healthy lifestyle choices. Walkability and bikeability are desirable characteristics of neighborhoods. An increasing number of Island residents are choosing to walk and bike to goods and services in the urban developed areas of the Island and to work.

How people choose to travel is a key element of both environmental sustainability and quality of life. Transportation is a significant contributor to climate change, as it accounts for a high percentage of greenhouse gas emissions. Emissions from transportation, especially diesel particulates, are a significant health hazard. The City's Comprehensive Plan focuses growth in urban areas such as Winslow and the Neighborhood Service Centers. With good planning and implementation of mixed use and higher densities within these urban areas, development can lead to a more sustainable growth pattern and preserve community character. Investments in infrastructure for active transportation modes and access to transit allow for reduced dependence on the automobile and present an opportunity for the Island to develop more sustainably and improve the quality of life for Island residents.

Active transportation facilities improve accessibility for people of all ages and abilities. For example, barriers to travel by wheelchair or walker (such as curbs without curb cuts) and lack of resting places for people with limited stamina greatly reduce people's ability to participate in community life. Many youth and seniors do not drive.

Infrastructure for active transportation also reduces the need for parking, which in turn improves walkability and bikeability, and access to transit by allowing more compact development. Costs of owning cars is a major expense for families, and good non-motorized infrastructure with



compact development can make living on Bainbridge more affordable – allowing a more economically diverse community.

Transportation infrastructure and associated drainage have direct impacts on the environment. Storm water run-off can contribute to water pollution, flooding, and water temperature elevation in riparian stream habitat corridors and Puget Sound. The road network right-of-way presents many opportunities to incorporate sustainable practices to provide positive contributions to environmental sustainability.

Community Character

Community character is a term used to identify the elements that define Bainbridge Island. The City of Bainbridge Island's Comprehensive Plan discusses the Island's character as "...forested areas, meadows, farms, marine views, and winding roads bordered by dense vegetation..." [Comprehensive Plan Framework Principles]

Relationship to Transportation

For transportation, community character elements include the highway, major streets, neighborhood roadways, and pedestrian and bicycle facilities. Community character includes natural and manmade features within the roadway right-of-way, such as trees with native understory and landscaping, drainage ditches, and street lighting. Each of these elements define the existing character of the City of Bainbridge Island. Some of these elements may be highly desired such as trees and plantings.

Much of the character of the transportation system relates back to stages of the roadway's development. Roadways throughout the Island were originally constructed as logging, mill, or farm-to-market roads connecting the rural areas of the Island with areas of urban development such as Winslow and to transportation connections such as "mosquito fleet" foot ferry docks. As the Island became more developed, major transportation features were added, including the Agate Pass Bridge, SR 305, and the Washington State Ferry's Bainbridge Island terminal. Island roadways were also improved over time -- pavement was added, roadways were widened, drainage was improved, and traffic controls were added to improve vehicle mobility and safety. Urban areas, mainly Winslow, saw a higher level of development including sidewalks and pedestrian paths, on-street parking spaces, street trees and landscaping, and street lighting. Recent improvements to the Winslow area include bicycle lanes and sidewalks, pedestrian crosswalks and refuge areas, bicycle and pedestrian paths, vehicle turn lanes, roundabouts, and other transportation features. New property developments are required to include transportation improvements along the property's frontage in accordance with the City's roadway design standards.

The City has followed the community's desires by making efforts to define and implement an appropriate look and feel for its roadway and off roadway transportation systems. Emphasis throughout the City's planning activities has responded to the community's concerns about preserving the elements that define the character of the community.

- The adopted Winslow Master Plan emphasized the use of traffic calming to slow traffic speeds and promoted the development of pedestrian and sidewalk facilities within the Winslow Core.



- The City roadway standards use 10-foot wide travel lanes instead of the standard 12 feet, creating a narrower feel and less paved width. This helps to slow traffic and reduce storm water impacts of roads.
- The City developed a Non-Motorized Transportation Plan and created a Non-Motorized Transportation Advisory Committee to provide better facilities for pedestrians and bicyclists throughout the Island.
- The City continues to explore and implement innovative traffic control options such as the roundabout at Madison Avenue and High School Road as an alternative to the installation of traffic signals.
- The City continues to evolve its transportation vision to include complete streets, shoulder networks for cyclists, sidewalk improvements for better accommodation of a wide range of users, and trails including regional, inter-island, and local connecting pathways.
- The City (Along with Kitsap County) has developed the concept of the Sound to Olympics Trail (STO) – a regional trail crossing Kitsap between both Winslow and Kingston to the Hood Canal Bridge – which will link the Burke-Gilman Trail and the Olympic Discovery Trails.

Community character transportation features

The IWTP is focused on identifying the infrastructure needed to improve mobility and safety of the transportation system. The Plan's alternatives and recommendations meet the Plan's goals for maintaining community character including:

- ***Road development guidelines*** – Providing consistency with the adopted roadway standards that promote the retention of appropriate roadside vegetation and trees and follow the natural topography.
- ***Street design guidelines*** – Providing for and protecting the development of more urban features, such as parking, sidewalks, and bicycle facilities within prescribed urban areas, and less urban features, such as widened shoulders and separated paths, in less urban areas. Provide Context appropriate street design in urban and suburban areas that promote the use of all mode of transportation for all ages and abilities of people.
- ***Street lighting guidelines*** – Concentrating street lighting within Winslow and Island Town Centers and areas identified by safety or community planning needs.
- ***Scenic resource and habitat protection*** – Focusing the development of the transportation system within existing and carefully chosen new travel corridors, while retaining or enhancing trees with understory and standing or lying deadwood.
- ***SR 305 Scenic Byway*** – Retaining the scenic character of SR 305 by discouraging new access points, and maintaining or enhancing vegetative buffers. SR305 is a WSDOT designated Scenic Byway, and the community wishes to preserve, enhance, and restore healthy forested habitat along the corridor. Trees, understory, standing and fallen deadwood all contribute to the desired view-shed and wildlife corridor. Vegetative buffer screening adjacent development is important, both within WSDOT right-of-way, and within adjacent land bordering the highway. Development of the Sound to Olympics Trail in and along the SR 305 right-of-way is planned to reduce the need for more motor vehicle lanes, enhance vegetative buffer, and improve connections with transit. Reversible bus rapid transit lanes are being studied to move people more efficiently, and with minimum impervious surface.

Desired features of Community Character

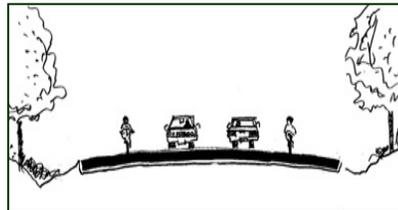
The photographs and sketches identify some of the key features that define the transportation character of Bainbridge Island.





Following natural topography, roadside trees and vegetation, with minimized paved surfaces are desired in suburban areas

Crosswalks, parking, street lighting, and non-motorized facilities are desired features in urban areas



Integration of bicycles, pedestrians, and non-motorized facilities are important features for the community

Livability and Health

The public is becoming more conscious of the environment in which they live and an increasing percentage of the population desires to live in places that are walkable and bikeable. The federal Centers for Disease Control (CDC) and the Kitsap Public Health District strongly encourage developing active transportation facilities to support moderate exercise for basic public health. Today prospective home buyers are presented with statistics such as walkability scores. A growing number of residents desire active transportation alternatives for daily trips including access to goods and services. More and more commuters choose active modes of transportation to commute to work. On Bainbridge Island, many residents commute by walking and bicycling to the Seattle ferry. Other commuters use Kitsap Transit or carpool and often walk to stops within their neighborhood.

Relationship to Transportation

In order to achieve livability and promote public health, developing progressive standards and incremental investments in transportation infrastructure including non-motorized elements are essential.

- ***Roadway Standards*** – Pedestrian and bicycle facilities need to be specified that evolve the infrastructure in the community to be more livable and provide for active modes of transportation and recreation. Consider whether street lighting is appropriate for routes where residents are walking or cycling to school, work, or transit in the dark during fall and winter months. This is particularly important for people with low vision—including seniors. Recognizing that investments take time, consider interim measures to provide additional non-motorized safety through means such as reducing speed limits, providing wider shoulders, and installation of signage.
- ***Complete Streets*** – Investments in pedestrian and bicycle facilities within both urban and suburban areas over time will provide for greater connectivity. Many urban streets lack sufficient sidewalks and bike lanes. Many secondary arterial roadways in suburban locations lack shoulders and separated facilities.



- **Multi use pathways** – Investments in separated pathways with regional, inter-island and local connectivity.
- **ADA Transition Plan** – The City is continuing a process of identifying ADA accessible routes for people with reduced mobility, many using assistive devices such as wheelchairs (motorized and manual) and walkers. For example, a Universal Design Working Group of the Non-Motorized Transportation Advisory Committee evaluated design options for the Winslow Way Reconstruction Project which made new facilities there much more accessible for people with disabilities.

Neighborhoods

Bainbridge Island is a residential community, and the protection of neighborhood areas and promotion of neighborhood transportation facilities, is an important concern for Island residents. Urban neighborhoods, such as Winslow, need a high level of development with pedestrian and bicycle facilities, transit access, and a development of residential street character. In suburban areas, neighborhoods are concerned about the impacts of traffic flow, the development of non-motorized facilities and improving future connections and circulation.

Relationship to Transportation

Residential areas need to provide a safe roadway system for adults and children walking, bicycling, playing, and driving. The City of Bainbridge Island has a limited transportation network and vehicle movements often depend on a single street. Because of this, as traffic levels increase on the arterial street system, adjacent and parallel streets will begin to experience factors such as “cut through” traffic, inappropriate vehicle speeds, and intersection congestion.

- **Neighborhood traffic calming** – The City’s Public Works Department, in conjunction with the Police Department, review complaints about inappropriate speeding or cut-through traffic on neighborhood streets.
- **Traffic enforcement** – The City of Bainbridge Island Police Department responds to neighborhood requests about high traffic speeds through residential areas.
- **Roadway standards** – The City of Bainbridge Island has developed its roadway design standards to act as a traffic calming feature through the use of narrow travel lanes and non-motorized facilities.

Neighborhood Transportation Features

The IWTP is focused on identifying the improvements needed for the mobility and safety of people using the transportation system. The alternatives and recommendations meet the Plan’s goals for maintaining the neighborhoods including:

- **Neighborhood cut-through traffic** – Focusing the development of transportation system within primary travel corridors.
- **Neighborhood circulation** – Develop the transportation network to provide secondary roadway access, improve emergency access, increase neighborhood circulation, and improve pedestrian and bicycle mobility. Pedestrian and bicycle path short-cut connections through neighborhoods offer important connectivity to link neighborhoods and discourage unnecessary vehicle trips. City review of new development projects should look for opportunities to provide non-motorized connectivity between neighborhoods.
- **Winslow street visualization plan** – Promoting the design and character of each street within the Winslow area.



Desired features for Neighborhoods

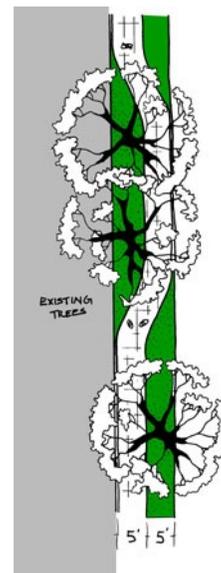
The photographs and sketches identify some of the key features that define the neighborhood goals for transportation.



Neighborhoods should be enhanced by providing appropriate street width, sidewalks, and other facilities

The character and needs of Winslow streets will be part of a visual street plan

Streets need to reflect the special needs of pedestrians, bicyclists and traffic flow



Environment

Maintaining a natural quality environment is very important to the Bainbridge Island community. Protection of the environment is a key consideration for all development projects, with the city, state, and federal government agencies, and Native American tribes with treaty rights, all playing roles.

Bainbridge Island residents voted to fund a \$ 10 million dollar bond to purchase open space, and that money was heavily leveraged through the City’s Open Space Commission to vastly increase open space on the Island. Bainbridge voters approved a Levy Lid Lift for the Bainbridge Island Metropolitan Parks and Recreation District to purchase land to strategically increase open space with recreational usage. The City completed an Open Space Study, which provides guidance for land use planning on where the more an less environmentally sensitive areas are to help inform decision-making. Citizens expect our planning for transportation (aka “grey infrastructure”) to complement the “green infrastructure” the community has striven to create.

Relationship to Transportation

Bainbridge Island has a variety of environmental characteristics that affect the development of the transportation system. As an island, traffic is concentrated near the ferry terminal in Winslow, and at the two-lane Agate Pass Bridge at the north end of the Island. Its topography, soils and steep slopes have limited the development of roadways in many areas. The Island has many sensitive resources such as ravines, parklands, open spaces, and shoreline and wetland areas that require creative and environmentally sensitive approaches to roadway and non-motorized facility development.



Possible impacts to the environment are a key consideration in the development of transportation projects. These include full consideration of impacts in the planning and design of a project on the environment. Steps in the project development and environmental review process include:

- Transportation corridor studies that include public review
- Environmental Impact Statements that include public scoping and testimony
- Environmental considerations in the engineering and design process
- Departmental Plan review
- Interagency review (where applicable)

Environmental Transportation Features

The following environmental aspects should be considered in addition to improving mobility and safety for all modes of transportation:

- ***Environmental sensitivity*** – Minimizing road construction within environmentally sensitive areas and encouraging the planting of low-maintenance, vegetated groundcover and trees along roadways. The Plan focuses the development of the transportation system within existing travel corridors.
- ***Utilities*** – Promoting the undergrounding of overhead utilities to reduce the need for removal and maintenance of roadside vegetation.
- ***Storm water management.*** – Providing for environmentally-sensitive design of storm water collection and detention facilities. Look for opportunities to combine traffic calming and storm water management goals through green infrastructure provisions within traffic calming features such as curb bulbs.
- ***Air Quality*** – Developing transportation plans and programs that improve traffic flow, encourage non-motorized and transit transportation alternatives to driving, and consider the impact to regional air quality.
- ***Wildlife corridors*** – Recognizing and promoting the maintenance of wildlife corridors.

Desired features of Environment

Bainbridge Island has a variety of environmental characteristics that affect the development of the transportation system.

The photographs and sketches below identify some of the key features that define the environmental goals.



Storm water Management and Green Infrastructure



*Special
stormwater
containment
features can
control water
runoff roadway*



- Storm water planters to control run off and improve water quality

Protection of environmental resources such as the Ravine



- Rain gardens to control storm water run-off and improve water quality



Developed landscapes including roadways are covered with impervious surfaces which can increase pollutant levels and increase stream flows degrading water quality. The Washington State Department of Ecology (DOE) establishes the storm water flow control and water quality requirements for roadway projects. As a municipality, the City of Bainbridge is required to meet the National Pollutant Discharge Elimination System (NPDES) permit obligations to discharge storm water to waters of the State of Washington and meet the NPDES permit requirements. With the implementation of the 2012 NPDES Permit, the City is implementing Low Impact Development (LID) requirements for both public and private development.

LID is an innovative storm water management approach that attempts to mimic the natural storm water hydrology of pre-development conditions. LID uses techniques that infiltrate, filter, detain, evaporate, and attenuate storm water run-off close to the source. Examples of “green” natural processes include, swales, bio retention, filter media, permeable pavement, and street trees. Streets that implement natural processes are commonly referred to as green streets. Green streets can serve multiple community goals by combining storm water infrastructure within traffic calming features such as curb, bulbs or by adding planting strip rain gardens that provide additional buffer from the sidewalk.

Balancing Community Needs

With thoughtful planning, new transportation infrastructure can often improve environment functioning—as when LID facilities replace more traditional storm water piping; or when pedestrian, bicycle, and/or transit facilities reduce the need for impervious and expensive parking facilities.

One of the more challenging aspects of improving a transportation system is finding the right balance between competing community needs and desires. For example, it may be best to construct a sidewalk/ separated pathway on one side of the roadway rather than on both sides to reduce impacts to vegetation. Balancing needs of non-motorized users and goals of vegetation protection will require analysis and public engagement to design improvements that best meet competing interests.

Finding designs which improve transportation systems and evaluating the trade-offs where they exist (weighing the importance between community goals and design guidelines) is an important function of the City of Bainbridge Island. Table 3-1 illustrates the issues that can arise for a variety of transportation improvements.



Table 2-1: Competing Community Needs

Project Type	Community Character concerns	Environmental concerns	Neighborhood concerns
Widen roadway for bicycle lanes	Increases paved width of roadways changing the road's look and feel	Promotes use of non-polluting vehicles, but also can increase water runoff	May slightly increase vehicle travel speeds on widened road corridor
Installation of roundabout at an intersection	Roundabouts highly desired over traffic signals	May result in removal of trees near intersection	May reduce cut-through traffic in residential areas
Rebuilding roadway impacted by shoreline erosion	May result in a more structured and modern roadway facility	May have impacts to shoreline areas, loss of trees and foliage	Needed improvement for access to property
Installing pedestrian path or sidewalk	May affect the feel of a traditional neighborhood	Promotes use of non-polluting vehicles	Provides safe access for pedestrians

As illustrated in the table above, each of these examples could have competing concerns and sometimes, even within a single category. In other words, a highly desired project for one member of the community may be highly opposed by another. In the end, these checks-and-balances can improve the planning and design of roadway projects by reflecting the needs and desires of the community.

Public Works uses the community values in the Comprehensive Plan when developing project objectives. The City of Bainbridge is committed to the principals of context sensitive solutions. Public Works staff strives to facilitate public engagement when developing capital projects to evolve and refine the community's values as they relate to each project.

CHAPTER 3 OPERATIONS AND MOBILITY



This chapter describes the traffic operations and current and future vehicle mobility for the City's roadway system. Mobility is the measure of how well vehicles can get around on the roadway system – the opposite of congestion. Island residents expect a high level of mobility to coincide with the character of their community. The high levels of congestion experienced during peak periods, especially on and around SR 305, is a common source of frustration for drivers.

While the focus of this chapter is on motorized level of service, it is recognized that providing for level of service for all modes is an important for a viable transportation system. In some locations where constraints limit options, some modes may be favored over other modes. Transportation networks should provide for all modes of transportation as a system. For vehicular traffic transportation demand strategies may be an optimal approach.

Level of service standards are used to provide a basis for the mobility analysis. This Plan used planning and operational models developed by Transportation Solutions, Inc. in TransCAD and Synchro software, respectively, to analyze current conditions (based on traffic counts and existing roadway network information) and to forecast future levels of service (based on traffic generated by forecasted land use and roadway network changes). The structure of the roadway network was analyzed by reviewing the roadway classification system, connectivity, access, and road standards.

Existing Roadway System

The Plan of existing conditions provides an analysis of the current operating conditions and provides a baseline for future comparisons. The City of Bainbridge Island's transportation system is made up of a network of roadways, pedestrian facilities, bikeways, the ferry terminal, and formal and informal trails. Each of these elements is important to the mobility or movement of people and goods within and to destinations beyond the Island. This chapter focuses on the roadway system only; the non-motorized, bus transit, and ferry systems are described in Chapters 6 & 7.

The roadway system is designed for the movement of people and goods throughout the community. Major regional transportation features of the Island include the Washington State Ferry Terminal, which connects Bainbridge Island to downtown Seattle; and State Route 305, which connects the Island to the Kitsap and Olympic Peninsula. State Route 305 is the Island's principal transportation corridor, providing an important north-south connection.





The State system is supported by a City roadway system that connects residential areas to the highway and retail and employment areas. The City’s arterial, collector, and residential street system provides roadway connections and access to properties within the City.

Travel Corridors

The following important commuter, shopping, business, school, and freight/commercial corridors are identified for the Island:

- *Commuter Corridors* – SR 305, Winslow Way, Wyatt Way, Ferncliff Avenue, High School Road, Day Road, Blakely Avenue, Eagle Harbor Drive, Baker Hill Road, Miller Road, and North Madison Avenue.
- *Shopping Corridors* – SR 305, Winslow Way, High School Road, Madison Avenue, Ericksen Avenue, Wyatt Way, Lynwood Center Road, and Valley Road.
- *School Corridors* – High School Road, New Brooklyn Road, Sportsman’s Club Road, Madison Avenue, Day Road, North Madison Avenue, and Blakely Avenue
- *Freight Corridors* – SR 305, Day Road, Miller Road, Fletcher Bay Road, Sportsman’s Club Road, High School Road, Madison Avenue, and Winslow Way.

Roadway Inventory

The City’s roadway system consists of approximately 140 miles of paved roads, and another 20 miles of unpaved roads. The City maintains a Geographic Information System (GIS) that includes the roadway system. The GIS database includes characteristics for each roadway segment, including length, pavement width, functional classification, posted speed, sidewalks, and transit and bicycle facilities. A spreadsheet is maintained that includes sign inventory information. The City periodically conducts an island-wide traffic counting and develops volume and traffic speed information for its major roadways. This Plan was updated in 2014 with TSI traffic counts.

Roadway Classifications

Roadway functional classification is defined as “the process by which streets and highways are grouped into classes, or systems, according to the character of traffic service that they are intended to provide”. The City divides Island roadways into four functional classifications: principal arterial, secondary arterial, collector, and local access roads. These classifications are described in Table 3-1.

Table 3-1. Functional Classifications

Classification	Definition
Principal Arterial	Carry the highest levels of traffic in the system at the greatest speed for the longest uninterrupted distance, often with some degree of access control. Used for through trips, and provide connections within the system.
Secondary Arterial	Carry high level of traffic at a moderate speed, sometimes for through trips. Often serve as access to high-intensity land uses such as major employers or larger commercial centers; provide connections within the system.
Collector	Connect traffic from residential roads to arterials at a lower speed, carrying lower levels of traffic than arterials. Serve neighborhood centers.
Local Access	Carry low levels of traffic at low speeds. Serve as access to residential and commercial areas and are not used for through trips.



Streets and highways are assigned one of these classes, depending on the character of the traffic (i.e., local or long distance) and the degree of land access that they allow. Typically, a trip will use a combination of different road classes, with each classification having a specific function with regard to access and travel speed. Arterials provide a high degree of mobility and less access, while local access roads provide a high level of access and less mobility. Collectors provide a balance between access and mobility and connect the system.

Each roadway in the City's system has been assigned a functional classification, which reflects its operational characteristics including traffic volumes, surrounding land uses, and travel speeds. Figure 3-1 shows the functional classes of the arterials and collectors. Other roadways are local access.

The following changes to roadway classifications since 2004 are included in this update to the IWTP: Halls Hill Road from Blakely Hill to Rockaway Bluff from Local Access to Collector, Wallace Way from Madison Avenue to Ericksen Avenue from Local Access to Collector, and Upper Farms Road from Collector to Local Access.

Road Standards

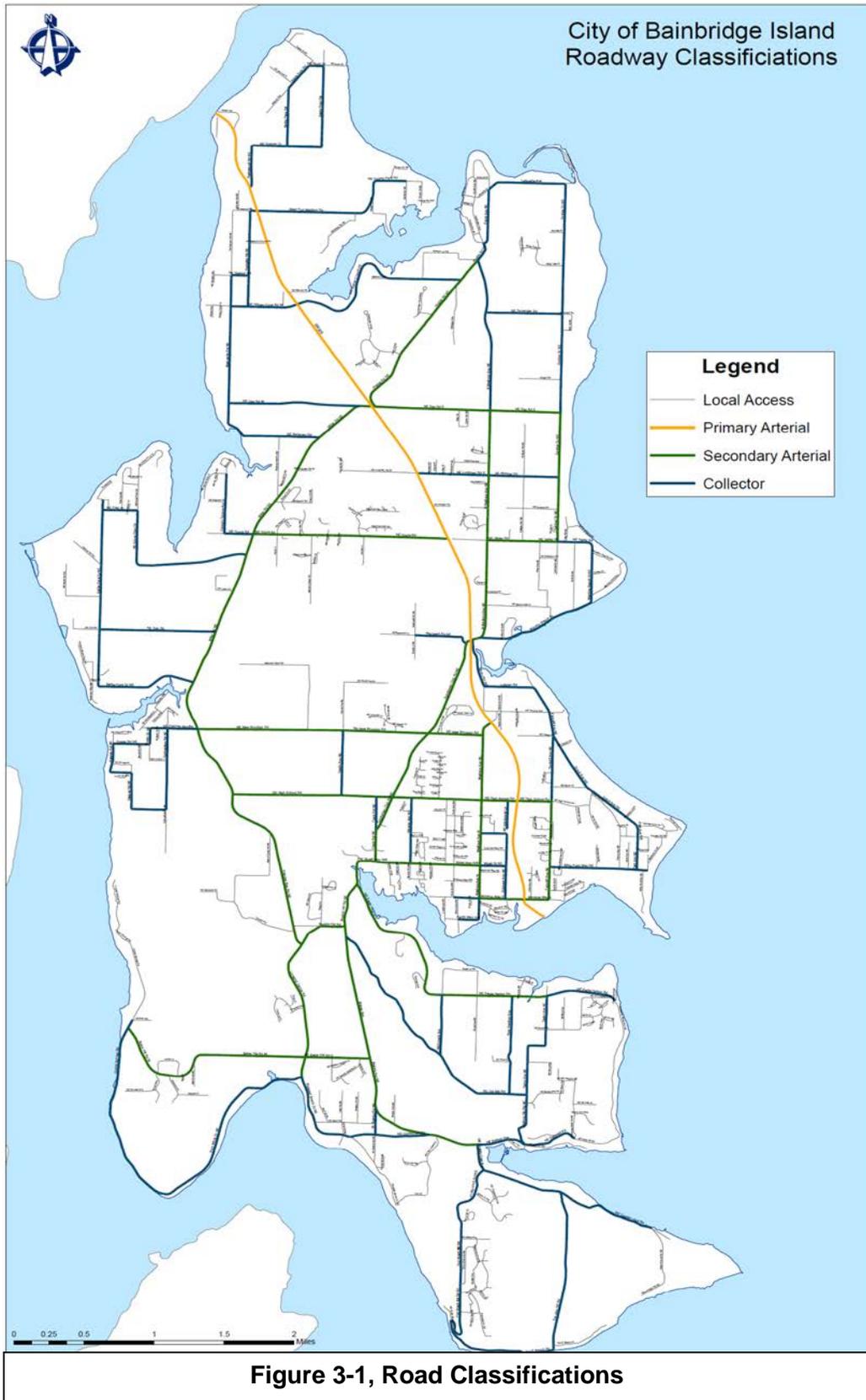
The City of Bainbridge Island has established its roadway street and design standards as part of its *Engineering Design and Construction Standards and Specifications*. These standards set the minimum requirements for constructing roadways and are applicable to all new roadway construction and modifications to existing roadways within the City of Bainbridge Island. The road and street design standards follow the functional classification system described above and establish separate standards for urban and suburban areas of the Island.

The City has both urban and suburban standards. Urban standards are intended to apply within the urban center of Winslow, the urban town centers including Lynwood, Island Center, and Rolling Bay, and the Day Road industrial Center. Urban standards apply in all locations with R2.9 and greater zoning and/or effective density. The City may require urban standards to be applied in other areas in close proximity for system continuity.

The roadway standards were created in 1997 and an update is needed to better address non-motorized elements and low impact development. The roadway standards should be updated within two years of the adoption of the IWTP.

Level of Service

This section describes the Level of Service (LOS) standards used in this document. LOS provides a method for measuring the performance of the transportation system. The City uses a minimum standard for LOS that is used to determine if adequate mobility is being provided on the roadway system. LOS standards and method of measurement have been coordinated with Washington State Department of Transportation, Washington State Ferries, Kitsap County, and Kitsap Transit to ensure that standards used in this document are consistent.





LOS Defined

LOS is a measurement used in transportation planning to assess the operating performance of the transportation system. For roadways, LOS measures the degree of traffic congestion along a roadway varying from LOS A (free-flow traffic with minimal delays) to LOS F (highly-constrained traffic with long delays).

The Highway Capacity Manual (HCM) (Transportation Research Board, Special Report 209) establishes quantitative methodologies for determining level of service for differing types of facilities. The methodologies vary for intersections, roadways, freeway, and highway, but all follow the LOS A - F classification and provide a consistent method of measuring the performance of the transportation system. Table 3-3 describes the operation of the transportation system at each LOS ranking.

Table 3-3: Level of Service Descriptions

Level of Service	Description
LOS A	Free flow traffic conditions with very low delay at intersections.
LOS B	Reasonably unimpeded traffic operations with only short traffic delays at intersections.
LOS C	Stable operating conditions with average traffic delays at intersections
LOS D	Operating conditions result in lower travel speeds and higher delays at intersections.
LOS E	Travel speeds are substantially restricted with problems likely to occur at intersections.
LOS F	Roadway operations are over capacity with extreme delays likely at intersections.

LOS is measured differently for roadways and intersections. For roadways, LOS is measured as a function of traffic volume and roadway capacity. For intersections, LOS is measured as a function of vehicle delay in clearing the intersection.

Roadway LOS Measurement

Roadway LOS is measured by the relationship between traffic volume (V) and capacity (C) of the roadway. As the volume of traffic using the roadway approaches, the capacity of the roadway (V/C approaching 1.0), the level of service deteriorates. Table 3-4 relates volume/capacity to LOS measurements for roadways.



Table 3-4. Roadway Level of Service and Volume/Capacity Ratio

LOS	Volume/Capacity (V/C) Ratio
A	Less than 0.6
B	0.60 to less than 0.70
C	0.70 to less than 0.80
D	0.80 to less than 0.90
E	0.90 to less than 1.00
F	More than 1.00

Traffic volumes can be counted or they can be calculated using the traffic model by analyzing land uses that are served by the roadway. Bainbridge Island roadway capacity policy is defined in the City Design and Construction Standards; see Table 3-5. No policy is currently defined for arterial roadway capacity. There is some inconsistency between the City’s current capacity policy and an engineering-based approach to roadway capacity calculation which would typically consider the physical structure of the roadway, including the number of lanes, type of intersection controls, widths of lanes and shoulders, and design speed. The City’s capacity standards should be reviewed and updated during the roadway design standard update process.

The roadway levels of service described in this Plan are based upon current capacity policy. In lieu of an arterial capacity policy, this Plan calculated arterial segment LOS based on an approach which is currently used by the City of Sammamish and which is consistent with the state of engineering practice.

Table 3-5. Existing Roadway Capacity Policy

Functional Classification	Area Type	Capacity (ADT)
Secondary Arterial	Urban	> 3,000
Secondary Arterial	Suburban	>2,000
Collector	Urban	2,000 to 3,000
Collector	Suburban	1,000 to 2,000
Residential	Urban	< 2,000
Residential	Suburban	< 1,000

To improve the LOS for a roadway, either the capacity must be increased or the volume of traffic using the road must be decreased. To increase the capacity, the City can look at several options such as roadway improvements ranging from adding signals or separated turn lanes to an intersection to roadway widening. To reduce traffic volumes, the City can explore options such as changing allowable land uses or modifying individual travel behavior. This section focuses on capacity improvements. Chapter 7 discusses other travel modes and methods of transportation demand management.



Intersection LOS measurement

Intersection LOS is measured by the amount of delay experienced by a vehicle waiting to clear an intersection. Delay at a signalized intersection can be caused by waiting for the signal or waiting for the queue ahead to clear the signal. Delay at un-signalized intersections is caused by waiting for a break in traffic or waiting for a queue to clear the intersection. Table 3-6 shows the amount of delay used to determine LOS for signalized and un-signalized intersections. Roundabout-controlled intersections use the same LOS thresholds as signalized intersections.

Table 3-6. Intersection LOS and Delay

LOS	Signalized Delay per Vehicle (sec/veh)	Unsignalized Delay per Vehicle (sec/veh)
A	0-10	0-10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50

*Generally, speaking...

Roadways that are LOS E or F fail the standard.

LOS D is okay for certain arterials and collectors in urban areas

LOS A, B or C are within the standard for all arterials and collectors*

Different delay standards are used for signalized (stop light controlled) and unsignalized (stop sign controlled) intersections. For signalized and all-way stop controlled intersections, the LOS is the amount of delay per vehicle caused by control and is reported for the intersection as a whole. For un-signalized intersections, where there are controls only on the minor approaches, the LOS is estimated by the average delay per vehicle and is reported for only minor approaches to the intersection.

City LOS Standard

The City of Bainbridge Island’s LOS standard designates the minimum operational performance of the roadway system that must be maintained. If traffic volumes cause a roadway to fall below the minimum LOS standard, improvements or other mitigation must be made to bring the facility back to the designated LOS standard. Level

of service standards are normally prescribed for the p.m. peak hour (most congested hour) of the traffic system, which typically occurs between 4:45 and 5:45 in the evening on Bainbridge Island.

The recommended minimum LOS standard uses the City’s roadway classification system, and four zones that reflect the differences in the Island’s character: Urban, Sub-Urban, Neighborhood Services Centers, and the SR 305 Corridor. Within each of these categories, individual minimum LOS standards were established for secondary arterials, collectors, and residential roadways. These are shown in Figure 3-2 and described below.

Urban Zone – (applies to roadways and intersections in the most developed areas of the City, mainly the greater Winslow area)

- Secondary Arterial – LOS D



- Collector – LOS D
- Local Access – LOS C

Neighborhood Service Centers (NSC) Zone – (applies to roadways and intersections within the City-defined Centers of Rolling Bay, Island Center, and Lynwood Center)

- Secondary Arterial – LOS D
- Collector – LOS C
- Local Access – LOS C

Sub-Urban Zone – (applies to roadways and intersections in areas outside of the Winslow core and the NSC – the remainder of the Island)

- Secondary Arterial – LOS C
- Collector – LOS C
- Local Access – LOS B

SR 305 Corridor – (applies to state highways and is established by the State)

- All Roadways– LOS D

Non-Motorized LOS Standard

The facility types and associated level of service for non-motorized transportation elements for secondary arterial and high volume collector (ADT 1500 or greater) roadways are established in Chapter 6, “Non-Motorized Systems” of this plan. The minimum Bicycle Level of Service (BLOS) and Pedestrian Level of Service (PLOS) for development in urban areas is level of service C. The minimum BLOS and PLOS for development in suburban areas is level of service D.

SR-305 LOS Standard

The LOS standard for state facilities is set by the Washington State Department of Transportation as a Highway of Statewide Significance (HSS) under RCW 47.06.140. The HSS designation requires that SR-305 be evaluated using a LOS Standard designated by WSDOT. While WSDOT internally evaluates roadways using its own methodology, WSDOT has assigned a level of service standard for SR-305 as LOS D-mitigate for City planning purposes. This standard requires that congestion be mitigated when the peak period operation of the state facility falls below LOS D.

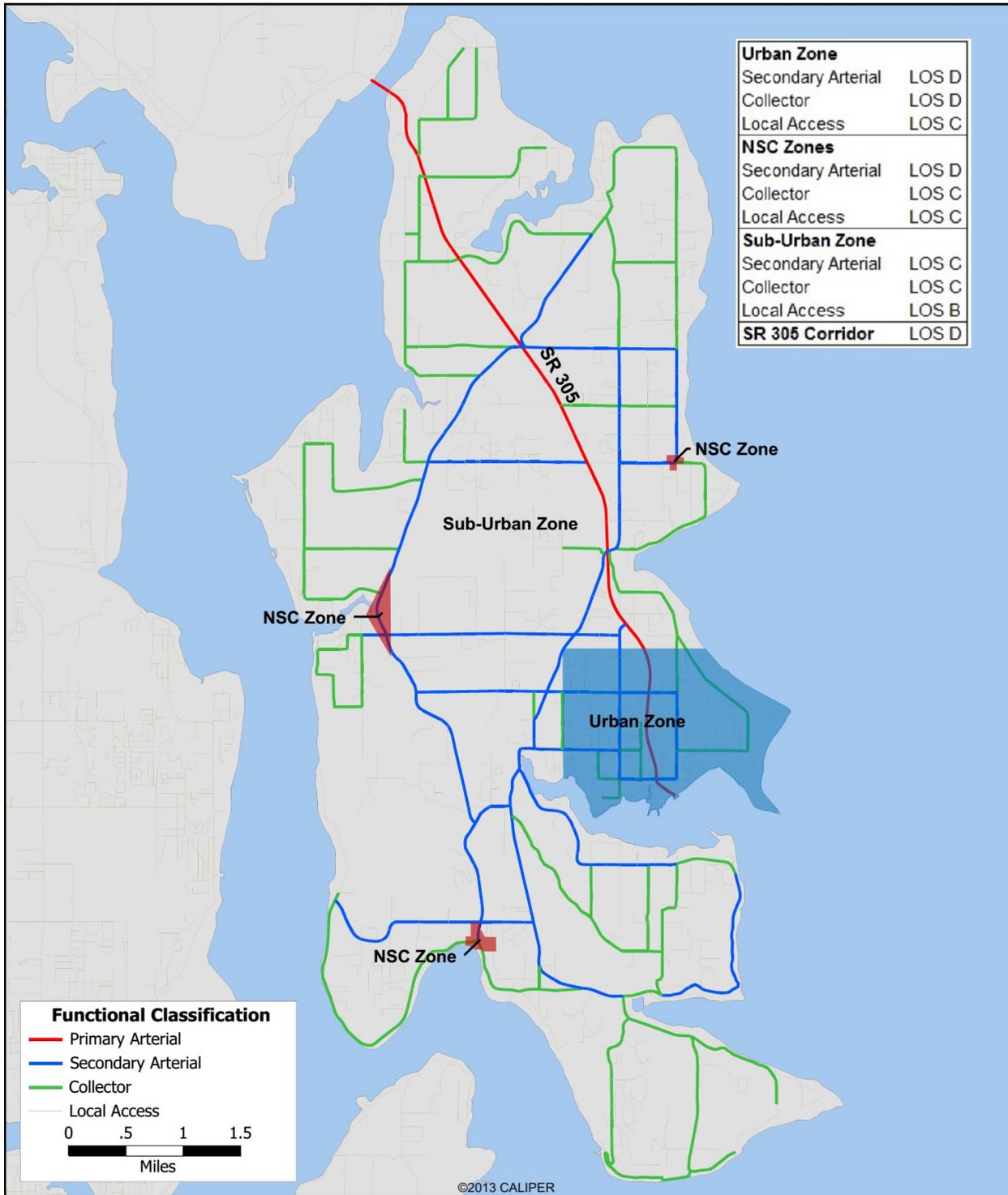


Figure 3-2
Recommended Level of Service Standards





Existing Traffic Conditions

This section describes the traffic conditions for the 2014 Plan year. The Plan is based on traffic data collected for roadway segments in 2012 and intersection counts in 2014.

Transportation Model

A consultant, Transportation Solutions, Inc. (TSI) developed a citywide transportation model to estimate existing travel demand and to provide a tool for forecasting future travel demand on City roadways. Current and future travel demand were used as inputs to a citywide operational model, developed using Synchro software, to evaluate current and forecasted PM peak hour levels of service throughout the city's roadway network. The demand model is based upon the concept of vehicle trips; pedestrians and cyclist demand is not forecasted. Similarly, carpool, vanpool, or transit users are represented by single vehicles in the model.

For analysis of existing conditions, the TransCAD-based model used existing land use data from Kitsap County and Puget Sound Regional Council (PSRC), roadway information from the City, and TSI traffic counts to reproduce existing trips and their paths, from origin to destination, through the citywide roadway network.

Land use was collected from Kitsap County at the individual parcel level and aggregated to create 241 transportation analysis zones (TAZs) which covered the entirety of the City. Two external zones were created to represent travel demand at the ferry terminal and at the north end of the Island.

Trip generation was based upon existing land use and trip generation rates established by the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition* and calibrated based on knowledge of local conditions and travel patterns. It was observed during calibration, for example, that single-family trip generation rates on Bainbridge Island were lower than the nationally-calibrated averages published by ITE. This reduced single family trip rate may be associated with a growing percentage of retirees living on the Island. Peak hour ferry trip generation rates were estimated from the WSDOT Ferries Division *2013 Origin-Destination Travel Survey Report*.

Trips were distributed through the TAZ network using a doubly-constrained gravity model, which assumes that trips produced at a given origin and attracted to a given destination are proportional to the total trip productions at the origin and the total trip attractions at the destination. Trip impedance was calculated free flow travel time as input to a gamma function with calibration parameters adjusted based on local knowledge and relationships established in other regional models, including the Kitsap County travel demand model.

The last step of the demand modeling process was to assign trips from origin to destination zones via the roadway network. Roadway information including width, number of lanes by direction, and presence of non-motorized facilities were used to estimate roadway capacity. TransCAD's stochastic user equilibrium assignment process iteratively loads the roadway network until a travel time equilibrium solution is found.

For operational analysis, a citywide traffic model was developed in Synchro software, using roadway information obtained from the City, satellite and street-level imagery collected from Google Earth, and traffic counts collected in 2014 by TSI. Relevant roadway information for operational analysis included number of lanes, intersection channelization, traffic control devices,



speed limits, and lane width. Observed PM peak hour traffic volumes were applied to the roadway network to calculate intersection levels of service.

Peak Hour Traffic Volumes

The City of Bainbridge Island collects traffic count data on a periodic basis to assess changes in traffic patterns, to collect information for its concurrency program, and to track the operational characteristics of the Island. In 2012, the City contracted an update of Island-wide traffic counts and travel speeds. In 2014, the City contracted intersection counts. This information was utilized in the traffic model developed by TSI. The data is included in Appendix E of this report.

WSDOT Ferry Travel Survey

Washington State Department of Transportation (WSDOT) conducts origin-destination (OD) surveys every six to seven years as a way to accurately capture and measure the travel patterns of ferry passengers. Passengers were asked about their typical routes, how they get to and from ferry terminals, and the purpose of their trips. The most recent survey was conducted in October 2013 and results were published in August 2014.

Surveys were administered to ferry riders during weekdays and Saturdays in October 2013. Over 17,000 survey questionnaires were collected system-wide, with 92 percent of collected surveys sufficiently complete for analysis. Survey responses were used to develop a database of ferry user characteristics, including trip origin and destination patterns. TSI reviewed and processed survey results for the Seattle-Bainbridge route and used them as inputs to the citywide travel demand and traffic operations models.

Figure 4-3 summarizes survey findings for the Seattle-Bainbridge Island ferry.

Highlights of the survey results are summarized below:

- Ferry ridership has declined slightly since 2006, with approximately 17,000 riders per day in 2013 compared to 18,000 riders per day in 2006. Vehicle boardings decreased by 7 percent during that period.
- The Seattle-Bainbridge route has shown an aging ridership, with the number of passengers over age 64 increasing from 8 percent in 2006 to 17 percent in 2013. System-wide, average passenger age increased from 42 in 1993 to 48 in 2006 and 49 in 2013. Currently 18 percent of riders are retired and another 14 percent are planning to retire in the next five years.
- Approximately 25 percent of weekday riders telecommute at least one day per week, up from 20 percent in 2006.
- The proportion of work- and school-related trips decreased and the proportion of recreation and shopping trips increased between 2006 and 2013.
- Of the 6,070 total (eastbound and westbound) ferry trips during the 3:00 to 7:00 PM weekday peak period, 67 percent had an origin or destination on Bainbridge Island, while the remaining 33 percent had off-Island trip ends. This indicates the WSF terminal's regional nature, with one in three travelers originating or destined for off-Island locations.
- The City of Poulsbo and other North Kitsap County locations accounted for 57% of the off-Island destinations. Other primary destinations included the cities of Kingston, Silverdale, Port Townsend, and Sequim. The results indicate that while much of off-Island traffic is



coming from areas adjacent to Bainbridge Island, as many as 40% of off-Island drivers could take advantage of new or improved service to downtown Seattle from Kingston or Bremerton.

- Nearly 70 percent of total weekday PM peak period ferry trips are destined westbound, with the other 30 percent of trips destined primarily for locations within Seattle.

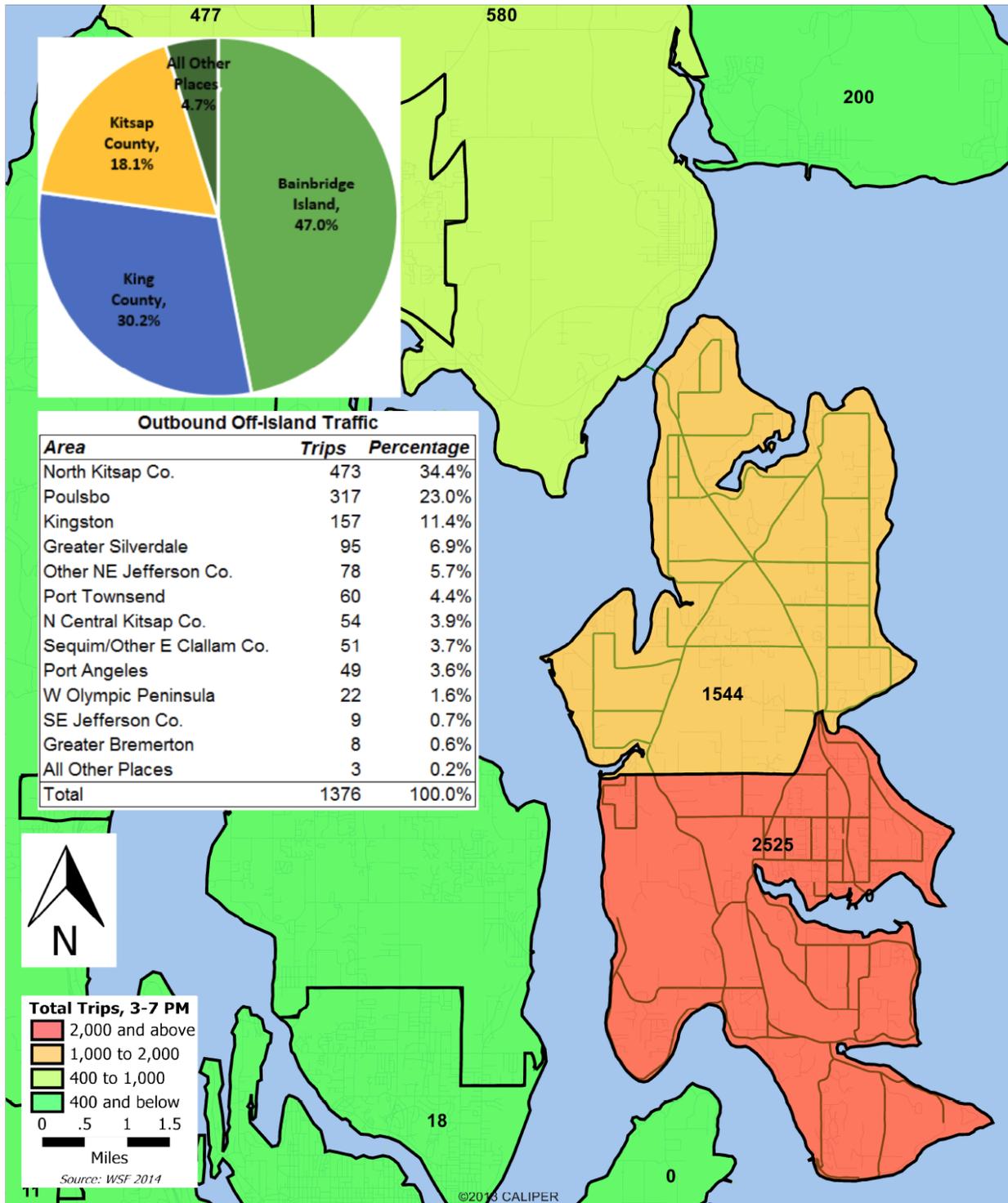


Figure 3-3
Ferry Terminal Person Trips,
2013 PM Peak Period (3-7 PM)





Existing LOS

The travel demand model was calibrated using a process that compares the counted roadway volumes to modeled flows which are based on land use and roadway network data. The calibrated TransCAD model and Synchro intersection analysis software were used to determine the 2014 LOS for the intersections in the study area.

Figures 3-4 shows the 2014 LOS for the Island as a whole and for the Winslow area. The LOS for each intersection is shown by approach in Table 3-7. All intersections modeled on SR305 north of High School Road currently do not meet minimum LOS standards with the exception of the signal at Day Road. Day Road however is close to exceeding the standard. In urban areas, the Madison/Wyatt intersection currently fails the minimum LOS standard but will be improved to LOS A upon completion of a planned roundabout.

There are currently no roadway level of service failures.

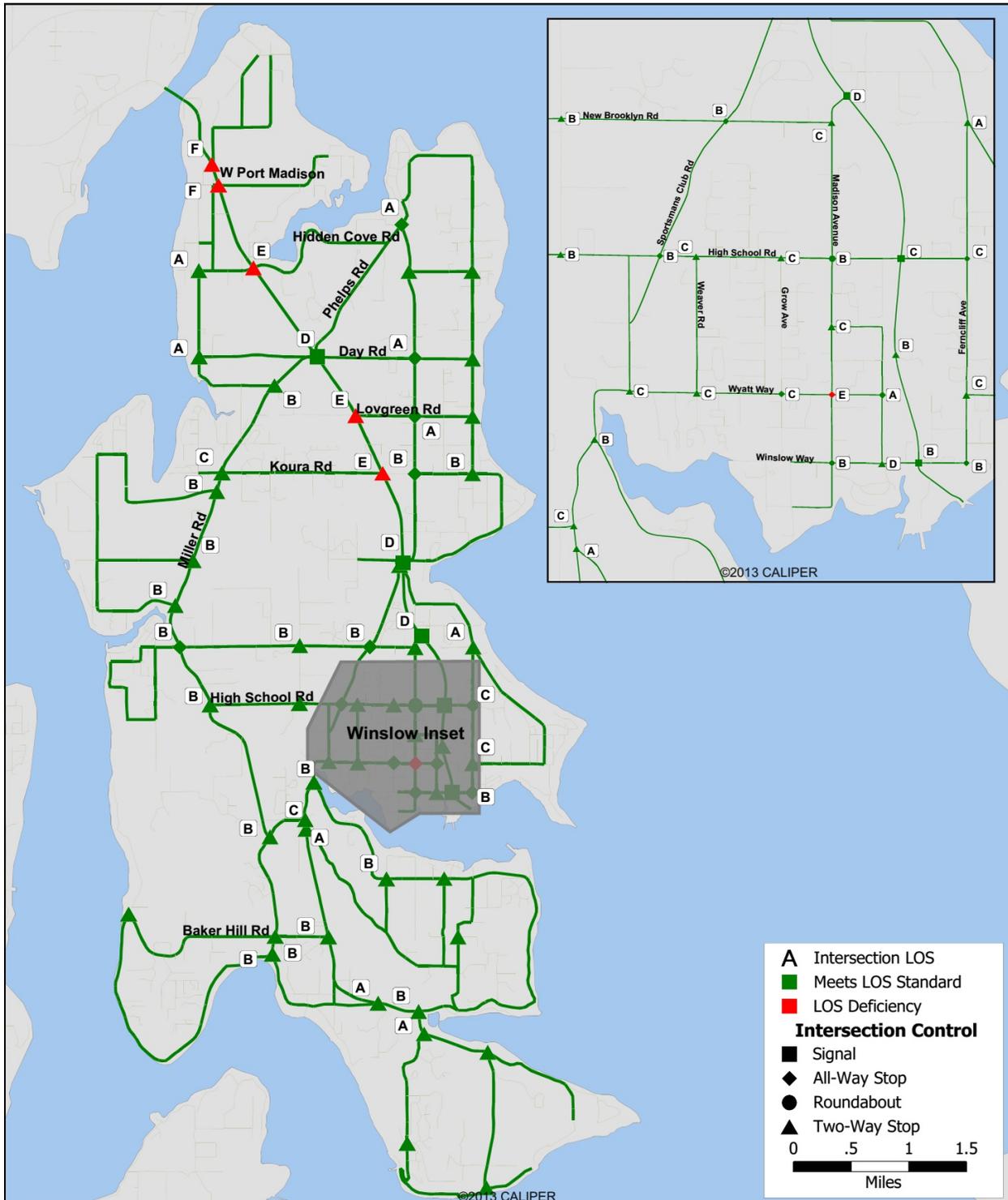


Figure 3-4
2015 Level of Service





Table 3-7. Intersections PM Peak Hour LOS Deficiencies – 2014 Baseline

Intersection	Control Type ¹	Delay ² (s/veh)	LOS
Madison Ave N / Wyatt	AWSC	38.5	E
SR 305 / Koura Rd	TWSC	37.3	E
SR 305 / Lovgreen Rd	TWSC	38.9	E
SR 305 / NE Hidden Cove Rd	TWSC	48.3	E
SR 305 / Port Madison	TWSC	>180	F
SR 305 / Agatewood Rd	TWSC	>180	F

¹TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; RAB = Roundabout; Signal = Signalized

²Average control delay for all movements. For TWSC, delay is reported for the movement with the highest delay.

Future Traffic Conditions

This section identifies the land use forecast methodology and results used to identify the future needs and deficiencies of the transportation system. Two time periods were studied: 2021, representing the six-year short-term planning period, and 2035, representing the 20 year long-term planning period. 2035 matches the long term planning horizon of Puget Sound Regional Council (PSRC), the region’s major planning entity.

Land Use Forecast

The transportation model used PSRC and Kitsap County land use forecasts to determine future PM peak hour trip growth by transportation analysis zone (TAZ). Trip growth forecasts were distributed and assigned to the future roadway network to generate expected future traffic growth citywide.

Determination of Base Year Land Use

Base year land use was provided by Kitsap County in the form of GIS-based tax parcel data. This data was cleaned and refined based on recent satellite and street-level photography, then categorized according to the following modeled land use types:

- Single-Family Housing
- Multi-Family Housing
- Senior/Assisted/Retirement Housing
- Retail
- General Office
- Industrial and Manufacturing
- Warehouse/Utility/Storage
- Hotel
- Hospital/Nursing Home
- Park and Ride
- School
- Recreation/Entertainment
- Church

Land use data was subsequently aggregated to create 241 transportation analysis zones (TAZs), with each TAZ representing a distinct geographical trip generating unit in the travel demand



model. Table 3-8 describes the modeled 2014 land use quantities. The base year travel demand model was calibrated using 2014 traffic counts to establish a tool that reflects vehicle traffic and travel patterns for each of the TAZs.

Table 3-8. 2014 Land Use

Land Use Category	Quantity	Units
Single-Family Housing	8,517	Dwelling Units
Multi-Family Housing	1,311	Dwelling Units
Senior/Assisted/Retirement Housing	212	Dwelling Units
Retail	589	KSF
General Office	316	KSF
Industrial and Manufacturing	163	KSF
Warehouse/Utility/Storage	226	KSF
Hotel	96	Rooms
Hospital/Nursing Home	69	KSF
Park and Ride	841	Stalls
School	3,355	Students
Recreation/Entertainment	207	KSF
Church	121	KSF

Land Use Forecasts (2021 and 2035)

The next step in the transportation modeling process was to incorporate land use forecasts to the calibrated base year travel demand model in order to establish 2021 and 2035 traffic forecasts.

The year 2035 transportation model horizon matches the land use forecasting horizon used by PSRC and Kitsap County. In order to convert regional 2035 land use forecasts to the level of detail required by the citywide transportation model, housing and employment growth forecasts were geographically distributed to the TAZ level according to zoning and estimated land capacity. Employment growth forecasts were converted to gross floor area or equivalent modeled units using relationships established by the Institute of Transportation Engineers, U.S. Department of Energy, and San Diego Association of Governments.

Table 3-9 shows the citywide residential and employment forecasts used in this Plan.



Table 3-9. 2021 and 2035 Forecasts

	Households	% Change from Base	Employees	% Change from Base
2014 Base Year	10,152	--	8,600	--
2021 Forecast	11,346	12%	9,321	8%
2035 Forecast	13,248	30%	10,587	23%

Growth in households is assumed to occur at an annual rate of approximately 1.3 percent per year during the planning period. Employment growth is expected at 1.7 percent per year. The 2035 forecasts assigned a moderate rate of growth throughout the Island with the greatest commercial growth in the designated Neighborhood Service Centers, industrial growth focused in areas currently zoned business/industrial, and residential housing growth occurring in areas where the greatest potential for new housing under the existing zoning could occur. The 2021 forecasts were based on a straight-line interpolation of growth for each TAZ, with the assumption that the distribution of employment and housing would be proportionate to the 2035 scenario.

Future Traffic Operations

This section describes the future traffic conditions on the City’s roadway system for 2021 and 2035. Future traffic conditions were estimated for 2021 and 2035 using the results of the land use and employment forecasts, roadway network information, and the calibrated travel demand model (including calibrated trip generation, distribution, and traffic assignment submodels).

2021 Traffic Forecast

The 2021 traffic forecast was developed by applying a linear interpolation of forecasted 2035 land use growth to the calibrated base year planning model. Forecasted traffic growth was then applied to the Synchro traffic operations model to analyze 2021 levels of service. Where LOS was shown to fall below the minimum LOS threshold by 2021, mitigating improvements were added to the road network. This section describes the results of the 2021 analysis.

2021 LOS

The traffic model produces a forecast of 2021 traffic conditions, which are shown in Figure 3-5. Results of the 2021 forecast show continued heavy congestion and poor level of service along SR305. At location other than SR305, there are only a few minor LOS deficiencies.

Roadway LOS

Roadway Segment LOS at sections of Eagle Harbor Drive and Miller Road are expected to decline. Shoulder widening project are included in the City’s short term (6 year) capital improvement plan for these locations.

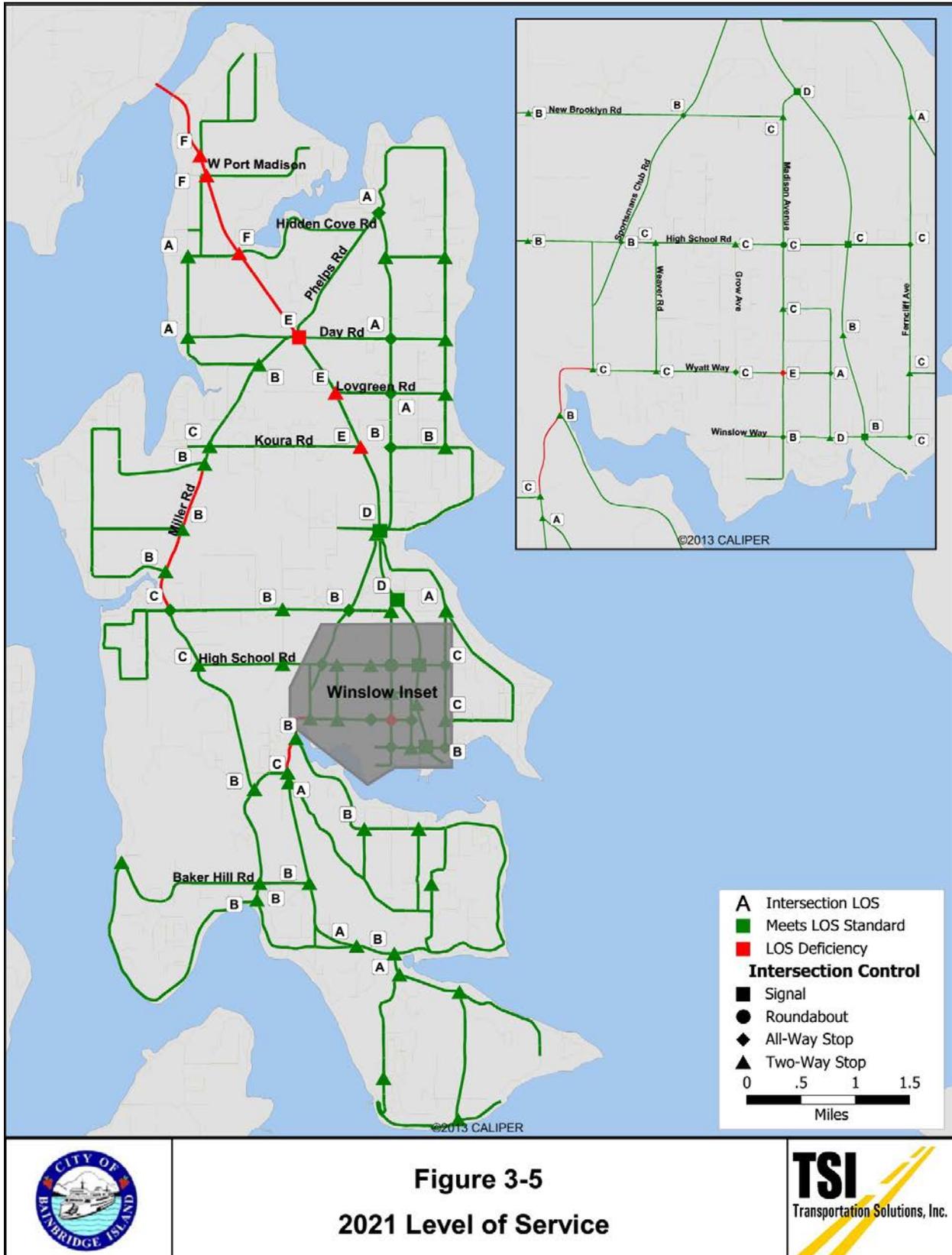
Along the SR305 corridor, north of Sportsman’s Club Rd., roadway capacity, in addition to poor intersection operation, is predicted to become an impediment to traffic flow and contribute to congestion.



Intersection LOS

The traffic model was used to identify locations where intersections may be the cause of poor operations. Table 3-10 shows the results of the 2021 Plan year intersection LOS analysis. Without mitigation, one intersection in the Urban Zone – Madison Avenue N / Wyatt Way NE – fails to meet the minimum LOS standards. The intersection of Winslow Way/ Ericksen Ave. is forecasted to decline to LOS D. The poor operation of the highway, if not addressed, will be a barrier to cross-Island traffic, impacting operations of the City’s roadway system as a whole.

On SR 305, the intersections at Agatewood Road, Seabold Road, Hidden Cove Road, Lovegreen Road, and Koura Road all fail to meet the minimum standard. By the 2021 forecast year, SR 305 corridor congestion continues to deteriorate with the intersection at Hidden Cove Rd falling from LOS E to LOS F. The intersection at Day Road is anticipated fail at LOS E. The poor operation of the highway intersections, if not addressed, will increasingly be a barrier to cross-Island traffic, impacting operations of the City’s roadway system as a whole.





2016-2021 Mitigation

Each intersection and roadway segment identified as below the minimum LOS standard in 2021 was studied to see if mitigation actions could improve the intersection LOS to the minimum standard. Targeted roadway improvements can correct an intersection or roadway that fails to meet the minimum LOS standard.

City Mitigation

For intersections in the City’s roadway system where the expected LOS is below the minimum standard, the following mitigation is proposed:

- *Madison Avenue/ Wyatt Way* – An intersection control improvement such as a signal or a roundabout would improve the intersection to LOS B. The intersection will be studied to determine what specific improvement should be constructed. A round-about may be one alternative. An improvement project is currently programed in the City’s CIP for Wyatt Way, including the intersection.
- Eagle Harbor Drive from Wyatt to Blakely - Shoulder improvements for non-motorized users are recommended. An improvement project is currently programed in the City’s CIP from Tolo to Peterson Hill.
- *Miller Road from New Brooklyn to Arrow Point* – Shoulder improvements for non-motorized users are recommended. An improvement project is currently programed in the City’s CIP for this segment.

WSDOT Mitigation

Six SR 305 intersections and roadway segments north of Day Road currently fail to meet LOS and will continue to deteriorate. Table 3-10 describes improvements that could mitigate LOS failures, such as adding turning lanes or signalization. Refer to chapter 5 of this Plan for recommendations.

Table 3-10a. Intersections PM Peak Hour LOS Deficiencies – 2021 Forecast

Intersection	Control Type ¹	2021 Delay ² (s/veh)	2021 LOS	Possible Mitigation
Madison Ave N / Wyatt	AWSC	44.2	E	Roundabout or signal
SR 305 / Koura Rd	TWSC	43.5	E	SR 305 Corridor Improvements
SR 305 / Lovgreen Rd	TWSC	39.4	E	
SR 305 / Day Rd	Signal	60.1	E	
SR 305 / Hidden Cove Rd	TWSC	>180	F	
SR 305 / Port Madison	TWSC	>180	F	
SR 305 / Agatewood Rd	TWSC	>180	F	

¹TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; RAB = Roundabout; Signal = Signalized
²Average control delay for all movements. For TWSC, delay is reported for the movement with the highest delay.



Table 3-10b. Street Segment PM Peak Hour LOS Deficiencies – 2021 Forecast

Segment	From	To	V/C	LOS
SR305	Day Rd	Hidden Cove Rd	0.94	E
SR305	Hidden Cove Rd	Seabold Church Rd	0.96	E
SR305	Seabold Church Rd	Seabold/W Port Madison	0.93	E
SR305	Seabold/W Port Madison	Agatewood Rd	0.99	E
SR305	Agatewood Rd	Reitan Rd	0.98	E
Bucklin Hill Rd	Blakely Ave	Eagle Harbor Dr	0.84	D
Miller Rd	New Brooklyn Rd	Battle Point Dr	0.99	E
Miller Rd	Battle Point Dr	Tolo Rd	0.84	D
Miller Rd	Tolo Rd	Arrow Point Dr	0.85	D
Eagle Harbor Dr	Bucklin Hill Rd	Finch Rd	0.84	D

2035 Traffic Forecast

The analysis of 2035 traffic conditions provides a long-range view of how the roadway system will operate on the Island. The 2035 traffic forecast considers housing and employment growth forecasted by PSRC and by Kitsap County, as well as any roadway network changes that would impact traffic operations. This section describes the results of the 2035 analysis.

2021-2035 Model Forecast Improvements

Few projects have been programmed into the traffic model to be constructed between 2021 and 2035. The City’s traffic plan has not been updated since 2004 and was not formally adopted. The State has recently begun longer term planning for the SR305 and other corridors. Because only a few improvements have been included in planning documents beyond the six-year period for either City or State facilities in the study area.

The following improvements are assumed to be in place by 2035:

- *SR305 / Suquamish* – A roundabout is planned for this intersection. This intersection is outside the study area for this Plan and is not evaluated in the traffic model.

2035 LOS

The traffic model produces a forecast of 2035 traffic conditions, which are shown in Figure 3-6. Results of the 2035 forecast show continued heavy congestion and poor level of service along SR305 and some minor intersection problems in the Urban Zone around Winslow.

Roadway LOS

Analysis of the expected traffic in 2035 shows that most of the City’s roadway system would continue to meet the minimum LOS standards with the roadway system in Winslow, including SR 305 intersections, generally operating acceptably. Based on the City’s existing capacity policy, some roadway LOS failures would still exist on Eagle Harbor Drive and Miller Road.



For the 2035 forecast year, LOS on SR305 from Day Road to the north end of the Island is expected to continue to decline, if roadway segment capacity improvements, in addition to intersection operation improvements, are not addressed.

Intersection LOS

The intersection analysis results from the 2035 Plan year are shown in Table 3-11. Assuming the identified short term planning horizon improvements are provided in the urban zone, further intersection improvements are needed or anticipated. Except, at the intersection of Winslow Way and Erickson restricted turning movements are advised to maintain LOS.

By 2035, the increase in traffic on SR 305 is expected to result in continued deterioration of intersection operations. Excessive delay would occur at nearly all of the intersections north of Day Road. The intersections at SR 305 and Koura Road would further deteriorate from LOS E to LOS F. The poor operation of the highway, if not addressed, will continue to be a barrier to cross-Island traffic, impacting operations of the City's roadway system as a whole.

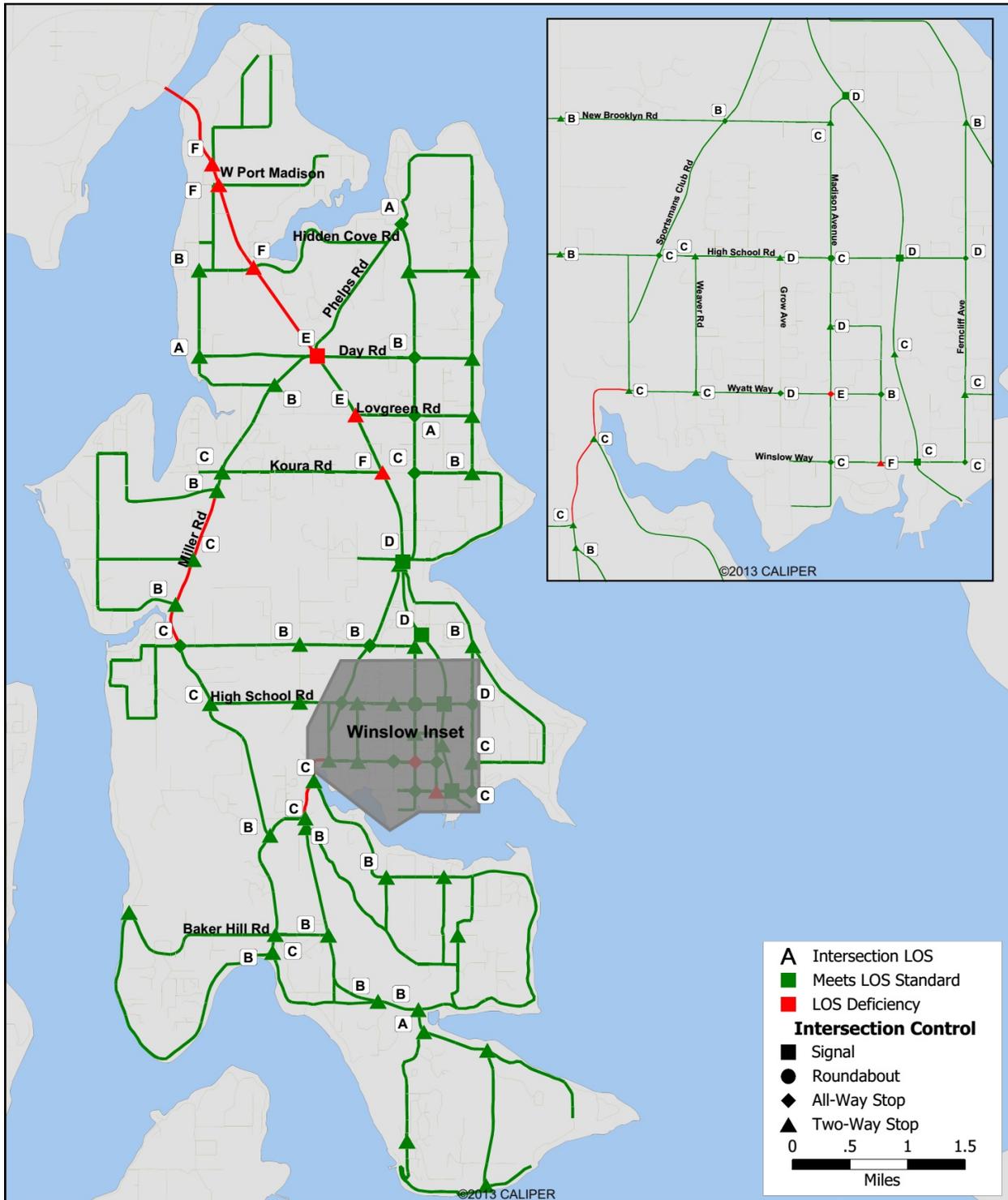


Figure 3-6
2035 Level of Service





Table 3-11a. Intersections PM Peak Hour LOS Analysis – 2035 Forecast

Intersection	Control Type ¹	2035 Delay ² (s/veh)	2035 LOS	Possible Mitigation
Madison Ave N / Wyatt	AWSC	42.9	E	Roundabout or signal
Winslow Way / Erickson Ave	TWSC	64.4	F	Access restrictions / RIRO
SR 305 / Koura Rd*	TWSC	51.2	F	SR 305 Corridor Improvements ³
SR 305 / Lovgreen Rd ⁴	TWSC	45.1	E	
SR 305 / Day Rd	Signal	78.7	E	
SR 305 / Hidden Cove Rd ⁴	TWSC	>180	F	
SR 305 / Port Madison	TWSC	>180	F	
SR 305 / Agatewood Rd	TWSC	>180	F	

¹TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; RAB = Roundabout; Signal = Signalized

²Average control delay for all movements. For TWSC, delay is reported for the movement with the highest delay.

³Specific corridor improvements identified below

⁴Alternative access to SR 305 is provided for locations w/RIRO access during PM peak hour:

- Koura Rd access via Miller Rd
- Lovgreen Rd access via N Madison Ave or Miller Rd
- Hidden Cove access via Phelps Rd, Seabold Rd or Day Rd

Table 3-11b. Street Segment PM Peak Hour LOS Analysis – 2035 Forecast

Segment	From	To	V/C	LOS
SR305	Day Rd	Hidden Cove Rd	0.95	E
SR305	Hidden Cove Rd	Seabold Church Rd	1.03	F
SR305	Seabold Church Rd	Seabold/W Port Madison	1.01	F
SR305	Seabold/W Port Madison	Agatewood Rd	1.05	F
SR305	Agatewood Rd	Reitan Rd	1.04	F
Bucklin Hill Rd	Blakely Ave	Eagle Harbor Dr	0.86	D
Miller Rd	New Brooklyn Rd	Battle Point Dr	0.97	E
Miller Rd	Battle Point Dr	Tolo Rd	0.81	D
Miller Rd	Tolo Rd	Arrow Point Dr	0.82	D
Eagle Harbor Dr	Bucklin Hill Rd	Finch Rd	0.85	D

2021-2035 Mitigation

Mitigating the LOS for the City intersections would require minor improvements which can be programmed into the City's future transportation improvements program. The increased traffic volume expected to use SR 305 in 2035 would overwhelm the existing facility, resulting in a situation that cannot easily be mitigated.



City Mitigation

Improvement to intersection channelization and/or intersection control can mitigate the substandard LOS at all of the City intersections. The following projects are proposed to improve LOS at the four identified substandard intersections:

- *Erickson Avenue at Winslow Way* – An intersection control improvement such as prohibiting left turns during peak traffic hours is recommended.

WSDOT Mitigation

Roadway segments along the seven-mile SR 305 corridor within the study area will operate at LOS F. This problem is based on lack of roadway capacity that affects the intersection operation as well, making it extremely difficult to mitigate individual locations. Any mitigation that is proposed would need to be examined on a corridor basis, and would need to be consistent with WSDOT operational objectives, as well as City's goals and objectives with regard to traffic operations, environmental and community character concerns. An individual solution for each problem location would not provide an adequate assessment of the corridor-wide issues that are present on the highway.

There are a number of possible solutions that could be proposed to mitigate the corridor. In order to adequately explore possible solutions, a special study was performed for this corridor. The results of the study are explained in Chapter 5.

Other Mobility Issues

There other issues that affect the mobility of traffic on the roadway network. These issues include factors that influence how traffic operates and connects to the City's roadway system. The three areas discussed in this section includes the connectivity of the roadway system, access management, and special study areas identified by the Steering Committee.

Connectivity

Connectivity is defined as the level of connections between roadways in a transportation system. In concept, connectivity describes the efficiency of travel between any two points on the roadway system. A high level of connectivity is characterized by a well-developed street network, available alternative routes, quick response times for emergency vehicles, good mobility for pedestrians and bicyclists, and an efficient use of the roadway system. A low level of connectivity is characterized by numerous dead-end streets, cul-de-sacs, and roadways that do not connect, resulting in poor response times for emergency vehicles, circuitous routing of pedestrian and bicycle travel, and inefficiencies in traffic flow. Low connectivity can also result in interrupted access to areas in the event of a road closure such as a traffic accident or landslide, which can result in the loss of development opportunities for some properties if they aren't served by the public roadway system, and can cause a high level of congestion and bypass traffic on the available streets.

On Bainbridge Island, an example of an area with relatively high connectivity is the Winslow subarea, where the street network is more developed and few streets end in dead-ends or cul-de-sacs. However; there are areas in Winslow where there are "super blocks" which inhibit



connectivity. Many of the sub-urban areas have low connectivity with few alternate connections and wide street spacing, requiring difficult routing between areas.

Connectivity improvements are usually undertaken to solve potential safety problems or to improve traffic flow. New connections can be constructed to provide access to undeveloped properties, or alternative access in areas where there is only one roadway serving many homes or businesses, where the existing road is unstable due to steep slopes or erosion, or where an alternative route is needed to provide relief to an overly congested route.

Seventeen connectivity projects have been identified across the Island to be developed as traffic and other needs dictate. These are shown in Figure 3-10 (general area of connection shown with star) and described in Figure 3-11. The potential connections shown are recommended for development by the Steering Committee. The recommendations were developed by looking at the needs of schools, fire and emergency medical response, and other public facilities, as well as access to landlocked properties. Each potential connection will be considered separately as traffic patterns and emergency response times warrant, will be studied to identify potential impacts, and will include discussions with affected property owners. Connections will be included with other nearby projects if possible. Connectivity improvements are not included in this Plan's 2035 traffic model.

Access Management

Access management is the control of the number and location of access points along a roadway, in order to provide access to property, maximize safety for all roadway users, and optimize roadway operations. Access management is especially important on arterial roadways and highways where there is or may be high travel speeds and traffic volumes are desired.

Access management is generally implemented on roadways for three reasons: to improve roadway operations, to improve safety, and to improve access to properties. Roadways operate best when all vehicles travel in a straight line. Conflict points occur when the path of one vehicle crosses the path of another. These can be at intersections, driveways, or at other locations where vehicles turn. Vehicles that slow to make turning movements, accommodate merging traffic, or allow crossing traffic flows all contribute to the reduction in the number of cars that can travel through a corridor. Reducing conflict point's increases capacity and traffic speeds.

Multiple conflict points not only slow traffic and reduce roadway capacity, but also increase the potential for accidents. Rear-end and turning vehicle collisions can be minimized through the use of access management strategies that reduce conflict points. Too many conflict points can also interfere with access to properties by making it difficult for vehicles to turn across traffic, or by restricting turning movements. Access management can also improve access to individual properties by organizing driveways at locations where turning movements are safer and easier.

On Bainbridge Island, access is a major issue along SR-305 corridor, particularly north of Hidden Cove Road. Along this stretch of the highway there are multiple driveways and streets where the only access to properties is via the State Highway.

Techniques that can be applied to increase the mobility and safety of a travel corridor vary from development of shared access points to the installation of medians or other turning restrictions.



The objective of an access management program is to provide access to a property while limiting negative impacts to the property.

Control techniques fall into two categories: driveway access and roadway operation. Driveway access controls prescribe the number and location of driveways for properties along a roadway segment. Roadway operation controls provide for access to properties and cross streets. The following list identifies the techniques included in each category:

Driveway Access Controls:

- internal circulation between parcels
- shared driveways
- limits on number, spacing, and size of driveways
- consolidation of access for adjacent parcels
- use of one-way driveways
- right-in/right-out (RIRO) access
- development of access driveways on minor streets

Roadway Operation Controls:

- refuge lanes or two-way continuous left turn lanes
- turning movement limitations through signage and channelization
- construction of deceleration lanes
- raised medians that limit left turns
- traffic signals at high volume locations
- provisions for U-turns

The State of Washington supports the use of access management strategies to protect its key roadways and travel corridors. RCW 47.50.010 requires that access be managed along all state facilities:

“Regulation of access to the state highway system is necessary in order to protect the public health, safety, and welfare, to preserve the functional integrity of the state highway system, and to promote the safe and efficient movement of people and goods within the state.”

While the institution of access management may not solve the corridor’s congestion problems, adoption of access management strategies and practices will increase the efficiency and safety of the corridor while minimizing the impacts on existing property owners.

The City of Bainbridge Island does not currently have a formal access management program. Some aspects of access management, such as number and location of driveways and internal parcel circulation, are monitored by the Public Works Department during the site plan review process.



WSDOT manages access on state highways, including SR 305 as it crosses the Island. This highway is classified as *Partial Access Control*, which has the following definition: “Access approaches are permitted for selected public streets, roads, some crossings, and existing private driveways. No commercial approaches are permitted and no direct access if Public Street or road access is available.”

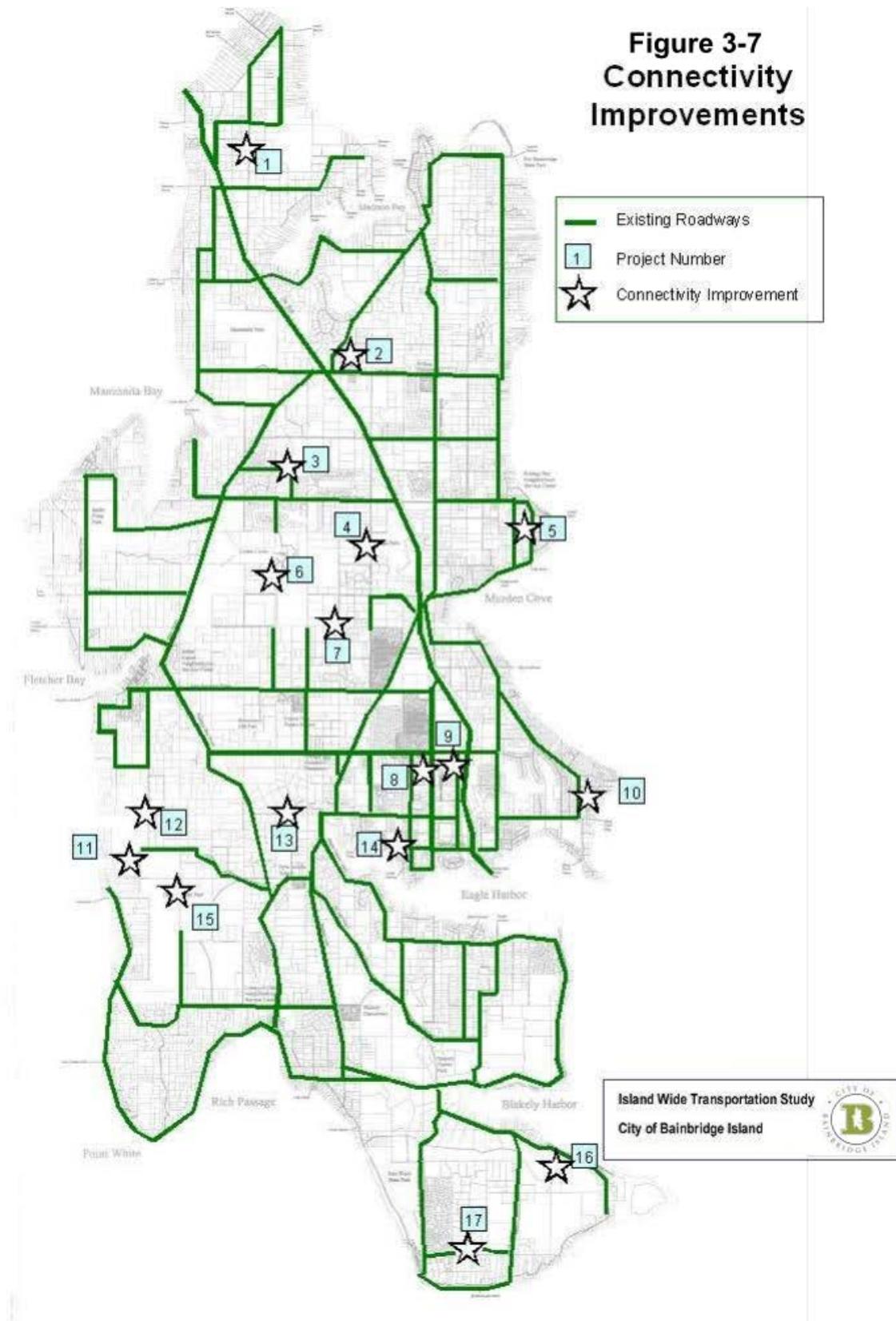






Figure 3-8

Guide To Potential Connectivity Improvements

1. **Agate Pass Road** – The extension of Agate Pass Road between Dolphin Road and W. Port Madison Road would provide a secondary access to the area and lessen traffic impacts and delay at the intersection of Agatewood Road/SR 305.
2. **Phelps Road** – The realignment of Phelps Road, east of current intersection with Day Road would improve the intersection’s geometrics and intersection spacing from Day Road/SR 305.
3. **Fieldstone/Bayhill Road** – The extension of Bay Hill Road to Fieldstone Lane would improve neighborhood circulation.
4. **Wardwell Road** – The connection between Wardwell Road and Koura Road would improve the circulation opportunities in the central Island area, provide a secondary access to the Wardwell Road area, and provide access to undeveloped parcels. One alternative may be to provide non-motorized through access and limit motorized use.
5. **Manitou Beach Road** – This proposed segment would provide a connection between upper Manitou Beach Road and Falk Road providing a secondary access to the area where shoreline erosion problems threaten sections of Manitou Beach Road.
6. **Mandus Olson Road** – The connection of north and south portions of Mandus Olson Road would provide better circulation throughout the area, a through connection between the two existing street segments, and access to undeveloped parcels. There is currently an unimproved gravel path at this location limited to non-motorized use. One alternative may be to limit this route to non-motorized use.
7. **Paulanna Road** – The extension of Paulanna Road to Bucsit Lane would provide secondary access to the area and could connect north to Wardwell Road.
8. **Ihland Way** – The connection of Ihland Way through to Madison Avenue would break up the superblock between Wyatt Way and High School Road.
9. **Ericksen Avenue** – The connection between Ericksen Avenue and Hildebrand Lane would eliminate the existing connection through the bank parking lot and improve the mobility of the transportation system.
10. **Dingley/Alder/Fairview** – This project would connect segments between these dead-end roadways to improve neighborhood connectivity.



11. **Marshall Road** – The extension of Marshall Road west to Crystal Springs Road would be an important link in developing a system of streets in the largely undeveloped southwest area of the Island. The current roadway is a long dead-end with a single access point.
12. **Springridge Road** – The extension of Springridge Road south to Marshall Road extension (see #11) would be part of the circulation improvements to the southwest portion of the Island. This roadway would also provide access to undeveloped parcels.
13. **Wyatt Way/Fletcher Bay** – Develop a western extension of Wyatt Way between Bucklin Hill Road and Fletcher Bay Road to provide secondary access to south Island locations and provide access to undeveloped parcels.
14. **Shepard Way** – This connection between Grow Avenue and Nicholson Place would create a secondary access and better circulation in the area for motorized and non-motorized users. There is currently an unimproved gravel path at this location limited to non-motorized use.
15. **Deerpath Lane** – The extension of Deerpath Lane north to NE Marshall Road would increase the connectivity in this south Island area. The current roadway is a long dead-end with a single access point.
16. **Country Club Road** – The connection between Country Club Road and Toe Jam Hill Road would provide an access around a potential shoreline erosion area.
17. **Darden Lane** – The project would connect Fort Ward Hill Road and Toe Jam Hill Road by developing a roadway segment connecting Evergreen Avenue and Darden Lane.
18. **Reitan Road** - Providing an access on both sides of the highway is recommended to maintain reliable access to the neighborhood as the only access is from SR305. This improvement would allow limited access for a section of SR305.
19. **Agate Beach Lane** - Providing a frontage road to link this and other properties fronting SR305 is recommended to maintain reliable access. This improvement would allow limited access for a section of SR305. This improvement would also provide an alternative route to SR305 for non-motorized users.
20. **Lovgreen Road** – A connection to Miller Road would provide alternative access to SR305, maintaining reliable access to the neighborhood and to SR305 via Miller Road.

CHAPTER 4 SR 305



The SR 305 highway is the State Highway's primary connection (via the WSF) between Seattle and the Kitsap Peninsula. Traffic during the morning and evening peak travel hours has continued to worsen resulting in long delays. This chapter reviews the issues associated with SR 305 and its impact to the City's roadway system. The chapter also describes a special study that was performed, and recommendations for future actions.

Summary of SR 305 Issues

SR 305 is significant to the City's roadway system as the major north-south travel corridor on the Island, not only for through traffic traveling to and from the ferry dock, but also for Island residents and employees. The goals and policies address the LOS standard, access to the Island via the Agate Pass Bridge, improvements to the highway, impacts to the highway from the City's Comprehensive Plan elements, and off-Island improvements that affect on-Island traffic.

As a state highway, WSDOT is the agency that is responsible for the operation and maintenance of SR 305. This means that WSDOT sets the minimum LOS standard and is responsible for the funding and implementation of any improvements to the highway. According to WSDOT policy, control of the highway within a City's corporate limits can be transferred to the City if its population is greater than 22,500. According to US Census data, Bainbridge Island exceeded this population threshold in 2010 with a population of 23,025, according to US Census data. As a result, some of the responsibility for highway improvements could shift to the City, however, because SR 305 is a regional facility and is listed as a Highway of Statewide Significance, some responsibility could also remain with the WSDOT.

SR 305 LOS Impacts

The traffic analysis (described in Chapter 4) shows that current conditions on SR 305 do not meet the WSDOT minimum LOS standards, and future traffic will be even worse. Currently, along the SR305 Corridor all collector street intersections fail and one secondary arterial intersection (Koura Rd.) do not meet level of service standards. The PM peak hour average speed along the seven-mile corridor is currently 16 miles per hour, with several roadway segments operating below the average speed. The problem is most severe at the north end of the study area, where there are large back-ups beginning at the Suquamish Way intersection and Agate Pass Bridge. By 2021, all of these locations will have failed LOS. Additionally, by 2035 the Day Road intersection will be LOS D and approaching falling below standard. The corridor is forecasted to operate with an average speed of 14 mph by 2035, which is less than one-third the posted 45 mph speed limit at the north end of the Island. The expected level of service for the highway without improvement – described as the No Action alternative – are shown for the 2015 and 2035 years in Figures 4-1, and 4-2.





Figure 4-1
SR 305 Level of Service
Existing Conditions





Figure 4-2
SR 305 Level of Service
2035 No Action





What Makes SR 305 Different?

The traffic issues on SR 305 are different than the issues associated with the rest of the Island's roadway system for several reasons. First, the highway facility is owned and operated by the WSDOT. This is significant because WSDOT would be the lead agency and would have primary decision-making and financial responsibility for improvements to the highway. Second, even though the highway functions as a main north-south corridor for Island travel, it is also heavily used by regional traffic and is a Highway of Statewide Significance, especially by vehicles traveling to and from the ferry terminal in Winslow. Because the WSF controls the ferry schedule, they have a great deal of influence on when and how much ferry traffic is using the highway. Third, the highway experiences substandard levels of service over most of the seven-mile length of the highway on the Island and the Agate Pass Bridge. Improvements to the highway would require several large projects that could be expected to require significant time to complete the planning, design, and construction of each, and a significant financial outlay.

This Plan updates the 2004 Island-Wide Transportation Study. The 2004 Study forecasted significant traffic growth on SR 305 which has not occurred as anticipated. This study updates the SR 305 travel demand and level of service forecasts using the planning and operational models described in Chapter 4 of this Plan, which yielded a more modest growth forecast than described in the 2004 Study. The updated Plan studied the roadway network on the Island, which does not include the intersection of SR 305 and Suquamish Way to the north of the Agate Pass Bridge. It is understood that short- and long-term improvements along SR 305 must consider the SR 305 corridor as a whole and that congestion at Suquamish Way could impact operations on the Bainbridge Island roadway network.

SR 305 Special Study

Because of the major issues associated with SR 305 improvements, a preliminary study was undertaken to determine what kind of possible improvements could resolve the traffic issues without looking into the environmental, financial, or other issues associated with the improvements. The goal of the study was to identify possible improvements along the SR305 to compare their effectiveness to improve mobility along the corridor, improve permeability across the corridor, and provide reliable access to neighborhoods whose only access is from SR305. Based on this information, the NMTAC and Staff, could include recommendations in the IWTP to better position the City to advocate for improvements.



Because SR 305 is a state facility, all improvements would require a commitment by WSDOT to be constructed. The City could participate in the improvements in order to improve mobility and level of service for the City roadway system.

Special Study Alternatives

Three preliminary alternatives were developed to examine different future scenarios to see if there is a way to overcome the SR 305 operational deficiencies. Alternatives for at grade signalized



intersections, at grade roundabouts, and separated grade intersection improvements where modeled. Refer to Figures 4-3, 4-4, and 5-5.

Special Study Results and recommendations for further study

The three improvement alternatives were analyzed and compared to see how well they were able to meet LOS minimum standards. The special study compares at-grade and separated grade alternatives. Both at grade and separated grade alternatives maintain an acceptable LOS at intersections. However, in some locations alternative longer routes would need to be taken to access intersections meeting LOS standards. Additional intersection improvements could be evaluated in a more comprehensive plan. Roadway level of service failures are not mitigated in either of the two alternatives but would require additional roadway capacity along the SR305 corridor (e.g. in the form of added travel lanes) or decreased volume. Note that it is assumed in the analysis that the SR305 intersection at Suquamish Way will be improved so as not to have a ripple effect on Island intersection locations.

Further study is needed to design alignments and develop reliable cost estimates to adequately plan for maintaining adequate level of service both currently and in the next 20 years along SR 305. Grade separated alternatives would be significantly more costly to implement than at grade alternatives. Both alternatives achieve acceptable LOS. Therefore, it may be difficult to justify the additional cost of grade-separated alternatives, especially larger interchanges. Some combination of intersection improvements and limited access is needed to reduce congestion and provide for reliable access. It may be practical to incorporate less extensive grade separation options for both motorized and/or non- motorized modes to maintain permeability along the corridor.

The SR305 corridor as it exists today and with any future improvements will have a significant impact on many aspects of transportation on Bainbridge Island. Further study should be inclusive of and comprehensive to address all aspects. The following issues have been identified for inclusion in further study of the corridor:

- Operations of adjoining roadway networks and connectivity – The study should consider the effectiveness of the adjacent roadway networks along the corridor. There may be opportunities to mitigate cut through traffic and improve connectivity. There may be impacts to circulation and neighborhoods.
- Corridor Permeability – The 2004 IWTS included a special study that looked at two improvement scenarios. The first scenario, Alternative A, assumed increasing congestion would not be mitigated and interchanges and crossings to restore east-west travel along the corridor. Permeability for all modes remains a key consideration for any scenario.
- Maintaining reliable access for neighborhood – For many neighborhoods, such as in the Agate Pass and West Port Madison areas, the only access is from roadways that connect to SR305. Maintaining reliable access is an important aspect of any scenario.
- Sound to Olympics Trail and Inter-Island Trails – The City envisions a network of regional and sub-regional separated pathways along and crossing the SR305 corridor. The existing and potentially wider highway presents a barrier to many users. Permeability for active modes of transportation is a key consideration for intersection and other improvements.
- Bus Transit – Improving efficiency of and access to transit along the corridor is an important aspect that should be studied and integrated into all scenarios. Collaboration with Kitsap Transit is needed to explore possibilities.



Other SR 305 Issues

The deficient level of service is the most significant issue currently affecting the City's transportation system. The bridge, park and ride, and off-Island improvement issues will be addressed in future studies in conjunction with an overall plan for SR 305 improvements. The City should take a leadership role in initiating studies to develop improvement projects and not defer to WSDOT's timeline and priorities. The City should partner with Kitsap Transit and others to reduce vehicular demand on the Highway.

SR 305 Recommendations

Since the 2004 IWTS, WSDOT has implemented a number of intersection projects including the following:

- Signal improvements at N. Madison.
- Signal timing optimization for peak hour ferry offloading at the Winslow Way intersection
- Signal timing optimization for the Day road intersection to improve access from Day and Miller.
- Bike through lane on right improvements to the north and south legs of the intersections at Madison, Sportsman's Club/ N. Madison, and Day Roads.



Figure 4-3
SR 305 Level of Service
2035 Alternative A





Figure 4-4
SR 305 Level of Service
2035 Alternative B





Figure 4-5
SR 305 Level of Service
2035 Alternative C





A number of interim and long term recommendations are as follows based on the special Study.

Interim Improvements:

The following interim improvements are recommended at the time of this Report for the next 6 years:

- Support WSDOT’s proposed right hand turn lane at the south leg of the Suquamish Intersection, including bicycle lane, and pedestrian sidewalk and crossing improvements.
- Advocate for WSDOT to include “do not block” intersection signage at intersections north of Day Road, Hidden Cove, West Port Madison, and Agate Point in the above WSDOT project.
- Intersection improvements at West Port Madison eliminating access to Seabold and providing a receiving lane (similar to Agate Pass) for south bound traffic. The intent of this proposal is to reduce cut through traffic in the Seabold neighborhood and improve access to SR305 from West Port Madison Road.
- Advocate for consistent 8 foot or wider paved shoulders along the full length of the corridor to accommodate cyclists and pedestrians.
- Advocate for the Sound to Olympics Trail and its branch trails.
- Advocate for improved access to ferry and bus transit including park and ride and bike parking opportunities both on and off island.

Long Term Recommendations:

The following Long Term specific improvement projects are recommended:

- Advocate for improvements at the intersection to Suquamish to address north south mobility/capacity.
- Advocate for capacity improvements to roadway segments north of the Miller Road intersection. Alternatives may include HOV lanes, a reversible HOV lane, or shoulder use by HOV’s. Consider accommodation for bus rapid transit.
- Advocate for Agate Pass Bridge replacement.
- Advocate for a separated pathway for non-motorized users in conjunction with other improvements.
- Advocate for limited access improvements at Reitan in conjunction with the bridge replacement. This would include access for Reitan and possibly connection frontage roads from both sides of the highway in conjunction with the bridge replacement.
- Advocate for intersection improvements at Agate Point & West Port Madison to restore access to these “highway locked” areas. A joint signal may be the most economical solution, is spaced evenly with adjacent signals allowing for signal synchronization, and would mitigate for continuous traffic at peak hours should the WSDOT proposed round-about be constructed at Suquamish Way. Note that this signal could be programed to flash yellow/ red during non-peak hours.
- Advocate for intersection improvements at Day Road. Improvements to accommodate additional (4 lanes) in the north-south direction at the signalized intersection would help with queuing for operational efficiency. The Phelps Road intersection with Day Road is in close proximity to SR305. If funding can be secured for a two lane round about it may be a preferred solution to address this complexity. With either a wider signalized intersection or two lane round about additional facility investments would also be needed to accommodate pedestrians and cyclists.



The above recommendations are based on information from the special study that was included in the update of this Plan. The special study was limited to the LOS data developed using the updated traffic data and traffic model. Further study and preliminary design and engaging the community in a process for decision making is recommended prior to developing and prioritizing specific improvement projects. The priorities for funding have been assumed to be reducing traffic congestion on SR305 and maintaining access at intersection locations with no alternative access.

At the time of the writing of this Plan a gas tax increase had been passed by the State Legislature. The City of Bainbridge along with Kitsap County, The Suquamish Tribe, and the City of Poulsbo are organizing a multi-agency effort to plan improvements for the corridor. WSDOT is undertaking a State wide effort for planning corridors “Corridor Sketches” including SR305.

The new State funding may provide for intersection improvement at Suquamish Way and as much as \$6M dollars of improvements on Bainbridge Island. The level of funding for Bainbridge could address intersection improvement and other related work at the Day Road intersection, the Agatewood/ W. Port Madison intersections, and possibly some limited access roadway improvements. At other intersections along SR305 where there are alternative routes to access SR305 access restrictions would be employed for peak hours, until additional funding can be secured.

Chapter 5 Safety and Maintenance

Safety and the related issue of maintenance are primary community concerns to ensure the roadway system's safety and longevity. This chapter provides an overview of the



safety and maintenance issues for the City of Bainbridge Island. The core of the safety section is a discussion about accident history and high accident locations. The maintenance section describes maintenance issues, activities, and programs that occur on the Island.
Safety

Many of the Island's two-lane roads were constructed before current safety guidelines were developed. As traffic levels increase, the potential for safety concerns rises. There is a combination of factors that can lead to accidents on substandard roadways, including demographic changes to the Island's population, preferences for larger or more powerful vehicles, increased motor vehicle volumes, and demands for greater use of roadways by pedestrians and bicyclists. Crashes on these roads can have more serious consequences because of narrower lanes and shoulders, hazardous roadsides, steeper grades, and sharper curves, which also impedes the ability for emergency vehicles to respond.

Speed is a factor in the risks and severity of traffic accidents. Both the likelihood of accidents and the severity of injuries are greater with higher speeds. Communities are embracing initiatives for lowering speed limits such as the Vision Zero initiative that has been adopted by the City of Seattle and WSDOT's target zero initiative. Vision Zero initiatives make the goal of zero deaths and serious injuries the highest priority and emphasize government taking the lead to implement improvements to further that goal. An emphasis is placed on lowering speed limits, including engineering solutions such as narrowing traffic lanes, and employing traffic calming.

The City of Bainbridge embraces the principle of putting people first when it comes to safety over efficiency for vehicular traffic and even bicycle traffic. The City's standard roadway lane width is 10 feet providing narrow lanes for traffic calming. The following areas are emphasized for safe street design:

- Speed Limits – Consider neighborhood context and existing and future non-motorized use when establishing speed limits. For local access and minor collector streets, lowering speed limits can be an effective tool for obtaining lower speeds. For secondary arterials and major collectors, speed zones with lower speed limits can be an effective tool for lowering speeds. When traffic engineering professionals consider lowering the speed limit has potential for achieving lower speeds then the non-motorized safety aspects of the study should be heavily weighted in the analysis.
- In developing capital projects, consider elements that manage speed, improve safety and traffic calming. Examples include non-motorized improvements, roundabouts, traffic islands, and curb bulb outs, and radar feedback signs.
- Bicycle climbing lanes at locations where differential speeds are higher between cyclists and motorists;



- Pathways separated from the roadway for pedestrians, wheel chair users, and cyclists;
- Street lighting – Provide and maintain street lighting in areas used by pedestrians and cyclists in urban areas of the Island and near schools. Locations include intersections and mid-block crosswalks.
- Maintaining or providing vegetation for traffic calming close to the roadway.

In developing transportation improvement programs consider types of projects that provide improved safety for the traveling public, such as:

- Complete Streets,
- Shoulder Improvements,
- Separated Pathways, and
- Greenways.

The number of accidents provides an indication of the safety of an intersection. Types of safety concerns that may be contribute to accident data include:

- *Road Surface Conditions* – Poor roadway surface conditions such as pavement edge drop-offs, potholes, worn lane striping, and reductions in surface friction due to age and wear affect vehicle stopping and maneuvering capabilities. Road conditions may present hazards to cyclists and pedestrians.
- *Intersection Configuration* – Accidents related to high turning volumes, lack of channelization, and improper phasing.
- *Non-Motorized Conditions* – High accident data between vehicles with pedestrians or bicycles may emphasize the need for the construction of non-motorized facilities.
- *Geometric Conditions* – Accidents related to undesirable physical characteristics of the roadway's design, such as sight distance, curve radii, paved width and shoulder, and roadway slope.
- *Enforcement Issues* – Accidents related to vehicle speeding, intersection traffic violations, driving under the influence of alcohol or illegal drugs.



Accident History

Accidents can indicate where safety issues exist within a transportation system. The number of accidents at a specific location is a function of a number of factors including the quality of reporting data, traffic volumes, roadway design and geometrics, vehicle speed, and speed limit. For the analysis the total number of annual accidents at intersections over a ten year period is used. Unsignalized intersections with an average annual number of accidents of 5 or more is considered to be a high accident location. For signalized intersections 7 or more accidents is considered to be a high accident location.

City Intersections

Table 5-1 indicates intersection locations with 10 or more accidents over the ten year period ending in 2014 per the City’s accident data base at locations other than along the SR305 corridor. Current data is compared with data from the previous study which was reported over a 9.5 year period ending in 2000.



Table 5-1. Bainbridge Island Accident Locations

Intersection		Type	Accidents 2005- 2014	Average Annual Accidents	Accidents 1991 - 2000	Average Annual Accidents
High School Rd	@ Madison Ave.	RA	22	2.2	45	4.7
High School Rd	@ Hildebrand Lane	SC1	20	2.0	19	1.9
Winslow Way	@ Ericksen Ave.	SC2	14	1.4	18	1.8
Wyatt Way	@ Madison Ave.	SC4	13	1.3	23	2.4
Miller Rd.	@ Koura Rd.	SC2	12	1.2	---	---
High School Rd.	@ Grow Ave.	SC2	10	1.0	24	2.5
Eagle Harbor Dr.	@ Bucklin Hill Rd.	SC1	10	1.0	---	---

RA - Round About, SC – Stop Controlled

All of the top ten intersections fall below the high accident criteria threshold. The highest number of accidents is reported for the two intersections along High School Road west of and in closest proximity to SR305.



State Route 305 Intersections

Table 5-2 indicates the accident rates at primary intersections along the SR 305 corridor as from data available from the Washington State for the ten year period ending in 2014. The number of reported accidents, and the average annual rate over a 3.25-year period from the prior IWTS. Annual average accidents are shown for comparison purposes Department of Transportation. The table displays the intersection cross streets, the type of intersection (“S” signalized, “U” un-signalized),

Table 5-2. SR 305 Accident Locations

Intersection	Signalized/ Unsignalized	Accidents 2005 - 2014	Average Annual Accidents	Accidents 1997 - 2000	Average Annual Accidents
SR 305 @ Madison Ave.	S	82	8.2	22	6.8
SR 305 @ Sportsman’s Club Rd.	S	71	7.1	21	6.5
SR 305 @ Day Rd.	S	52	5.2	34	10.5
SR 305 @ High School Rd.	S	47	4.7	25	7.7
SR 305 @ Winslow Way	S	31	3.1	9	2.8

Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying , evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data

As indicated by the table, the intersections at SR 305/Madison and SR 305/Sportsman’s Club exceed 7 accidents per year which is considered higher than what is normally expected for signalized intersections. There are no scheduled improvements identified by WSDOT for these intersections.

Accidents involving pedestrian and cyclists

From review of the State accident report there were 19 injury accidents reported involving pedestrians (6) and cyclists (13) along the SR305 corridor for the ten year period. The highest concentration of accidents was near the Ferry Terminal. The vast majority of these accidents outside of the urban Winslow area involved cyclists. A project for implementing non-motorized improvements on SR305/ Olympic Drive near the Ferry Terminal is in progress.

From review of City accident reports outside of SR305 there were 121 injury accidents reported involving pedestrians (27) and cyclists (94) for the ten year period. There



was at least one fatality involving a pedestrian on struck crossing the street on New Brooklyn in December of 2010. The highest concentration of accidents occurred on Madison Avenue (17), Winslow Way (16), High School Road (14), and Wyatt Way (10). In 2012 Winslow Way was reconstructed including pedestrian and bike facility improvements. Non- motorized improvements are planned for Wyatt Way and Madison Avenue.

Addressing Safety Problems

Addressing safety problems require a combination of approaches ranging from educating the driver, enforcement, to improving the roadway. Roadway improvements fall into two major categories — improvements designed to prevent crashes from occurring, and improvements that minimize the severity of crashes that occur. Types of improvements that can improve safety problems include:

- *Clear Zones*—Areas of open space with gentle slopes adjacent to the road giving motorists room to safely regain control of their vehicles if they run off the road. These areas should include features such as signs and utility poles which breakaway on impact, barrier walls or guardrails that redirect vehicles away from hazards, and crash cushions that absorb energy and lessen the severity of crashes where appropriate.
- *Guardrails* – The Island along its perimeter has many medium and high bluffs. In the interior the island’s topography is hilly in many areas. Guardrails are employed at many locations. Many of these guardrails are older not meeting current design standards and some are in disrepair. There are some locations where new guardrails may be warranted due to roadway configuration, topography, traveled speed, and traffic volumes.
- *Signing, Pavement Marking, and Delineation* — Traffic signs, pavement markings, rumble strips, and reflective devices improve driver perception of important roadway features and alert them to changes in roadway geometry or other conditions.
- *Pavement Improvements and Preventive Maintenance* — Greater smoothness and friction of the road surface are provided by pothole repair, resurfacing, rehabilitation, and reconstruction.
- *Intersection Controls* – Stop signs, roundabouts, and traffic signals can better control traffic flow and reduce intersection conflict points.
- *Adding or Widening Shoulders* – Shoulders provide drivers, pedestrians, and cyclists with additional room to maneuver on narrow roads or to pull out of travel lanes.
- *Channelization* – Separate lanes for left or right-turning traffic avoid impediments to traffic flow, which can lead to rear end crashes.





- *Pedestrian/Cyclist Facilities*—A variety of techniques can be used to separate pedestrians and cyclists from motor vehicle traffic to improve safety.

How study addresses safety

The IWTP proposes improvements that will improve the safety of the roadway system through targeted improvements at intersections and roadways. Safety-related elements of this study include:

- Reviewing roadway geometrics and promoting safety enhancements,
- Identifying and mitigating of high accident locations,
- Identifying and mitigation of intersections with poor LOS operations, and
- Including safety as a factor in the evaluation of the roadway system.

Safety Programs

- **Roadside Safety Program** – This program provides for the inventorying and inspection of roadside elements of the Island’s secondary arterial streets and higher volume collector streets. The program also provides for contracting work that is beyond the capacity of Operations and Maintenance. Roadside elements include items such as guardrails, shoulders, and clear zones. This program provides for the prioritization of guardrail repairs, replacements, and installations.
- **Focused Traffic Studies Program** – This program provides for the study of traffic control measures implemented on the Island’s roadways. As conditions change with factors such as population growth and development, it is necessary to evaluate the effectiveness of roadway signage and other traffic control devices. Many residents are concerned about vehicular speeds and this program provides for the evaluation of speed limits.

Maintenance

An increasingly important function of the City of Bainbridge Island is preservation and maintenance of the existing roadway system. Careful maintenance allows existing travel corridors to keep their function, prevents damage from water and vehicle loads, and maximizes the use of City resources.

Maintenance Issues

The City of Bainbridge Island’s Public Works Department is in charge of roadway maintenance activities for the Island.

Key maintenance issues for the City include:

- *Vegetation growth* – Overgrown vegetation requires the trimming of foliage to retain roadway safety and sight distance.



- *Pavement maintenance* – As roadways age, the pavement surface and underlayment can be damaged by traffic, heavy vehicles, weather, and water seepage if not properly maintained. Poor pavement condition can also affect the safety of the road for drivers and bicyclists.
- *Gravel road grading* – The surface of gravel roadways can deteriorate fairly quickly, producing potholes in the roads. These roads need regular re-grading to maintain the surface.
- *Dirt and gravel on shoulders and roadways* – Regular sweeping of roadways is necessary to provide a clean, smooth surface for drivers. Bicyclists are particularly concerned about gravel, dirt and debris accumulating on shoulder areas.
- *Stormwater* – Maintaining good roadway stormwater drainage is important to protect the roadway and to prevent flooding hazard.
- *Roadway erosion* – Roadway erosion on shoreline and steep slope areas is increasingly becoming an issue for the City. Repair of these roadways often is expensive and may require special permits and consistency with shoreline management goals and objectives.

Maintenance Programs

The roadway system has a number of on-going needs to keep the current roadway system functioning, and to prevent major roadway failures that would require extensive roadway reconstruction. The City Public Works Department's operation and maintenance program has the primary responsibility for these programs.

- *Street sweeping program* – Island-wide, street sweepers collect debris and litter before they enter the stormwater collection systems or roadside ditches. This function is important to protect stormwater run-off from the roadways and to provide a safe surface for automobiles and bicyclists.
- *Brush cutting program* – Island-wide mowing of vegetation to maintain roadway clearance and sight lines.
- *Roadway ditches and shoulders* – These components of the roadway system are periodically maintained, cleaned, and reshaped to ensure they function as designed.
- *Roads preservation program* – The City of Bainbridge Island has an annual road program focused on preserving, maintaining, and repairing the existing roadway infrastructure. The April 11, 2001 Pavement Management Program evaluated 462 street segments totaling 256 lane miles in length. The study recommended a strategy for each of the streets evaluated for either 1) reconstruction, 2) overlay, 3) seal coat and/or 4) patching. Where the roadway does not require complete reconstruction the City can repair damaged sections (patch with asphalt), apply chip seal layer (an oil emulsion and crush rock layer), or overlay new asphalt over the existing pavement.
- *Gravel grading program* – The City fills and regrades the surface of the gravel roads in the system annually.



- *Trail and Pathway Maintenance program* – The City cuts brush and restores trail surfaces to maintain its separated pathway and trail network.
- *Special Maintenance* – The City also performs maintenance activities not addressed in the above programs such as the removal of large trees that may present hazards to the traveling public.
- *Sign Inventory* – The City maintains a data base of signage and routinely maintains or replaces signs to meet reflectivity and other requirements.

How study addresses maintenance

The IWTS proposes improvements that will address roadway maintenance and promote the long-term preservation and operation of the street system. Maintenance related elements of this Study include:

- Establishing the use of existing City transportation facilities as key elements of the future travel network. The need to maintain and improve these facilities is required to meet City roadway standards
- Promoting maintenance as a priority need in the budgeting and financing of transportation functions.
- Identifying roadway improvements that meet the minimum requirements of the City's Design and Construction Standards and Specifications.

CHAPTER 6 NON-MOTORIZED SYSTEMS



Non-Motorized Modes – people walking, cycling, horseback riding, and using wheelchairs – play an important role in Bainbridge Island’s transportation system. Many peak hour commuting trips as well as other trips are made walking or riding. Having non-motorized choices available is important to many Island residents. Providing facilities that accommodate non-motorized users provides for safety, mobility, supports development density, encourages healthy lifestyles, reduces impact to the environment, and ultimately provides for improved quality of life for Island residents, workers, and visitors.

Background / History

Non-motorized modes of transportation, have been and continue to be, an integral part of Island life. From the late 1800’s to the early 1900’s, the main transportation to the Island was provided by a small fleet of steam ships referred to as the “mosquito fleet”. Roads originated at or near the “mosquito fleet” docks. Early residents walked, rode horses, and biked before the proliferation of automotive transportation. Auto ferry service was brought to the Island in the 1920’s at Agate pass. The Agate Pass Bridge was constructed in 1950. Auto ferry service to Seattle followed in 1951. With the onset of the golden age of the automobile, reliance on non-motorized transportation declined, in most places. As a rural oasis from the growing urban center of Seattle; however, walkability, biking, and horse-friendly neighborhoods remained an attractive part of the Bainbridge lifestyle. Walking and biking continued to be an important aspect of mobility within and nearby the Town of Winslow and other outlying Island town centers. With a reliable transportation to Seattle, a commuter culture developed and Bainbridge evolved to be more suburban. With increasing population, bus transit linking residential areas to the ferry terminal became an important element of the transportation system. In more recent times, with increased density closer to the ferry terminal increasing traffic congestion, and greater awareness of health and environment, walking and biking have become a more attractive mode of transportation.

The entire Island incorporated as the City of Bainbridge Island in 1991. Since incorporation, there has been a greater emphasis on non-motorized transportation planning. Following the development of the 2003 Island-Wide Transportation Plan, non-motorized transportation became a significant driver of the City’s Capital Improvement Program. The City has invested heavily in non-motorized improvements over the past decade. The following is a summary of major milestones in the City’s non-motorized planning and implementation:

- Inclusion of bicycle system planning and maps in the Transportation Element of the 1992 Comprehensive Plan.
- Development of a Trail System Master Plan in 1994.
- Recommendations for sidewalk and bicycle improvements in the 1995 Winslow Master Plan.



- Formation of a Non-Motorized Transportation Advisory Committee (NMTAC) to advise Council and support staff in December of 2002.
- Drafting of an island-wide Non-Motorized Transportation Plan in 2003. This plan included a comprehensive set of policies and goals that were later adopted in the City's Comprehensive Plan. Extensive Island-wide non-motorized existing and planned facilities maps were developed. These maps were subsequently adopted in the City's Comprehensive Plan and have evolved through several comprehensive plan updates.
- Inclusion of extensive non-motorized planning in the transportation element of the City's 2006 Comprehensive Plan following the 2003 Non-Motorized Plan.
- Formation of the Core 40 Program to provide a 40-mile integrated shoulder network for bicycles island-wide in 2007. The delivery of several Core 40 projects, including Bucklin Hill and North Madison.
- Delivery of capital improvement projects (mostly grant funded) in the Winslow area providing pedestrian and/or bicycle facilities including; Bjune, Ericksen, Ferncliff, High School, Madison, and Winslow Way.

In the 2004 Island-Wide Transportation Study, the 2003 Non-Motorized Plan was included as a separate volume. In this update to the Island-Wide Transportation Study, the Non-Motorized Plan is being incorporated into the Plan. Both the 2003 Non-Motorized Plan and the 2004 Transportation Study were extensive efforts that involved considerable staff time, comprehensive consultant support and extensive public outreach. Much of the information in the past Plans is still relevant today and remains a useful reference. The current update is more limited in scope and budget. The limited update is being prepared by City Staff with consultant support for updating information from the updated traffic model from the recent impact fee study. Public involvement includes participation by the NMTAC in the revisions to the Plan and review of the final draft by the Planning Commission. All of those meetings are open to the public. The final draft of the Plan is intended to be utilized to inform the update of the City's Comprehensive Plan Transportation Element. The Comprehensive Plan update includes more extensive public involvement.



System Overview, Inventory, and Attractions

The City's existing non-motorized transportation system consists of sidewalks, bike lanes, and trails.

Sidewalks are prevalent in the urban town center of Winslow and Lynwood.

The city's network of shoulders on arterial streets is largely built out in the urban town Center of Winslow. Outside of the town center of Winslow only a few roadways have paved shoulders for cyclists.

Most City trails of significant length are located within the City's rights-of-way. Other City trails connect to or through neighborhoods in formalized easements. City trails are mostly gravel surfaced and constructed to 6 feet in width although many neighborhood trails are smaller in width. The Parks District owns and operates a network of trails within, between, and connecting to Parks that makes up most of the length of trails on the island.

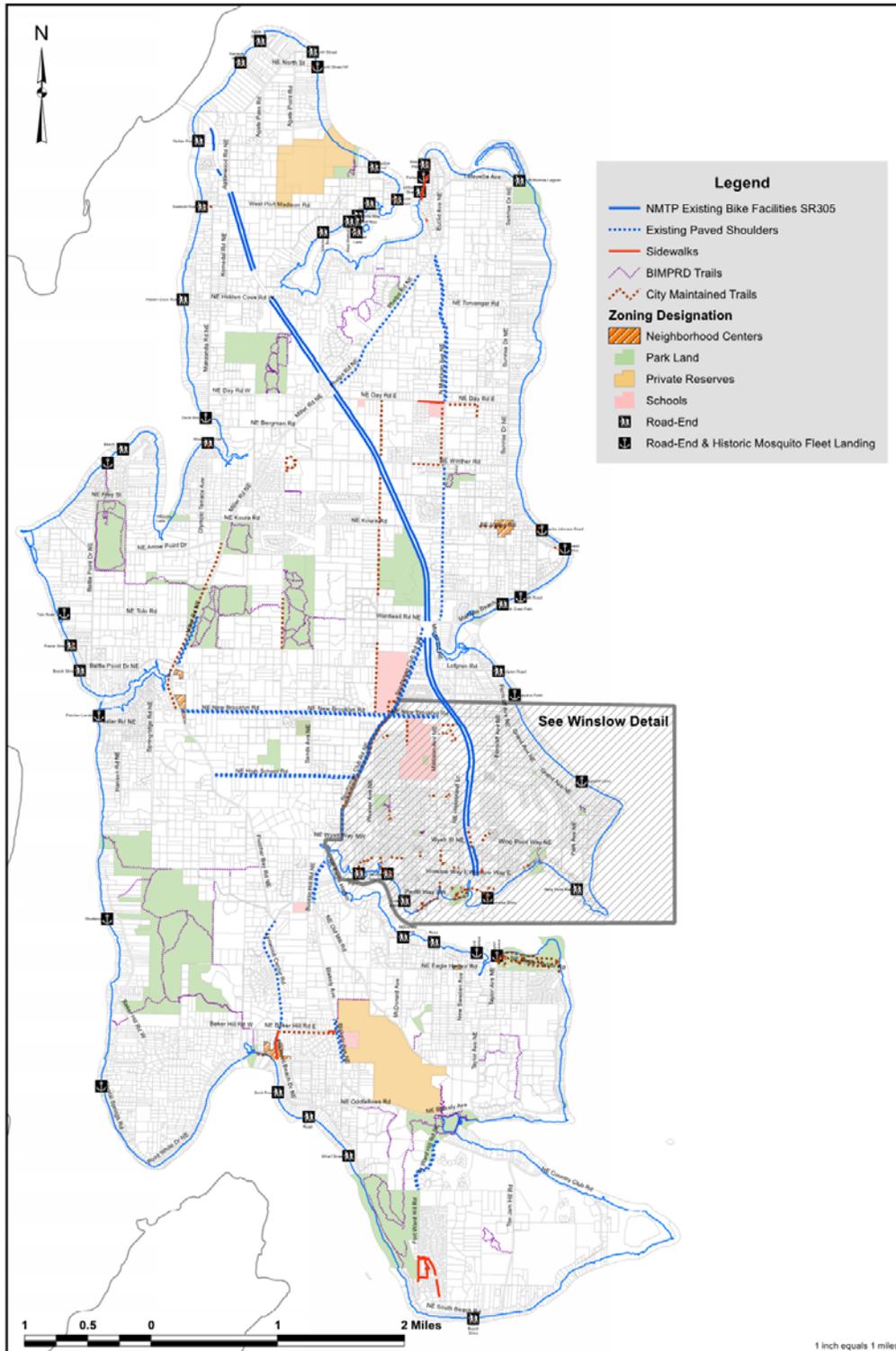
The City's existing non-motorized facilities are shown in Maps A and B.

There is a huge potential to improve non-motorized access to transit, goods and services, and recreational opportunities on Bainbridge Island and improve the quality of life for citizens. The following destinations are identified for consideration:

- Ferry Terminal
- Agate Pass Bridge
- Town center of Winslow
- Town centers of Day Road, Island, Lynwood, and Rolling Bay
- Residential neighborhoods
- Schools
- Churches
- Parks
- Road ends and shorelines
- Equestrian facilities

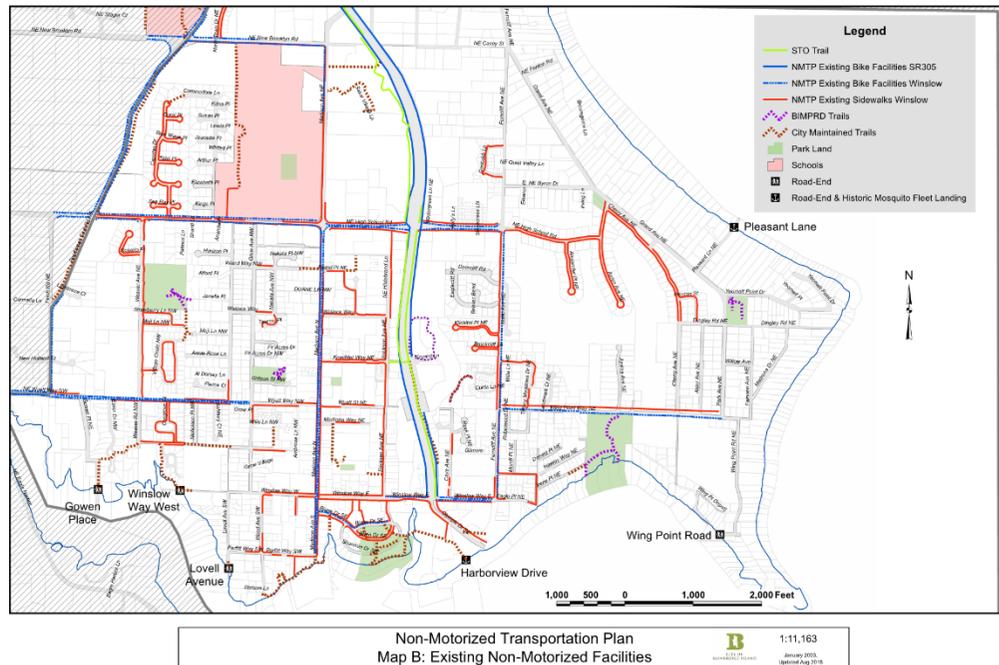


City of Bainbridge Island – Island Wide Transportation Plan
Chapter 6 Non-Motorized System



Non-Motorized System Plan
January 2003 Updated May 2016
Map A: Existing Non-Motorized Facilities





Barriers to use and Connectivity Improvements

Barriers are physical characteristics of a transportation system that limit or restrict the mobility for non-motorized users. Some common barriers on the Island are listed as follows:

- Inadequate maintenance from lack of shoulder sweeping for cyclists, objectionable joints at settled sidewalk panels, or poor trail surfaces in need of re-grading and compaction;
- Deficiencies in design such as lack of ADA compliant ramps, facilities that are not of adequate width to be comfortable for many users, and facilities with materials that are not ADA compliant;
- Discontinuities in system networks such as gaps in sidewalks or roadway shoulders;
- Inadequate facilities at roadway intersections;
- Lack of facilities when systems do not exist or do not extend far enough to meet needs;
- Physical barriers such as naturally occurring ravines or existing developed properties that do not provide for access.



To address barriers and other limitations on non-motorized connectivity across the Island, connectivity improvements are identified in a set of figures and tables which are intended to be living documents updated as new areas are identified and considered warranted by the Public Works Department / Director.

Table 6-1 lists identified barriers on SR305 and on City roadways.

Table 6-1, Roadway Network Barriers		
1	SR305 at Vineyard Lane	A separated grade crossing is needed to unite the two sides of the urban town center of Winslow that are divided by the SR305 superblock between Winslow Way and High School Road.
2	SR305 Signalized Crossings	Wide crossings can be a barrier to some users; As capacity improvements are made to SR305, medians, islands, and other pedestrian related improvements should also be provided.
3	SR305 Shoulders	Shoulder widening is needed to address gaps in between Hidden Cove Rd and the Agate Pass Bridge.
4	City Secondary arterial and collector roadways	Where pedestrians and cyclists are uncomfortable, shoulders and/or separated pathways are needed in areas with or with potential for non-motorized use. Many of these areas are identified for improvements shown in Map E.

Table 6-2 identifies potential connectivity for trails. The focus of this table is for regional and inter-island multi-use pathways and roadway shoulder improvements. Trails included in this table are shown in Maps E and F. These maps graphically depict one set of possibilities for inter-island trails for the purposes of demonstrating connectivity that may be achieved by an integrated trail network. Some connectivity is identified for connecting pathways that are branches of regional and inter-island trails. Local connectivity is beyond the scope of what is listed. Refer to Maps C and D for additional trail connection zones. Trail connection zones are identified as opposed to specificity of routes to allow flexibility. The City's past practice has been to acquire easements for trails from private property owners on a voluntary basis or when there is significant development.



Table 6-2, Trail Connection Zones

1	Sound to Olympics Trail at Vineyard Lane	A non-motorized Bridge is envisioned to connect the center of Winslow which is divided by SR305, requiring easements for accommodating a non-motorized bridge and its approaches.
2	Sound to Olympics Trail at Hildebrand Shopping Area	A 10-foot wide paved pathway is envisioned to serve as a cross-connecting route at the north end of the urban Winslow area. This route would connect to Schools and Parks facilities and also serve as a transportation corridor.
3	Sound to Olympics Trail_north of High School Rd	A 10-foot wide paved pathway is envisioned to serve as a cross connecting route at the north end of the urban Winslow area. This route would connect to Schools and Parks facilities and also serve as a transportation corridor, requiring easements from the Parks District and private property owners fronting SR305 for construction of the trail from High-School Rd.
4	Sound to Olympics Trail north of Madison Ave	A 10-foot wide paved pathway is envisioned to serve as a cross connecting route at the north end of the urban Winslow area. This route would connect to Schools and Parks facilities and also serve as a transportation corridor, requiring easements from private property owners fronting SR305 within the highway setback for flexibility in construction of the trail.
5	Sound to Olympics Trail north of Sportsman Club Rd.	A 10-foot wide paved pathway is envisioned to serve as a cross connecting route at the north end of the urban Winslow area. This route would connect to Schools and Parks facilities and also serve as a transportation corridor, requiring easements from the Parks District on the Meigs Farm property.



6	Sound to Olympics Trail north of West Port Madison	A 10-foot wide paved pathway is envisioned to serve as a cross connecting route at the north end of the urban Winslow area. This route would connect to Schools and Parks facilities and also serve as a transportation corridor requiring easements from private property owners for use of roadways fronting SR305.
7	Waterfront Trail connector at Harbor Drive	A 10-foot separated pathway is envisioned to connect the Waterfront Trail to the Ferry Terminal. Permission is needed from WSF to use the area West of the roadway for a separated pathway.
8	Cave Avenue Trail connector	A 6-foot wide connecting pathway is envisioned to connect local neighborhoods to the STO trail and the center of the urban area of Winslow. Easements may be needed in the vicinity of the ravine for access from the STO trail to Ferncliff Avenue near Wing Point Way.
9	Knechtel Trail connectors	A network of 6-foot wide connecting pathways and low volume local access roadways is envisioned to connect local neighborhoods to the center of the urban area of Winslow and the STO trail. Easements are needed from private property owners to link local access to the roadway for east – west connection from STO trail to Weaver.
10	Schools Inter-Island Trail	A 10-foot wide paved pathway is envisioned to serve as a cross connecting route at the north end of the urban Winslow area. This route would connect to Schools and Parks facilities and also serve as a transportation corridor. Formalized routes and easements are needed from the Parks District at the Central Park and the School District at the High School campus and the City’s Suzuki property.
11.	Wardwell Inter-Island Trail	A 10-foot wide paved pathway is envisioned to serve as a route connecting points north to the urban Winslow area School and Parks facilities. Formalized route and easement are needed from the School District at the Middle School campus.



12.	Shepard Inter-island Trail	A network of 10-foot wide paved pathways and low volume streets is envisioned along this corridor to better accommodate non-motorized use. Easements will be needed from private property owners to link local access roadway for east – west connection from Weaver to Finch.
13.	Head of the Bay shoulders and trail	6-foot wide paved shoulders are envisioned along this corridor. Additional right-of-way may be needed from fronting property owners to widen the roadway and mitigate for wetland impacts.
14.	Bucklin Hill Road	6-foot wide paved shoulders are envisioned along this corridor. Additional right-of-way is needed to widen the roadway and drainage for shoulder improvements.
15.	Lost Valley Inter-island Trail	A 10-foot wide paved pathway is envisioned through the lost valley. The trail would provide a more direct route to the west from the Winslow area at lesser grades than surrounding road networks. Easements are needed at the east end of the proposed trail to connect through to Fletcher Bay Road.
16.	Lynwood Center Inter-Island Trail	A 10-foot wide paved pathway separated from the roadway is envisioned on the East side of Fletcher Bay Rd and Lynwood Center Rd. This pathway would provide non-motorized connectivity south to Lynwood Center. Easements are needed along the East side of Fletcher Bay Road.
17.	Sound to Olympic Expeditionary Trail Inter-Island Trail	A continuous trail network is envisioned connecting Wardwell road on the South end to Lovgreen Rd at the North along mostly unopened rights of way. This system would connect with Megs Farm Park Land trails.
18.	Mandus Olson Corridor Inter-Island Trail	A continuous network of trails and low volume roadways is envisioned to link to the Lost Valley at the South and the STO Expeditionary Trail / Lovgreen Rd at the North.



Table 6-3 identifies gaps and deficiencies in sidewalks in the urban center of Winslow. This information is used to facilitate the planning of the City’s sidewalk infill program and pedestrian elements for capital improvement projects.

Table 6-3, Winslow Area sidewalk gaps and deficiencies		
1	Madison Avenue from Wyatt Way to High School Rd	The existing 4-foot plus wide sidewalk is not adequate to accommodate a range of users.
2	Madison Avenue from Winslow Way to Wyatt Way	Sidewalk ramps not to current standards
3	Madison Avenue from Winslow Way to Parfitt Way	Sidewalk ramps not to current standards
4	Wyatt Way from Ericksen to Madison Ave	Sidewalk needed both sides
5	Wyatt Way from Madison Ave to Lovell	Sidewalks and bike lanes needed
6	Wyatt Way from Lovell to Weaver	Sidewalk is needed on north side to fill in the current gap.
7	Winslow Way from Madison Ave to Grow Ave	Existing sidewalks are incomplete for roadway segment. Complete sidewalks are needed on both sides.
8	Grow Ave from Winslow Way to Wyatt Way	Sidewalk needed. Possible greenway.
9	Grow Ave from Wyatt Way to High School Rd	Sidewalk needed. Possible greenway.



10	Wood Ave from Grow Ave to Parfitt Way	Sidewalks are incomplete on both sides.
11.	Cave Avenue	Gap in sidewalk on East side.
12.	Waterfront Park Trail at Harbor Drive	The sidewalk is narrow along a steep street grade. A separated pathway on the ferry property to the East with switchbacks would improve accessibility for persons with disabilities and cyclists.
13.	Waterfront Park Bridge and approaches	The bridge needs to be widened to accommodate cyclists and resurfaced for all users.
14.	Trail from Parfitt Way to Finch Place	The existing gravel trail serves an area that is used by many senior citizens and is inconsistent in width and surfaced with gravel

Envisioned Non-Motorized Travel Routes and Network

The vision and goals for non-motorized transportation are established in the Transportation Element of the City’s Comprehensive Plan. To meet the vision and mobility and connectivity goals in the Transportation Element of the Comprehensive Plan, a comprehensive network is further defined in this section.

Providing facilities for accommodation of non-motorized modes of transportation has consistently ranked high on past City surveys. The City Council appointed the NMTAC to work with staff to plan and assist with the implementation of non-motorized improvements and other work related to furthering non-motorized transportation.

This section provides a detailed understanding of the current needs as understood at this time by the NMTAC and what the best opportunities are given geographical, existing development, and other constraints in providing for those needs.

The over-arching goal embodied in the non-motorized vision and the first non-motorized goal is to provide a network of transportation facilities that provide non-motorized modes of travel for the greatest number and widest range of the traveling public.

The NMTAC considers the following mobility challenges to be high priorities:

- A. Accommodating a wide range of non-motorized users of all ages and abilities.



- B. Providing connectivity to the Ferry Terminal and the Winslow Town Center.
- C. Providing safe routes to schools.
- D. Providing connectivity to town centers and neighborhoods across the island for all modes.
- E. Improving safety for cyclists and walkers on the Island’s secondary arterial roadways.
- F. Improving usability and accessibility of sidewalks in the Winslow Town Center.
- G. Removing barriers and addressing gaps in networks addressing the above priorities. This includes but is not limited to SR305 and other higher volume streets.

Bainbridge Island is largely rural and suburban with neighborhood centers like Rolling Bay and Lynwood Center and the Winslow Town Center that have more urban development patterns. Context sensitive solutions for non-motorized modes will depend upon site specific conditions such as existing and planned land uses, the location of origins and destinations such as schools and parks, motor vehicle speeds and volume, and the overall network connectivity.

The non-motorized transportation system is envisioned to create a network of facilities that makes it safe and secure for all ages and abilities of people to get around their neighborhoods and the island without a car. This will require a toolkit of facilities that will be evaluated for the particular context but may include:

- A. Sidewalks and bicycle lanes along urban streets in the Island’s town centers.
- B. Separated non-motorized facilities that provide a viable non-motorized transportation option for a wide range of people walking, riding bikes, riding horses, or using wheelchairs are a key component of the Island’s transportation system. This pathway network is envisioned to connect to the City’s sidewalk and bike lane infrastructure and connect to main destinations like the ferry terminal, Agate Pass Bridge, Winslow, urban town centers, schools, parks, shoreline street ends, equestrian facilities, and other amenities. These facilities will vary depending on purpose but are envisioned to include:
 - a. The Sound to Olympics (STO) trail, which serves as a centralized spine for non-motorized users and is envisioned as a 12-foot wide separated multi-use path connecting the Bainbridge Island Ferry Terminal to the Agate Pass Bridge and linking to other regional locations,



- b. Inter-island trails, which are envisioned as 10-foot wide separated multi-use pathways to link urban town centers, schools, and parks.
 - c. Connecting pathways, which are 6-foot wide trails built to City standards that provide local connectivity and connect to the regional and inter-island trails. Additionally the system will integrate with Bainbridge Island Metropolitan Parks District Trails, built to Park Standards that provide both inter-island and local connectivity.
- C. Road shoulders can provide connectivity for commuter and more experienced cyclists, as envisioned in the City's Core 40 Program. The Core 40 goal is to provide an integrated network of shoulders for cyclists that when combined with multi-use trails and lower volume roadways provides 40 miles of bicycle routes on the Island.
- D. On low-volume neighborhood streets, specific non-motorized infrastructure may not be necessary if vehicular speeds are low (20-25 mph).

This combination of facilities is envisioned to make up a functional network that provides connectivity to the attractions previously identified and mobility for the greatest number and widest range of users.

Sidewalks, Shoulders, Multi-use Trails, and Connecting Pathway planned facilities are identified and located in attached Maps C and D. These facilities are integrated to optimize connectivity for alternative modes of transportation for users of all ages and abilities.

Routes are identified for pedestrians, cyclists, and equestrians within the non-motorized network. In 2007 the City developed a vision for a network of shoulders to provide connectivity for cyclists across the Island. This network was named the Core 40 Network. The intent is to provide shoulder improvements on the Island's aerial roadways to achieve connectivity to 40 or more miles of roadways for cyclists; refer to Map G. Refer to Map D for identified equestrian routes.



Facility Types

The system plan maps identify facility types for roadway shoulders and trails. Refer to Recommended Capital Improvement Plan Maps for Regional and Inter-island trail designations.

Sidewalks are not depicted on system plan maps. Sidewalks are required per City Design and Construction standards in urban zoned areas of town centers and neighborhood centers.

Shoulders: Shoulders are required at locations shown in system plan maps. Minimum shoulder widths are designated as 3-foot asphalt paved plus a one foot or greater gravel ballasted edge / curb offset distance (Type C) or 5-foot asphalt paved plus a one foot or greater gravel ballasted edge / curb offset distance (Type B).

Type B shoulders are intended to provide limited space for non-motorized user when vehicles are traveling in each direction. This facility type is best suited for roadways with low traffic volumes when the frequency of conflict is low and where drivers can most often maneuver to provide additional room for non-motorized users.

Type C shoulders are intended to provide space that is adequate to accommodate cyclists riding with traffic and pedestrians walking facing traffic.

Trails: Regional Trails, Inter-island Trails, and some Connecting Pathways are shown in system plan maps. Connecting Pathways may be required locations not depicted in the system plan maps to preserve existing connectivity or provide connectivity to facilities. The City's minimum trail width is 6-foot wide. Where Type A facilities (Regional Trails, Inter-island Trails) are designated 10-foot-wide trails minimum plus 1 foot or greater ballasted shoulders. All trail facilities are to be hard surfaced. Trails along roadways should be separated from the vehicular traveled way.

Levels of Service

Bicycle Level of Service (BLOS) and Pedestrian Level of Service (PLOS) are established for each of the facility types for Secondary Arterial Streets and high Volume Collector Streets over 1500ADT. Refer to the following tables for Urban and Suburban Locations.

Facility Description	BLOS	PLOS
10-foot wide multi-use pathway separated 7 or more feet from the roadway or separated by physical barrier	A	A



6-foot wide trail separated 7 or more feet from the roadway	C	A
5-foot wide sidewalk or trail with curb and gutter and planter strip 3 or more feet wide	N/A	A
5-foot wide sidewalk	N/A	B
5-foot wide paved shouder w/ 2 foot buffer	B	C
5-foot wide paved shoulder	C	C

Table 6-5, Non-motorized Levels of Service for Suburban Locations

Facility Description	BLOS	PLOS
10-foot wide multi-use pathway separated 7 or more feet from the roadway or separated by physical barrier	A	A
6-foot wide trail separated 7 for more feet from the roadway	C	A
5-foot wide paved shouder w/ 2 foot buffer	B	C
5-foot wide paved shoulder	C	C
3-foot wide paved shoulder	D	D
6-foot wide shoulder	N/A	C
8-foot wide shoulder	N/A	B

Frontage Improvements

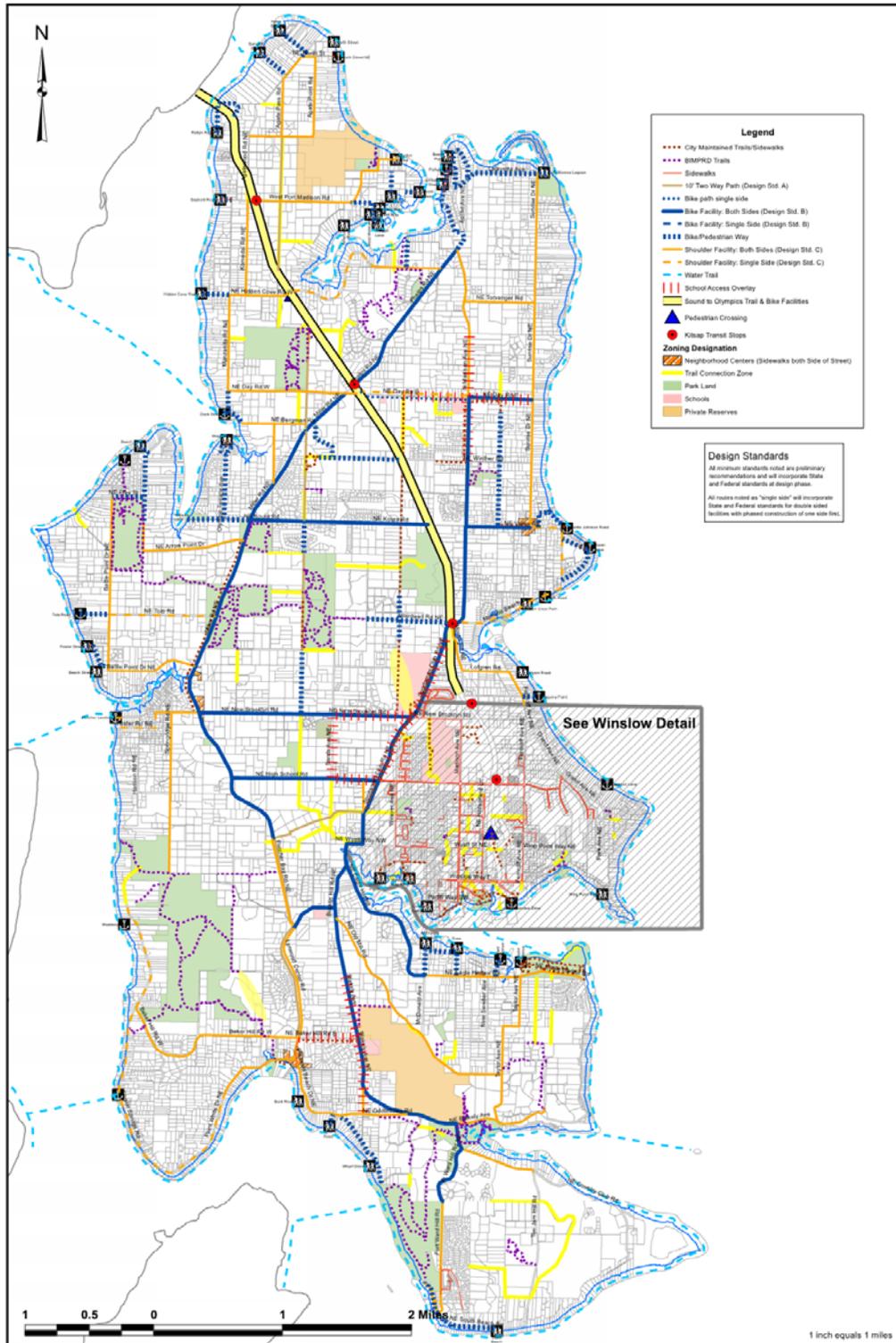
Non-motorized improvements are required for along with other infrastructure improvements for all development. The following table identified the level of improvements required that have been determined to be roughly proportional with the scale of development.



Table 6-6, Frontage Improvement Requirements	
Development Type	Required facilities:
Development or re-development of a residential lot.	ROW dedication and easements. Sidewalk and shoulder infill and reconstruction to meet current standards.
Subdivisions over 3 lots in size, multi-family development exceeding 4 units, and all commercial development / re-development.	In addition to the above, the construction of sidewalk and shoulder extensions, and construction or reconstruction of trails up to 6 feet in width.
Residential Plats of 8 lots or more and development of commercial properties greater than 20,000 gross building square feet in aggregate.	In addition to above, the construction or reconstruction for all facilities including multi-use trails.

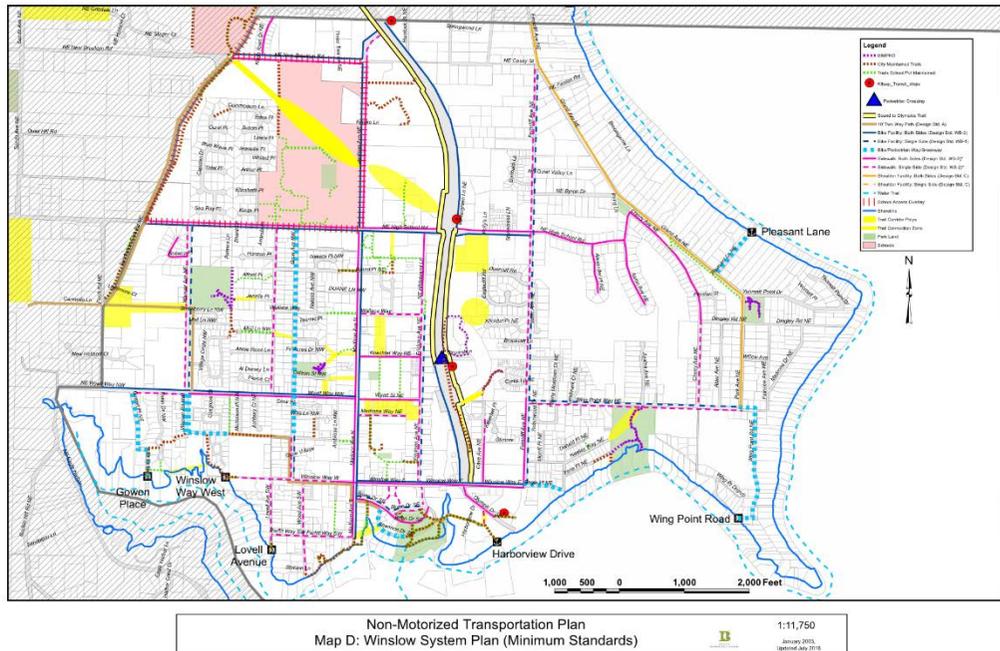


City of Bainbridge Island – Island Wide Transportation Plan
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Non-Motorized System Plan
 Map C: (Minimum Standards)
 January 2003 Updated July 2016





Implementation, Prioritization, and Funding

This section elaborates on specific measures to further the Non-Motorized Implementation Goals in the Transportation Element of the Comprehensive Plan. The following objectives have been identified:

- A. As opportunities are identified, develop proposals to update the Municipal Code to increase the ability to obtain non-motorized facilities in accordance with the IWTP and consistent with the goals in the Transportation Element of the Comprehensive Plan with non-motorized projects.
- B. Support community efforts to develop new regulations incentivizing the construction of non-motorized facilities by development.
- C. All commercial and residential projects that reach the design and review thresholds set in the Municipal Code shall be reviewed for compliance with the goals, policies, and standards in the Transportation Element of the Comprehensive Plan, the Islandwide Transportation Plan and other adopted Plans.
- D. Facilitate the NMTAC review of development projects with potential for non-motorized elements and provide opportunity for early input in designs.
- E. As properties develop, secure right of way dedication for frontage improvements on City streets and easements for regional and inter-island



multi-use trails (20 feet or more) and connecting pathways within and connecting neighborhoods (15 feet or more).

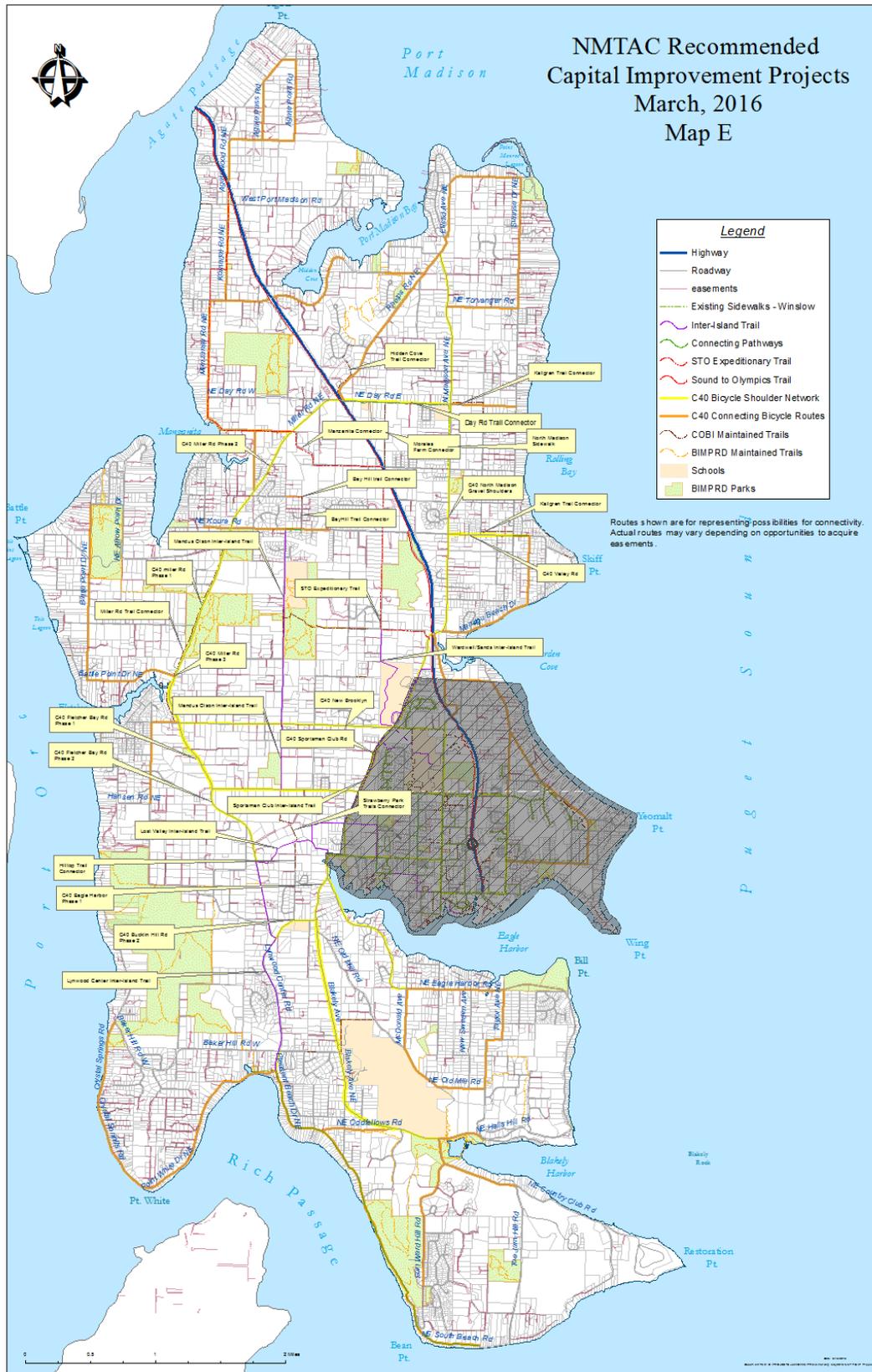
- F. Support opportunities to secure new easements or renegotiate existing easements (example: utility access agreements).
- G. Provide mechanisms for funding, prioritizing, and implementing projects to develop non-motorized facilities identified in this plan. Identify and prioritize specific non-motorized projects in the City's transportation planning including but not limited to the IWTP and the Capital Facilities Plan to assure their completion.
- H. Actively pursue various funding sources, such as available grant and bond initiatives for priority projects. Pursue joint funding opportunities with the School District, Parks District, and Department of Transportation. Provide flexibility in the program as needed to be competitive.
- I. Support the development of a non-motorized bond measure to fund regional and inter-island trails, Core 40 shoulder improvements, and other island-wide non-motorized improvements.
- J. Support involvement of the NMTAC in transportation planning and capital improvement planning. Important aspects of this work include developing and prioritizing projects, and collaborating to develop grant applications and secure funding.
- K. Support involvement of the NMTAC in public outreach and the development of transportation improvement projects.
- L. Incorporate non-motorized improvements into capital improvement projects. Consideration to be given to the context of each site in developing designs.
- M. Study maintenance needs and put forward a budget proposal in Operations and Maintenance to provide for new facilities and improved level of service of all facilities.

Non-Motorized Improvement Plan

Programs and projects to achieve the proposed Non-motorized Transportation System Plan are identified in Maps E and F.



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adjacent to angle parking and at transition areas from bike lanes to shared lanes on Winslow Way.

- E. Provide separation for non-motorized from non-motorized uses at higher speed (over 30mph) and higher volume (over 2000 ADT) motorized traffic locations. When separation is not practical, alternative routes should be provided to accommodate users of all ages and abilities. A particular emphasis for separated facilities is on roads connecting to schools and along SR305.
- F. Consider lowering speed limits of secondary and collector street with significant bicycle and or pedestrian traffic that lack non-motorized facilities.
- G. Posting of walking and biking warning signs on roadways in high non-motorized use areas without adequate facilities.
- H. Consider incorporating traffic calming elements such as narrow lanes (9-10 feet depending on roadway classification), chicanes or winding roadways, and maintaining native vegetation or providing street trees in all designs. Consider speed humps, and / or raised crosswalks at urban local access or other streets with a desired speed limit of 20mph when there are large vehicular traffic generators or very high volumes of pedestrians.
- I. Provide street lighting of secondary arterials and collector streets in urban areas and marked crosswalks on arterial streets in suburban areas.
- J. Provide bicycle activated sensors at signal locations.
- K. Avoid placement of utility facilities, such as manhole covers and utility poles, within non-motorized travelways.
- L. The design of new parking lots and garages shall include covered bike storage / parking facilities. Where existing bicycle parking is sufficient and conveniently located, the City Engineer may omit this requirement.
- M. When bike racks are required for commercial development and public facilities, the racks shall be conveniently located to the building entrance, appropriately designed to be compatible with the design and development of the site, and sheltered from inclement weather.



Standards

The City's existing Design and Construction Standards were developed in 1997 and have not been updated to include all of the non-motorized elements identified in the 2003 Non-Motorized Transportation Plan. It is recommended that this document be updated following the update of the Island-Wide Transportation Plan and the City's Comprehensive Plan.

Refer to the table below showing a list of considerations for updating the Design and Construction Standards.

Standards 1	Maintain narrow 10-foot lanes on major roadways.
Standards 2	Modify standards to require pedestrian facilities to be maintained at grade at driveway entrances.
Standards 3	Require sidewalks to be built to the back of the right-of-way along arterial and collector streets.
Standards 4	Include a standard for planter strips for increased pedestrian accommodation. An alternate standard would still be available to omit planter strips in certain situations; wider sidewalks should be provided where planter strips are omitted.
Standards 5	Minimum bike lane width on secondary arterial and major collectors is to be 5 feet. An additional one-foot clearance of the curb to be provided at curb and gutter locations. Buffered bike lanes to be considered.
Standards 6	Require paved driveway approaches at all driveways serving more than 3 households for all categories of projects. Note that paved driveways are currently required for new development.
Standards 7	Include a standard for shared use path, buffered separated multi-use path, inter-island trail, etc.
Standards 8	Utility structure covers are to be located out of the sidewalk and shoulders used by cyclists unless impractical and any deviation requires approval by the City Engineer. Type of cover to have flush, skid, and lock down characteristics suitable for cycle use.
Standards 9	Tenant improvements and remodels trigger frontage improvements to meet current ADA standards.



Preservation and Maintenance

Existing and proposed non-motorized facilities need to be preserved and maintained to ensure continued usefulness. As the system grows, so does the demand for resources to maintain it. Facilities deteriorate over time and the City needs to plan for expenditures to repair and / or reconstruct these assets.

Areas of emphasis for maintenance as follows:

- o Annual raised sidewalk grinding or replacement of sidewalk panels to address deficient disability access.
- o Annual sidewalk and cross walk power washing where needed to maintain slip resistance and / or contrasting color.
- o Monthly sweeping of separated pathways.
- o Annual cleaning / power washing of separated pathways.
- o Seasonal brush cutting of trails.
- o Annual grading and graveling of non-hard surfaced trails where needed to address unevenness and traction issues.
- o Maintenance of roadway surfacing to consider serviceability of shoulders for cyclists when prioritizing repairs.
- o As needed cutting of roadside brush to maintain use of shoulders for cyclists and pedestrians.
- o Monthly shoulder / bike lane sweeping + higher frequency at problem areas.
- o As needed repair and adjustment of lids and grates to maintain even surfaces for cyclists and pedestrians.
- o Annual pavement marking maintenance of cross walks, bike lane symbols, etc.
- o As needed washing and replacement of signage such as no-parking signs, way finding signs, etc.



Education, Encouragement and Enforcement

The NMTAC, supported by City Public Works, Planning, and Police Staff, and in coordination with School District, Parks District, Fire District, Health District and community groups will work to further the education goals of this Plan. This should include developing programs, or adopting programs used successfully elsewhere, to encourage use of non-motorized modes and promote safety. This may include:

- Listening to the community to identify transportation system deficiencies and opportunities for improvement
- Coordinating and or supporting programs and projects that encourage active modes of transportation
- Supporting community outreach and involvement for the development of transportation projects
- Supporting safe routes to school programs
- Supporting “Adopt-a-Trail” and “Adopt a Route” programs
- Developing and distributing guide maps and providing wayfinding signage. Public non-motorized facilities such as trails should be identified with signage in order to designate routes and access points. This is especially important where facilities are adjacent to or run through easements on private property.

The Committee and City routinely support the following efforts:

- ‘Bainbridge Shares the Road’ program and signage.
- League of American Bicyclists ‘bicycle friendly community’ designation.
- [Walking, Cycling, and Paddling Map](#) supported on the City’s web site.
- [Walking Map of Winslow](#), produced by Sustainable Bainbridge and supported on the City’s website.
- Map of accessibility features in the Winslow area, produced in cooperation w/ the Kitsap County Accessibility Communities Advisory Committee.
- Participating in ‘Bike to School Day’.
- Community engagement for connectivity opportunities and easements.



- Participating in public outreach involvement opportunities of City transportation projects.
- Coordinating with the Police Department to identify areas with higher non-motorized use that may need emphasis for safety due to accident history, speeding, observed poor behaviors by either motorized and / or non-motorized users for consideration for education and enforcement emphasis.
- Promoting Police bicycle patrols for enforcing laws for cyclists and patrolling multi-use pathways.

CHAPTER 7 OTHER TRANSPORTATION SYSTEMS

For the City of Bainbridge Island, other transportation systems provide an extremely important role in the movement of people, vehicles, and goods. The ferry, transit, and non-motorized systems are a primary means of moving people to and from their destinations from commuter trips to Seattle to tourists visiting Bainbridge Island. This chapter describes each of these systems and their relationship to the Bainbridge Island transportation system.

Ferry System



The WSF service has, for many years, been the primary provider of ferry transit services in western Washington. The Seattle-Bainbridge ferry run provides an integral connection to the greater King County and locations east of Puget Sound to the Kitsap Peninsula, and the Olympic Peninsula regions. System-wide, the WSF system carries more than 23 million passengers per year (*2014 Washington State Ferries Rider Statistics Report*).

Washington State Ferry Operations

The Seattle/Bainbridge Island ferry provides daily crossings between Bainbridge Island and downtown Seattle's Coleman Dock. The 35-minute crossing covers 8.6 miles and connects Bainbridge Island and the SR 305 corridor with downtown Seattle and the Interstate 5 and 90 corridors. Two Jumbo Mark II Class auto/passenger ferries, the M/V Tacoma and M/V Wenatchee, serve the route connecting the I-90 corridor to SR 305. Each vessel has a travel speed of 18 knots, and maximum capacity for 2,500 passengers, 218 vehicles and 60 commercial vehicles.

Table 7-1 lists the ridership, schedules, crossing times, and service frequencies for the Seattle-Bainbridge Island route and alternative ferry routes that serve the central Kitsap County region. As shown in Figure 8-1, these alternative routes include the Seattle-Bremerton (passenger-vehicle and passenger only), and Kingston-Edmonds runs. The Seattle-Bainbridge run carries the largest share of ridership with more than 6.32 million passengers per year. The Kingston-Edmonds runs carries approximately 4 million annual passengers and the two Seattle-Bremerton ferries carry about 2.5 million riders.



Credit: WSF

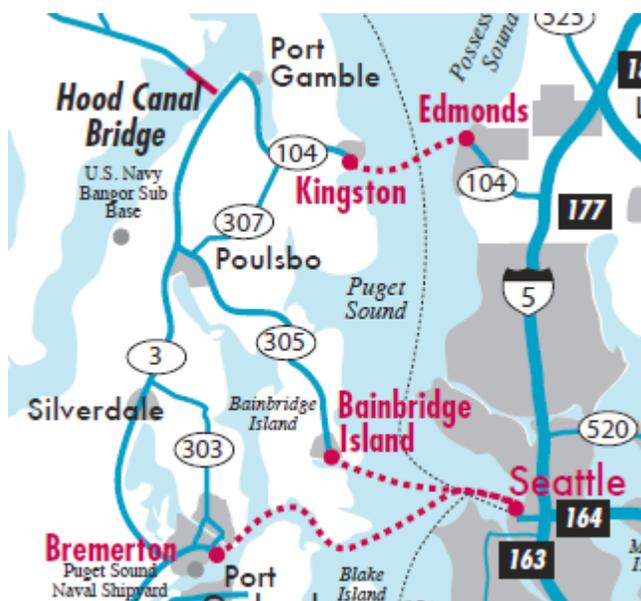


Table 7-1. WSF Schedules and Headways

<i>Route</i>	<i>2014 Ridership</i>	<i>Vehicles Carried</i>	<i>Hours of Operation (first- last sailing)</i>	<i>Crossing Time</i>	<i>Service Frequency</i>
Seattle/Bainbridge Island	6.32 million	1.95 million	5:30 am-2:10 am	35 min	40-50 min
Seattle/Bremerton	2.52 million	0.65 million	5:10 am-1:30 am	60 min	70-140 min
Kingston/Edmonds Ferry	4.00 million	2.10 million	5:10 am-1:00 am	30 min	40-70 min

Source: Washington State Ferries

Figure 7.1 Ferry Routes



Ferry LOS

WSF uses daily percentage of vessels at vehicle capacity as the measure of the Level of Service for ferry services. This methodology has changed since the last COBI Plan. The new methodology places an emphasis on using existing capacity as opposed to the prior method of measuring length of wait times at peak sailings which emphasized maintaining commute times for motorists.



Table 7-2 Ferry Operation LOS

Route	Level 1	Level 2
Seattle/Bremerton	25% to 30%	50% to 60%
Seattle/Bainbridge Island	25% to 30%	65% to 75%
Edmonds/Kingston	25% to 30%	65% to 75%

Source: WSF 2009 Long Range Plan

Level 1 level of service represents the percentage of sailings at peak vehicle capacity. At 25% capacity peak sailings are filled to capacity but other sailings are not. Exceeding the LOS standard is an indicator that adaptive strategies should be employed to reduce peak demand.

Level 2 level of service represents the percentage of sailings at peak vehicle capacity. Standards were set to 65% to 75% for routes reflect the ability to spread demand throughout the day due to more time flexibility amongst customers. Exceeding the LOS standard is an indicator that additional investment is needed to address capacity.

The WSF Long Range Plan forecast that percentage of vessels sailing at peak capacity will not exceed 67% through 2030 not exceeding the LOS threshold of 75% for the peak summer month of August. Thus capacity improvements in the planning period are not driven by the LOS standard.

Kitsap Transit Passenger Only Ferry Proposals

WSF discontinued passenger-only ferry service in 2003. Both a private company, Aqua Marine and the Port of Kingston have attempted to restore high speed passenger only service from Kingston and Seattle. Both services have proven to be unsustainable financially due to limited ridership. The Port of Kingston ended its service in 2012.

Kitsap Transit proposed to develop a passenger only ferry service supported by a sales tax increase in Kitsap County in 2003. Proposition 1 was not supported by the voters at that time. In 2014 Kitsap Transit commissioned a study to evaluate the potential for passenger ferry service. Kitsap Transit is currently exploring creating a ferry district to fund passenger only ferry service.

In the past, passenger only ferry service has served only one port of call in Kitsap, limiting ridership. It is suggested that a return to a mosquito fleet model of service with multiple ports of call for each vessel in Kitsap be considered. Examples for this type of service would include Kingston, Indianola, Suquamish, Bremerton, and Port Orchard with shared service to these multiple ports and Seattle.

Ferry System Issues

The primary issue for ferry service is funding. With the erosion of the gas tax with more fuel efficient vehicles transportation funding has been in decline. Since the taxpayer backed tax



cuts in the early 2000's, WSF has been faced with raising fares, deferring maintenance of its fleet and terminals, and foregoing expanded operations. Challenges include:

- Maintain operating funding to keep fares at 80% fare box recovery
- Fund vessel maintenance and replacement reserves
- Fund terminal reconstruction including the Seattle Ferry Terminal
- Develop long range plans and funding strategies for expanding services including investments in expanding existing service, additional routes, and multimodal transportation to more sustainably meet the region's growing transportation needs. Examples may include upgrading the Edmonds Kingston Ferry terminals to better serve bus and other multimodal transportation, introducing ferry service from Southworth to Seattle and upgrading walk-on capacity and level of service to Bainbridge Island using three smaller auto capacity ferries to limit traffic congestion impacts to SR305.

Recommendations for Ferry Services

The City supports the retention and expansion of ferry systems to reduce the dependency on the Bainbridge Island terminal and SR 305, and to promote a more convenient and equitable ferry system. Elements of the recommendations include:

- *Parity of ferry services* – The City promotes services closer to home origins and to reduce demand at the Bainbridge Island ferry terminal and on SR 305. Examples include Vehicle / Passenger Ferry Service from Southworth to Seattle, and High Speed Passenger-Only Ferry Service from Kingston to Seattle, and direct bus service from Kitsap County to King County via the Kingston – Edmonds Ferry.
- *Ferry Priority* – The City supports the WSDOT and Kitsap Transit's programs to encourage non-SOV use through priority boarding, through the development of facilities for bicycles and pedestrians.
- *Passenger Ferry Options* – The City supports the replacement and expansion of passenger only ferry services through public and private initiatives.
- *Walk on and bicycle capacity* - The City supports long range planning for capital improvement expenditures to enhance walk-on and bicycle capacity at peak sailings.
- *Motorized capacity* – The City supports long range planning for capital improvement expenditures to maintain a two-boat minimum wait-time for motor vehicle capacity at peak sailings.
- *Fair box recovery* – Maintain affordable fares for service to Bainbridge Island and Kitsap County. The City supports long range planning and investment for State funding to subsidize operation and maintenance for the Ferry system.

Kitsap Transit bus and other services

Kitsap Transit, as the public transit service provider in Kitsap County, serves the County including the City of Bainbridge Island. One way bus service is provided for commuter hours to the Ferry Terminal. Kitsap Transit has an ACCESS program providing transportation for seniors and disabled persons who are unable to use regular-route buses. Starting in June



2014, dial-a-ride service was introduced providing day time inter-island bus service. Kitsap transit also provides park-and-ride lots, vanpool programs, and rideshare programs.

Existing Routes

Eleven bus routes serve Bainbridge Island providing service mainly to and from the Winslow ferry terminal. Figure 8-2 shows the routes as they relate to the roadway system and areas of the Island.

Table 8-3 provides details about the origins and destinations of the routes, the 2014 ridership levels, hours of operations, and service frequency. Most service is provided to meet peak morning and evening demand related to ferry terminal travel, with little or no mid-day service. Service also tends to be one-directional with transit vehicles “deadheading” back (not in service) to meet the demand from arriving ferry passengers.

A total of 534,226 annual passengers in 2014 used the KT routes that serve the ferry terminal (Routes 33, 90-106). WSF reports that 3,087,786 walk-on passengers for 2014. If the assumption is made that all of the ridership also used the ferry system, approximately 1 out of every 6 ferry riders use Kitsap Transit service.



Figure 7-2 Kitsap Transit Routes





Table 7-3. Kitsap Transit Services

Route	4 Ridership	Hours of Operation	Service Frequency
- Silverdale/Bainbridge	*	4:30-7:45 15:30-19:45	45-50 min
- Poulsbo/Bainbridge	204,524	4:50-8:05 15:50-20:05	45-50 min
- Kingston/Bainbridge	88,662	4:45-8:10 15:45-20:10	35-50 min
- Manzanita	35,205	4:55-7:40 15:55-19:40	40-55 min
- Agate Point	21,554	4:50-7:40 15:55-19:40	40-55 min
- Battle Point	44,878	4:50-7:40 15:50-19:40	45-55 min
- Sunrise	30,046	4:50-7:40 15:50-19:40	45-55 min
- Crystal Springs	34,845	4:50-7:40 15:50-19:40	45-55 min
- Fort Ward	26,940	5:00-7:40 16:00-19:40	45-55 min
- Bill Point	10	7:40 15-19:40	15 min
- Fletcher Bay	12	6:00	10 min
- A – Ride (1)	15	– 4:00	
1) – Dial-A-Ride started in _____ of 2014			

Source: Kitsap Transit (www.kitsaptransit.org)



Park & Ride Lots

Kitsap Transit has developed a number of Park & Ride facilities along SR-305 and in North Kitsap County to provide hubs where passengers can leave a vehicle prior to boarding a bus. Park & ride facilities are used by Kitsap Transit bus riders, but can also serve as meeting locations for vanpools and carpools.

Table 8-4 describes the park & ride facilities located on transit routes that serve Bainbridge Island as identified by Kitsap Transit.

Table 7- 4. Park and Ride Facilities

Park & Ride Facility	Location	Spaces	Served by Bus Routes
Clearwater Casino	Suquamish	96	90, 91
Georges Corner	Kingston	225	91
Gateway Fellowship	Poulsbo	138	33, 90
Liberty Bay Presbyterian Church	Poulsbo	75	33, 90
No. Kitsap Baptist	Poulsbo	57	90
Poulsbo Junction	Poulsbo	35	33, 90
Poulsbo Church of Nazarene	Poulsbo	100	90
Suquamish United Church of Christ	Suquamish	65	91
American Legion Post	Bainbridge Island	5	98
Bethany Lutheran Church	Bainbridge Island	80	94
Island Church	Bainbridge Island	37	93
Day Road	Bainbridge Island	25	90, 91

Source: Kitsap Transit (www.kitsaptransit.org)

Kitsap Transit provided spot observations Park & Ride facilities in 2014. Table 8-5 summarizes the park & ride lots' capacity, the number of observed vehicles, and parking utilization rates for park & ride lots on Bainbridge Island.



Table 7-5. Park and Ride Lot Utilization

Park & Ride Facility	Capacity	Observed 2014	Parking Utilization
American Legion	5	10	200%
Bethany Lutheran Church	80	65	81%
Island Church	37	18	49%
Overall	122	93	76%

Source: WSDOT Office of Urban Mobility

The study shows that area park & ride lots are well used but have adequate capacity. It appears that additional capacity at the American Legion location would be a benefit if a lease can be secured to utilize additional space.

Transit System Issues

Most transit agencies in the region, including Kitsap Transit, have not developed LOS measurements at this time. However, general assessments can be made about areas serviced, frequency, capacity, and access. Kitsap Transit has provided a morning and afternoon peak period transit service that meets the needs of many Island commuters. Mid-day (9:15am to 3:30pm) inter-island service is also provided. Review of the transit service reveals that the main issues relating to the transit are related to the expansion of transit services and improving the frequency of service. Issues related to transit include:

- With ferry passenger service expected to grow and increasing congestion on SR305 ridership capacity for buses for commuters is a critical element for achieving a viable transportation system. Capacity is an important aspect of level of service.
- With more congestion on SR305 attributed to commutes to employment both on and off island improving bus service within Kitsap County is an increasingly important element of a viable transportation system. Frequency of service and transfer efficiency are important aspects of level of service.
- Park and ride lots and bicycle parking at park and ride lots and bus stops are important to support commuters and encourage ridership. This includes park and ride lots at churches and other locations on Bainbridge Island for resident use and off-island park and ride facilities to support transit use.
- To better serve seniors and youth and persons with disabilities both short and long term support less reliance on the automobile for more sustainable growth inter-island bus transit is an important element of an effective transportation system. Extend of locations served and hours the service is provided are important aspects for level of service.
- Improving access to the Transit Center near the Ferry Terminal is needed. Currently the pedestrian facilities are sub-standard and do not provide adequate accommodation for a wide range and number of users and there are no bike facilities, on Olympic Drive.
 - Improving access to bus stops with in the Urban Center of Winslow and at the City's Urban Town Centers is needed. Both the lack of infrastructure and deficient infrastructure are barriers to access in some areas.
 - Improving King County Metro transit services at the Seattle ferry terminal to provide better connections to popular destinations including the airport.



Recommendations for Transit System

The City supports the development and improvement of transit services on Bainbridge Island and those services that provide options for non-Island commuters. The following recommendations are forwarded:

- *Transit LOS* – Encourage Kitsap Transit to monitor system use to ensure that current and forecasted demand is met for the SR305 corridor. Additionally monitor underserved Island locations for transit service expansion as Island development occurs.
- *Public Transit Ferry Access* – Support changes to transit services that promote ferry use, including the airport service, popular destinations, and special events.
- *Expansion of Island Transit* – Supports the expansion of bus services on the Island to better serve commuters, non-commuters, residential areas, and neighborhood access centers, and disabled users. This includes the Access Bus and BI Ride (Dial-a-Ride) services.
- *Ferry Commute* – Improve service with high capacity buses as needed to meet demand. This should include expanding accommodation for riders with bicycles.
- *Route 90 to Poulsbo* – Improve frequency of service between the Bainbridge Ferry Transit Center to the Poulsbo Transit Center with transfers to Kingston at Suquamish and Bremerton and other locations from Poulsbo.
- *BI Ride* – Extend hours of service to include afternoon and evenings.

Non-Motorized System connectivity to Transit

Active modes of transportation such as walking and bicycling are important to many island residents. The City has invested in planning and implementation for pedestrian and bicycle infrastructure to accommodate a wide range of users. Providing connectivity to transit is one important aspect for non-motorized improvements. Opportunities include development of a network of bike lanes that link commuters to the ferry terminal and regional and interisland trail systems that link pedestrians and cyclists to transit stops along SR305 and throughout the island.



Multimodal – Transportation Demand Management

In the previous study the Steering Committee strongly felt that the transportation solutions addressed in the IWTP should consider providing a multimodal approach and solution that will encourage drivers to share rides, use transit or commute by non-motorized means. The emphasis on supporting alternative modes including+ using demand management strategies is currently supported by the NMTAC.

A key to the development of a multimodal system is through the use of Transportation Demand Management (TDM). TDM is a series of methods and strategies that discourage the use of single occupant vehicles and encourage non-motorized and transit travel. TDM implies the “management of travel demand”, that supplement the development of travel alternatives such as transit, carpools, park-and-ride facilities, or passenger ferry service.



TDM strategies are focused on increasing the use of alternatives to single driver automobile trips through a mix of incentives and disincentives. These programs tend to be lower in cost compared to roadway or other capital projects.

While TDM programs may increase the number of person trips through a corridor by increasing use of buses, carpools, and diverting trips to off-peak hours; traffic levels may not decrease due to unmet travel demand replacing any reductions from TDM programs (latent demand for travel).

TDM Programs on Bainbridge Island

There are many TDM programs currently in effect on Bainbridge Island. Agencies and major employers have implemented these programs to discourage the single use of single occupant vehicle (SOV) trips during commute periods.

Agency-Based Programs

The City of Bainbridge Island, Kitsap Transit, and Washington State Ferries have programs that encourage the use of transportation alternatives to the SOV.

Examples of TDM Programs promoted by these agencies include:

- *Ferry Terminal Parking Restrictions* – The City has limited amount of parking at the ferry terminal and charging an hourly or daily fee reduces the number of persons who drive to access the ferry. As parking becomes more difficult or expensive, fewer drivers will desire to use the parking areas. On the other hand, restricted parking may increase the amount of drop-off/pick-up activity at the terminal or encourage parking in adjacent neighborhoods.
- *Commercial Parking Tax* – The City has charged a tax on commercial parking lots since 1999. The current rate is a 30% tax that provides funds for the City’s general fund. This tax, if added to the parking fee, increases the out-of-pocket costs for automobile commuters, encouraging ridesharing, non-motorized travel, and transit use.
- *Carpool Parking Areas* –The City provides reserved parking areas for carpools at its ferry terminal lot. Providing reserved spaces or reduced parking rates encourages drivers to form carpools, increasing the occupancy of vehicles.

Rideshare Programs – Programs that promote the formation of carpools and vanpools can increase the rate of vehicle occupancy by increasing the number of persons

moved during peak times. Kitsap Transit has a program to match interested commuters into carpools and vanpools using the RideshareOnline.com database.

- *Vanpool Programs* – Kitsap Transit also administers a vanpool program that provides vans for commuters for a monthly fee. WSF provides additional incentives to registered carpools and vanpools who receive preferential boarding. Vanpools also receive a reduced ferry rate.



- *Land Use Policies* – The City’s promotion of higher-density residential in the Winslow area promotes increased opportunities for residents to walk, or use bus service rather than drive.
- *Parking Restrictions and Enforcement* – The development and enforcement of parking policies and rules may reduce undesired parking behaviors, such as in neighborhoods adjacent to the ferry terminal area. Types of parking restrictions include hourly parking limits, residential parking zones, and area re-parking restrictions.
- *Car sharing Program* – A car sharing program allows people to have access to a vehicle that they rent on an hourly and/or mileage basis. This type of program reduces vehicle ownership, encourages transit and non-motorized travel, and lowers overall driving behavior.

Employer-Based Programs

Major employers (100 or more employees) are required by the State’s Commute Trip Reduction law to promote ridesharing and transit use by developing in-house incentive programs that encourage employees to use ridesharing, transit use, and non-motorized travel. Kitsap Transit administers the program within the county. According to Kitsap Transit data only two Island employers have formal CTR programs. Each major employer is required to designate an in-house coordinator and develop a Commute Trip Reduction Plan indicating how the employer will meet the required trip reduction targets. Some of the examples of employer-based programs in use includes:

- *Transit subsidies* – Employers can provide or partially-subsidize the cost of monthly transit passes to their employees
- *Flextime programs* – Employees are allowed to shift their work schedule to avoid travel during peak travel periods, or to meet transit schedules.
- *Telecommute programs* – Employees are allowed to work from home offices in order to reduce the amount of commute travel.
- *Guaranteed Ride Home Program* – This program provides employees who commute by transit, carpool, vanpool, bicycle, or foot a free taxi ride in the event they need to return home on an emergency basis during mid-day and late evening hours.
- *Commute Subsidies* – Employees are eligible for a monthly subsidy if they commute by transit, bicycle, foot or carpool to work.

Regional Coordination

The Growth Management Act requires that cities coordinate planning efforts with adjacent jurisdictions, the county and the region. This coordination is particularly important for transportation, where plans by one jurisdiction may have a substantial effect on the traffic on another. Regional planning allows a long-range vision to be established for a region as a whole, allowing predictability and consistency between jurisdictions, while still allowing flexibility to meet community goals.



There are a number of regional plans that could affect the transportation system of Bainbridge Island. Many of the regional concepts depend on the availability of funds that may or may not occur in the future. This memorandum discusses potential regional plans from WSDOT, Kitsap Transit, and Kitsap County and discusses how these plans might impact the findings of the IWTS.

WSDOT Plans

The Washington State Department of Transportation (WSDOT) identified a number of improvements to the state route system in its *Washington Transportation Plan* (WTP). In the Puget Sound Region, these projects are first identified in the Puget Sound Regional Council's *Metropolitan Transportation Plan "Transportation 2040"* (MTP) plan. This plan sets the transportation plans and policies over a 30-year period, with the emphasis on the first 20-year time frame. The MTP identifies improvements to the SR 305 corridor.

- *SR 305 Corridor Improvements (Winslow Ferry Terminal to Agate Pass Bridge)* - Access management, intersection improvements, and HOV queue jump lanes improvements.

Consistency with IWTP

These projects should improve the overall mobility of the SR 305 corridors. The improvements along SR 305 between the ferry terminal and Agate Pass Bridge are unlikely to affect overall traffic levels, but may shorten transit travel times and enhance safety for bicyclists. The off-Island improvements will complement the SR 305 alternatives considered on Bainbridge Island, but will not significantly affect the City's traffic situation.

Kitsap County Plans

Kitsap County has the responsibility to maintain and fund improvements to County roadways. The County's 1998 Capital Facility Plan identifies a number of improvements to County-owned roadway facilities; however, none of these improvements directly impact the Bainbridge Island roadway system.

Kitsap Transit Plans

Kitsap Transit is aggressively looking to developing future alternatives to expand transit throughout its service area. Kitsap transit has considered a variety of approaches including dedicated high-capacity bus service, passenger rail or monorail service, and passenger ferry services.

- *High Capacity Transit Facilities*— This "long-range" concept of the high-capacity transit service would improve transit travel times by developing dedicated transit lanes. A Bus Rapid Transit system has been identified as a priority.

Consistency with IWTP

Any of the transit proposals would be compatible with the IWTP SR305 Alternative A and Alternative B scenarios. Depending on the level of transit ridership and the success of Transportation Demand Management (TDM) programs to control single occupant vehicle use, this concept would likely improve SR 305 levels of service if constructed.

CHAPTER 8 FINANCING



The City of Bainbridge Island utilizes a fiscally sound approach, using a variety of resources in order to secure funds for the design, right-of-way procurement, and construction of transportation facilities. Taxpayers, developers, and County, State and Federal programs all contribute to the development of the transportation system. The City prepares a biennial budget, a financial capacity analysis, and a 6-year Capital Improvement Plan (CIP) to provide an updated look at the projects to be completed for the year and in the upcoming years ahead, as well as financing plans for those projects. The State of Washington's Growth Management Act (RCW 36.70A.070) requires that the transportation element of a comprehensive plan include:

- An analysis of funding capability
- A multi-year financing plan based on the needs identified
- A discussion of how the jurisdiction will address funding shortfalls through a reassessment strategy.

This chapter describes how the City plans to pay for the transportation improvements identified in the IWTS along with projects that appear in the current Capital Improvement Plan (CIP). Included in this section is a discussion of the City's funding capabilities, discussion of the potential funding sources, the 6-year and 20-year transportation improvement plans, and reassessment strategy.

Funding Capabilities

The City of Bainbridge Island has implemented a variety of revenue sources and financing mechanisms to fund City services and capital improvements. One indication of the City's funding capability is the analysis of historic revenue sources.

Table 8-1 summarizes the revenue sources from 2011 to 2014 for the City's Streets Fund, Capital Project Grants, and for overall City revenues. The City has consistently allocated a large portion of its funding outside of the operating budget for transportation. Over the last few years, the City has aggressively pursued transportation grant funding from State and Federal sources. The City recently implemented a Transportation Benefit District and is currently evaluating Transportation Impact Fees providing for more revenue. The City supplements dedicated transportation revenues to pay for operating costs such as salaries, benefits, and other associated costs.





Table 8-1. Historical Transportation Funding Sources

	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>
<i>(All numbers are in 1000s)</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<i>Commercial Parking Lot Tax</i>	\$552	\$588	\$715	\$753
<i>Motor Vehicle Fuel Tax</i>	484	471	477	478
<i>Parking Fees (City lots)</i>	337	4	0	0
<i>Interest and Other</i>	72	1,334	50	738
<i>Total Street Fund Revenue</i>	\$1,446	\$2,398	\$1,242	\$1,970
<i>Transportation Grants (Federal)</i>	1,987	200	809	1,502
<i>Transportation Grants (WA State)</i>	1,379	288	465	0
<i>Total Capital Grants</i>	\$3,366	\$488	\$1,273	\$1,502
<i>Transportation Benefit Dist. funding</i>	0	0	122	391
<i>Total City Non-Utility Revenue Sources</i>	\$22,901	\$19,629	\$20,781	\$22,048

Source: City of Bainbridge Island financial statements

Overall, the City has annual non-utility revenues of more than \$20 million. The City's 2015-2016 biennial budget projects relatively flat revenue trends for both years. In addition, the City has significant additional bonding capacity. As of 12/31/2014, the City is at 28% of its general obligation bond limit (not requiring a vote of the taxpayers) and 7% of its limit for special levy bonds that could be used for transportation projects (requiring a 60% majority vote of the taxpayers).

Types of Funding Sources

The implementation of the 6-year and 20-year CIPs depends on the availability of transportation funds. This section describes the sources of transportation funds applicable to the City of Bainbridge Island.

General Funds

City general funds are made up of a variety of revenue sources and can be used to pay directly for transportation improvements or to meet the City's local funding requirement – or “match” – for other funding sources. Some revenues are specifically dedicated for transportation projects, such as the City's share of the State's Motor Fuel Tax, and are dedicated to particular activities like roadway repair and construction. Other City revenues from the general fund can also be used for transportation according to City funding priorities or to pay for transportation improvements that also benefit other funds such as water, sewer and storm water. For 2015, the City budgeted approximately \$1.5 million of dedicated operating revenues and \$6.1 million for capital expenditures.

Grants

There are numerous state and federal grant programs for improving the mobility or safety of the transportation system. Some sources of funds allow a local agency to apply directly, while other grant programs require submittals through a coordinated application process through the jurisdiction's Metropolitan Planning Organization. In addition, there are other sources of funding available to only counties or WSDOT, requiring the City to advocate for improvements through coordination with these eligible agencies. Most grants are issued on a competitive basis and require local jurisdictions to contribute between 10-25% of the cost. A higher local match percentage can make



a project more competitive for grant funds. In 2015, the City has budgeted receiving \$4.4 million for transportation projects.

General Obligation Bonds

General Obligation Bonds are an important method for the building and construction of transportation facilities. The City can issue bonds up to 1.5% of the assessed property values within the City without a vote of the people and an additional 2.5% with a vote of the people. A bond can allow the rapid development of the transportation system within a short period of time. Bonds are used by cities to finance major improvements and are repaid either through general funds, special taxes or assessment, or roadway tolls. In 2007 through 2010, the City used two general obligation bond issues for street, sidewalk and other non-motorized improvements throughout the island. General obligation bonds can be funded by revenues from growth and are one alternative to fund infrastructure to accommodate growth as it occurs.

Developer Contributions

Development provides an opportunity for the portions of the system to be built without the expenditure of public funds. Where roadway improvements are required (as indicated in the City's Comprehensive Plan), developers construct the facilities along the length of the property as part of their street frontage improvements. Typically, two to three projects are developer-funded during each year.

Concurrency

The City of Bainbridge Island adopted Transportation Concurrency Ordinance #2001-09 in April 2001. This action added Chapter 15.32 Transportation Concurrency to the Bainbridge Island Municipal Code. The ordinance establishes the requirements, procedures, tests, and the appeals process for establishing if a new development meets concurrency within the City of Bainbridge Island.

Generally, certain permit applications that exceed the adopted thresholds (15.32.030) must submit necessary documentation to the City Engineer, who conducts the concurrency test. The concurrency test determines if the addition of the proposed development will exceed the Level of Service Standard adopted in the Transportation Element of the Comprehensive Plan. If the application passes the test, a certificate of concurrency is submitted with the development permit. Otherwise, the applicant may revise the project or appeal the test following the provisions of the appeals process (15.32.070). The City is required to produce an annual report summarizing the current level of service on City's roads; identifying significant current and future development activities; and identifying where changes in the six-year Capital Improvement Program and Capital Facilities Plan are needed.

Impact Fees

An impact fee, or transportation mitigation fee program can be established by a city to collect fees for every new vehicle trip added to the roadway system. Developments are charged the fee based upon the number of new vehicle trips added to the road. These fees must be used to improve roadways that will be impacted by the new development. The City currently is in the process of implementing an impact fee.

Transportation Benefit District Fees

Cities and Counties are provided a mechanism to raise revenues for transportation programs charging a fee for vehicles licensed in their jurisdictions in accordance with



RCW 36.73.020. The City currently levies a fee of \$20 per year on qualifying licensed vehicles.

Local Improvement Districts

A final funding option is the development of Local Improvement Districts (LIDs). Generally, an LID requires a petition or survey with approval from a majority of property owners to the formation of the special assessment district and is repaid by members of that district. LID's are most often used in places where the improvements also have an economic incentive; for example, a retail area may form an LID to widen sidewalks in order to create a more pedestrian-friendly area that could translate into higher sales. The City has used LID's for transportation and utility improvements.

User Fees

This funding mechanism attempts to pay for all or part of the cost of an improvement by charging the users of the facility. Roadway and bridge tolls, and the WSF ferry service are all examples of transportation related user fees. Toll are usually tied to the repayment of General Obligation Bonds for a specific set of transportation improvements. Toll are most common for the funding of bridges and other major improvements. The City is not currently using tolling at this time.

Proposed Projects and Funding Needs

The development of a transportation development plan identifies a schedule for planned expenditures over a six-year period. Table 8-2 is a list of recommended improvements to meet Level of Service (LOS) standards and accompanying proposed funding sources. Table 8-3 is a list of transportation projects that have been identified in the City's Capital Improvement Plan (CIP), including discretionary projects in addition to those needed to meet LOS standards.

Funding for the projects needed to meet LOS standards will come from a combination of Local, State, and Federal Sources. The Wyatt Way Reconstruction project will be funded with significant support from a State grant. In the next six years, given the past history of Federal grant funding, it can be reasonably anticipated that grant funding can be secured for the Sportsman's Club/New Brooklyn Intersection Improvement project. In summary, the City is well positioned to address projects to maintain LOS standards over the next six years.

Many non-motorized improvement projects have been identified in the City's CIP. Over the coming six years, the number of discretionary transportation projects exceeds the City's ability to fund them. Establishing priorities for funding and securing new funding sources is needed if a sizable portion of these projects are to be delivered.

The most significant and expensive current needs to meet LOS standards are along SR305. At this time, WSDOT is responsible to plan and develop capacity projects to meet LOS standards on SR305, while the City performs much of the routine maintenance along the SR305 corridor. The City's population is approximately 23,000 and is expected to reach 25,000 in the next 5 to 7 years. At that time the City may become responsible for improvements on some segments of SR305 depending on access requirements. The City should consider partnerships with WSDOT to address current needs. This Plan identifies needs for capacity improvements and includes a



special study that proposes both at grade and separated grade solutions. The City has developed projects along the corridor such as the Olympic Drive project that was funded by a State Grant and could consider implementing additional projects. This could include funding elements of WSDOT projects or the City undertaking and funding its own projects along the corridor by obtaining development permits from the State.

Proposed Sources of Funding

To increase funding capacity both in the short term for non-motorized projects and in the long term for capacity projects, the city could consider increasing the TBD fees and/or issuing bonds. A bond issue could provide for investments in non-motorized transportation so that more complete networks of bicycle and pedestrian facilities could be realized in a shorter time frame. Alternatively, revenues from the current mix of resources could be directed to transportation rather than other City programs and services.

Reassessment Strategy

At the time of this Plan, no funding shortfalls for capacity projects to meet LOS standards were anticipated for the CIP six year time horizon. However, if the City is unable to secure grant funding or suffers other financial setbacks, the City may need to reassess in future years.

The Growth Management Act requires that jurisdictions develop a reassessment strategy in the event that funding shortfalls occur that limit the City's ability to carry out the transportation improvement plan. In the event that the City cannot fund the transportation capital improvements needed to maintain the adopted roadway LOS standards (as identified in the Level of Service section), then the City shall take one or a combination of the three following actions as directed by the City Council:

1. Phase proposed land developments that are consistent with the City's land use plan until such time as adequate resources can be identified to provide adequate transportation improvements.
2. Reassess the City's transportation financing strategy to identify additional funding opportunities with federal and regional grants and funding programs, and through the development of new partnerships with WSDOT, Kitsap County, and the private sector.
3. Reassess the City's adopted roadway LOS standards to reflect service levels that can be maintained under the known financial resources.



Table 8-2 Recommended Improvements to meet LOS standards

Location	Description	Year (1)	Estimated (2)
Wyatt Way/ Madison Ave.	Intersection control - round about	2016	1200
New Brooklyn Road/ Sportsman's Club Road (3)	Intersection control - round about	2017	800
Madison Avenue/ New Brooklyn Road (3)	Intersection control - round about	2020	900
Winslow Way/ Bjune Dr.	Intersection control - left turn restriction	2021	50
Madison Ave./ Wallace Way	Intersection control - left turn restriction	2021	20

Notes:

1. Project start date for design.
2. \$ in thousands, Transportation element only
3. Meets LOS requirement in model. Traffic impacts have been observed at peak hours for Schools.



Table 8 - 3
6 Year Transportation Funding Needs

6 year Transportation Improvement Program ID	Name	Location	Description	(\$ in thousands)	
				Probable Cost	Totals
Roadway Preservation Projects:					
PR-1	Annual Roads Preservation Program	Island-wide	Asphalt Patching, Chip Sealing, Asphalt Overlay	9468	
PR-2	Annual Roadside Safety Program	Island-wide	Replace or improve guardrails and shoulders	600	
PR-3	Mountainview Road Reconstruction	Falk Rd. to end	Road reconstruction and drainage improvements	86	
PR-4	Wardwell Road Reconstruction	Sportman's Club to Tripple Crown Dr.	Road reconstruction and drainage improvements	100	
PR-5	Country Club Road Reconstruction	Toe Jam Hill to Bulkhead	Road reconstruction and drainage improvements	175	10429
Intersection Improvement Projects:					
INT-1	See Wyatt Way Reconstruction		Round about		
INT-2	Sportsmans Club & New Brooklyn		Round about	993	993
Complete Streets Projects:					
CS-1	Wing Point Way Reconstruction	Fernclyff Ave. to Park Ave.	Water and sewer utility replacement, storm drainage, road reconstruction, shoulders, and sidewalks		
CS-2	Olympic Drive NM Impr., Phase 1	Winslow Way to Harbor Dr.	Bike and pedestrian facility improvements	1539	
CS-3	Olympic Drive NM Impr., Phase 2	Winslow Way to Ferry Terminal	Bike and pedestrian facility improvements	1521	
CS-4	Wyatt Way Reconstruction, Phase 1	Madison Ave to Lovell Way	Road Reconstruction, Intersection imp., Bike lanes, and Sidewalks	618	
CS-5	Winslow Way Reconstr., Phase 2	Madison Ave to Grow Ave	Water and sewer utility replacement, storm drainage, sidewalks, patching and overlay	3700	
				2300	9678
Sidewalk Improvement Projects:					
SW-1	Madison Ave. Sidewalk, Phase1	Wyatt Way to High School Rd.	Reconstruct sidewalks and drainage	3188	
SW-2	Madison Ave. Sidewalk, Phase2	Winslow Way to Wyatt Way	Reconstruct H/C ramps at driveways	158	3346



Table 8 - 3
 6 Year Transportation Funding Needs

Core 40 Shoulder Program Projects:			
SH-1	C40 - Spot Projects	Islandwide	300
SH-2	C40 - Fletcher, Phase 1	Highs School Rd. to N. Brooklyn Rd.	470
SH-3	C40 - Bucklin, Phase 2	Blakely Ave. to Fletcher Bay Rd.	1136
SH-3	C40 - Miller, Phase 1	Torvanger Rd. to Peterson Hill Rd.	1010
SH-4	C40 - Eagle Harbor, Phase 1	Wyatt Way to Bucklin Hill Rd.	712
SH-5	C40 - Eagle Harbor, Phase 2	Bucklin Hill Rd. to McDonnald Rd.	700
			4328
Trails Projects:			
TR-1	Connecting Pathways	Islandwide	150
TR-2	Sound to Olympics Trail, Phase 2/4	Winslow Way to High School Rd.	2250
TR-3	Sound to Olympics Trail, Phase 3	Vineyard Lane to High School	2490
		Trail easements and construction	
		Seperated pathway	4890
		Seperated pathway and NIM Bridge	
	6 year program total		33664
	Average annual		5611



CITY OF
BAINBRIDGE ISLAND

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
MEMORANDUM

DATE: SEPTEMBER 8, 2016
TO: PLANNING COMMISSION
FROM: JENNIFER SUTTON, AICP
SENIOR PLANNER
SUBJECT: STUDY SESSION ON ORDINANCE 2016-30

I. ORDINANCE 2016-30 BIMC UPDATE FOR 2016 COMPREHENSIVE PLAN UPDATE

The DRAFT 2016 Comprehensive Plan yields preliminary clarifying and procedural code changes necessary for its implementation. Ordinance 2016-30 makes these initial, relatively simple changes. However, Ordinance 2016-30 is only the 1st step to implement the comprehensive plan. As you can see in the implementation actions listed at the end of each element, implementing this comprehensive plan is a multi-year effort for the City; this will be evident in the City's 2017-2018 budget and work program to be approved before the end of the year. Changes that are made in Ordinance 2016-30 are summarized below.

- Changes the land use designation name *Neighborhood Service Center* to *Neighborhood Center*; changes references to the *Non-motorized Transportation Plan* to the *Island-wide Transportation Plan*;
- Modifies BIMC 2.16.210 to allow the City to initiate the *Special Planning Area process*.
- Removes the "Cluster" subdivision option for the densest residential zones (Ad Hoc Tree Committee recommendation);
- Allows zero lot line subdivisions citywide to allow housing types such as duplexes and triplexes;
- Repeals BIMC Chapters 3.82 *Bainbridge Island Arts and Humanities Account*, and 3.86 *Health, Housing, and Human Services Account* (no longer in use);
- Modifies BIMC 18.27 *Transfer of Development Rights* to expand sending areas;
- Modifies the definition of affordable housing to refer to median incomes for the Bremerton-Silverdale MSA; and

- Removes references to the *Flexible lot design handbook*, a guidance document that was never finalized.

Planning Commission Action: Review Ordinance 2016-30.

II. NEXT STEPS

Planning Commission open houses and public hearings on the DRAFT 2016 *Comprehensive Plan* and Ordinance 2016-30 are scheduled for:

Saturday, September 17: OPEN HOUSE 10:00 AM - 11:30 AM followed by
PUBLIC HEARING 11:30 AM - 1:00 PM

Thursday, September 22: OPEN HOUSE 4:30 PM - 6:00 PM followed by
PUBLIC HEARING 6:00 PM - 8:00 PM

Location: CITY HALL COUNCIL CHAMBERS, 280 MADISON AVENUE N

ORDINANCE NO. 2016-30

AN ORDINANCE of the City of Bainbridge Island, Washington, amending Titles 2, 3, 17 and 18 of the Bainbridge Island Municipal Code to ensure consistency with the updated 2016 Comprehensive Plan.

WHEREAS, the City is required by the Growth Management Act (GMA), RCW 36.70A.130, to conduct a periodic review and update of its comprehensive plan and development regulations to ensure consistency with updated state laws and population and employment projections; and

WHEREAS, the deadline to update to the City's Comprehensive Plan was June 30, 2016; and

WHEREAS, the City began working on the 2016 periodic update of the Comprehensive Plan in August 2014; and

WHEREAS, the Planning Commission began the review of each of the Comprehensive Plan's ten elements by holding a public workshop, where the Commission accepted both written and verbal comments on each of the elements; and

WHEREAS, for the 2016 Comprehensive Plan Update, the Planning Commission reviewed the *Introduction* and each element one at a time, meeting 38 times between January 2015 and August 2016 to discuss updating the elements, completing their preliminary review of all the elements on August 18, 2016; and

WHEREAS, each of the 38 Planning Commission meeting included an agenda item providing specific opportunity for public comment on the 2016 Comprehensive Plan Update; and

WHEREAS, the City issued a Determination of Non-significance regarding Ordinances No. 2016-29 and No. 2016-30 in compliance with the requirements of the State Environmental Policy Act, and

WHEREAS, the Comprehensive Plan is consistent with the Kitsap County Countywide Planning Policies, including the year 2036 population and employment allocations for the City of Bainbridge Island, and the Puget Sound Regional Council Multicounty Planning Policies, and the Growth Management Act; and

WHEREAS, the City must adopt development regulations that implement the Comprehensive Plan; and

WHEREAS, each Comprehensive Plan element has an implementation section that calls for further actions such as budget allocations, department work program additions, and community partnerships in order to fully implement the Comprehensive Plan; and

WHEREAS, the changes to the BIMC executed through this ordinance are generally the simple procedural or clarifying changes to the code that can be made without further study; and

WHEREAS, Ordinance 2016-29 adopts the update to the City’s Comprehensive Plan, and is being processes concurrently with this ordinance; and

WHEREAS, notice was given on **XX, 2016** to the Office of Community Development at the Washington State Department of Commerce in conformance with RCW 36.70A.106; and

WHEREAS, the Planning Commission conducted public hearings on both Ordinance No. 2016-29 and Ordinance No. 2016-30 on September 17 and 22, 2016; and

WHEREAS, after closing the public hearing, the Planning Commission deliberated on both Ordinance No. 2016-29 and Ordinance No. 2016-30 on **October XX, 2016 voting to recommend approval on XXXX, 2016; and**

WHEREAS, the City Council held study sessions on **October XX and November XX, 2016** on both Ordinance No. 2016-29 and Ordinance No. 2016-30; and

WHEREAS, the City Council conducted public hearings on both Ordinance No. 2016-29 and Ordinance No. 2016-30 on **XXXX, 2016; and**

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF BAINBRIDGE ISLAND, WASHINGTON, DOES ORDAIN, AS FOLLOWS:

Section 1: The Bainbridge Island Municipal Code is amended to change the name of the “Neighborhood Service Center” (NSC) zoning district to “Neighborhood Center” (NC) zoning district throughout the municipal code.

Section 2: Section 2.16.040.E *Site Plans and Design Review- Decision Criteria*, of the Bainbridge Island Municipal Code is amended to read as follows:

- 2. The locations of the buildings and structures, open spaces, landscaping, pedestrian, bicycle and vehicular circulation systems are adequate, safe, efficient and in conformance with the Island-wide Transportation Plan ~~nonmotorized transportation plan~~;

Section 3: Section 2.16.050.D *Nonagricultural Minor Conditional Use Decision Criteria*, of the Bainbridge Island Municipal Code is amended to read as follows:

- 4. The conditional use is in accord with the comprehensive plan and other applicable adopted community plans, including the Island-wide Transportation Plan ~~nonmotorized transportation plan~~;

Section 4: Section 2.16.050.E *Agricultural Minor Conditional Use Decision Criteria*, of the Bainbridge Island Municipal Code is amended to read as follows:

- 1. As agriculture is a preferred use, conditional uses that are listed as agricultural uses in Table 18.09.020 (except for agricultural research facilities) may be approved if:

- a. The conditional use will not be materially detrimental to uses or property in the immediate vicinity of the subject property; and
- b. The conditional use is in accord with the comprehensive plan and other applicable adopted community plans, including the Island-wide Transportation Plan ~~nonmotorized transportation plan~~; and
- c. The conditional use will be served by adequate public facilities including roads, water, fire protection, sewage disposal facilities and storm drainage facilities; and
- d. The conditional use complies with all other provisions of the BIMC.

Section 5: Section 2.16.070 *Short Subdivisions* of the Bainbridge Island Municipal Code is amended to read as follows:

- E. Preapplication Conference. The applicant shall provide copies of one or more proposed or “first draft” composite site plans prepared in accordance with flexible lot design standards of Title 17 and Chapter 18.12 ~~methodology as described in the Flexible Lot Design Handbook~~ for the preapplication conference.

Section 6: Section 2.16.110.D *Major Conditional Use Permit- Decision Criteria* of the Bainbridge Island Municipal Code is amended to read as follows:

1. A conditional use may be approved or approved with conditions if:
 - a. The conditional use is harmonious and compatible in design, character and appearance with the intended character and quality of development in the vicinity of the subject property and with the physical characteristics of the subject property; provided, that in the case of a housing design demonstration project any differences in design, character or appearance that are in furtherance of the purpose and decision criteria of BIMC 2.16.020.Q shall not result in denial of a conditional use permit for the project; and
 - b. The conditional use will be served by adequate public facilities including roads, water, fire protection, sewage disposal facilities and storm drainage facilities; and
 - c. The conditional use will not be materially detrimental to uses or property in the vicinity of the subject property; and
 - d. The conditional use is in accord with the comprehensive plan and other applicable adopted community plans, including the Island-wide Transportation Plan ~~nonmotorized transportation plan~~; and
 - e. The conditional use complies with all other provisions of the BIMC, unless a provision has been modified as a housing design demonstration project pursuant to BIMC 2.16.020.Q; and
 - f. All necessary measures have been taken to eliminate or reduce to the greatest extent possible the impacts that the proposed use may have on the immediate vicinity of the subject property; and
 - g. Noise levels shall be in compliance with BIMC 16.16.020 and 16.16.040.A; and
 - h. The vehicular, pedestrian, and bicycle circulation meets all applicable city standards, unless the city engineer has modified the requirements of BIMC 18.15.020.B.4 and B.5, allows alternate driveway and parking area surfaces, and

confirmed that those surfaces meet city requirements for handling surface water and pollutants in accordance with Chapters [15.20](#) and [15.21](#) BIMC; and

- i. The city engineer has determined that the conditional use meets the following decision criteria:
 - i. The conditional use conforms to regulations concerning drainage in Chapters [15.20](#) and [15.21](#) BIMC; and
 - ii. The conditional use will not cause an undue burden on the drainage basin or water quality and will not unreasonably interfere with the use and enjoyment of properties downstream; and
 - iii. The streets and pedestrian ways as proposed align with and are otherwise coordinated with streets serving adjacent properties; and
 - iv. The streets and pedestrian ways as proposed are adequate to accommodate anticipated traffic; and
 - v. If the conditional use will rely on public water or sewer services, there is capacity in the water or sewer system (as applicable) to serve the conditional use, and the applicable service(s) can be made available at the site; and
 - vi. The conditional use conforms to the “City of Bainbridge Island Engineering Design and Development Standards Manual,” unless the city engineer has approved a variation to the road standards in that document based on his or her determination that the variation meets the purposes of BIMC Title [17](#).
- j. If a major conditional use is processed as a housing design demonstration project pursuant to BIMC [2.16.020.Q](#), the above criteria will be considered in conjunction with the purpose, goals, policies, and decision criteria of BIMC [2.16.020.Q](#).

Section 7: Section 2.16.125 *Preliminary Long Subdivisions* of the Bainbridge Island Municipal Code is amended to read as follows:

- E. Preapplication Conference. The applicant shall provide copies of one or more proposed or “first draft” composite site plans prepared in accordance with flexible lot design standards of Title 17 and Chapter 18.12 methodology as described in the ~~Flexible Lot Design Handbook~~ for the preapplication conference. Applicants are required to participate in a community meeting through the city’s public participation program outlined in Resolution No. 2010-32. The meeting will be held during the preapplication conference phase of the project.

Section 8: Section 2.16.210.C *Special area plan process* of the Bainbridge Island Municipal Code is amended to read as follows:

- C. Beginning the Process. The special planning area process may be started in two different ways:
 1. The City Council may begin the process through the annual development of department work programs or biennial budget process; or
 2. Upon the written request of at least one owner of property located within a special planning area, the city council by resolution may approve the commencement of the special planning area process for that special planning area.

Section 9: Section 2.32.030 *Nonmotorized Transportation Advisory Committee* of the Bainbridge Island Municipal Code is amended to read as follows:

2.32.030 Duties and responsibilities.
The goal of the committee is to work with neighborhood groups and city staff to implement the Island-wide Transportation Plan ~~nonmotorized transportation plan~~ and advocate for nonmotorized transportation facilities, including the funding for such facilities and promotional or educational programs encouraging nonmotorized transportation. The committee will advocate for and ensure implementation of the Island-wide Transportation Plan ~~nonmotorized transportation plan~~, including but not limited to the recognition and integration of the federal, state and local emphasis on active recreation, the reduction of greenhouse gas emissions and the linkage of communities through regional connectivity.

Section 10: Chapter 3.82 *Bainbridge Island Arts and Humanities Account* of the Bainbridge Island Municipal Code is hereby repealed in its entirety.

Section 11: Chapter 3.86 *Health, Housing, and Human Services Account* of the Bainbridge Island Municipal Code is hereby repealed in its entirety.

Section 12: Section 17.12.020 *Flexible Lot Design Requirement for Single-family Subdivisions* of the Bainbridge Island Municipal Code is amended to read as follows:

- A. Requirement.
 - 1. All single-family residential short and long subdivisions within the city shall be designed in accordance with the city’s adopted flexible lot (flexlot) design requirements. If, due to site or design constraints, no homesite with supporting infrastructure can be located on a subject property, no division of land is permitted.
 - 2. Some of the flexible lot design requirements are outlined in this title and in BIMC Title 18, ~~and additional guidance is provided in the city’s flexible lot design handbook, which has been prepared and shall be maintained by the director, and made available to the public, to assist applicants in the preparation of flexible subdivision designs and applications for residential subdivisions.~~
- B. Pre-Existing Lots. Lots that have previously received final approval from the city, or that have previously received final approval from Kitsap County prior to inclusion within the city boundaries, and that do not comply with the adopted flexible lot design requirements shall be considered existing nonconforming lots, but any future resubdivision of any such lots shall comply with adopted flexible lot design requirements.
- C. Two Types of Flexible Lot Design Available. Applicants for a short or long subdivision or resubdivision shall comply with the standards in this title applicable to open space design or the standards applicable to cluster design. If an applicant does not notify the city of his or her intention to submit a cluster design, the open space design standards shall apply. In some cases, however, site constraints such as the size

and shape of the parcel or the presence of areas subject to Chapter [16.12](#) BIMC (Shoreline Master Program) or Chapter [16.20](#) BIMC (Critical Areas) result in only one of the options being feasible. The cluster design option is not available to properties located in the R-2.9, R-3.5, R-4.3, R-5, R-6, R-8 and R-14 zoning districts.

- D. Large Lot Subdivisions. As authorized by RCW [58.17.040](#)(2) or its successors, the city regulates the division of land into large lots. Large lot subdivisions shall comply with the requirements of BIMC [17.12.040](#) (General residential subdivision standards), the requirements of BIMC [17.12.060](#) (Special requirements for sensitive areas), if applicable, and the requirements of BIMC Title [18](#) for the zone district in which the property is located. Large lot subdivisions are not a form of flexlot and therefore are not subject to cluster or open space design requirements.

Section 13: Section 17.12.030.A.4 *Open space/Cluster Standards and Homesite Locations for Single-family Residential Subdivisions* of the Bainbridge Island Municipal Code is amended to read as follows:

4. Amount of Open Space Required.
- a. Basis. In determining the open space area requirement stated in subsection A.4.b of this section, the city has relied on the “Analysis of Open Space Report” dated July 15, 2003, and amended April 30, 2004, and the other reports, statutes and documents referenced in the recitals to the ordinance codified in this section (“open space documentation”). The open space documentation shall be incorporated into the record of every short or long subdivision application. In reviewing a short or long subdivision application, the city shall consider the open space documentation as presumptively valid and applicable to the short or long subdivision application.
 - b. Amount Required.
 - i. The area provided for open space shall be based on and consistent with the existing valued open space features (listed in Table 17.12.030-2) on the subject property, up to a maximum of 25 percent of the area of the property being subdivided, unless additional open space area is otherwise provided pursuant to subsection A.5 of this section.
 - ii. All lands subject to critical area regulations by Chapter [16.20](#) BIMC shall remain subject to those regulations regardless of whether they are included in the required open space designation.
 - iii. If a property being subdivided contains valued open space features as described in Table 17.12.030-2 that exceed 25 percent of the gross land area, the maximum required area for open space designation is still 25 percent, unless it includes protected critical area as regulated by Chapter [16.20](#) BIMC.
 - iv. If the gross land area contains less than 25 percent in open space features, then the designated open space is identified accordingly. ~~The flexible lot design handbook provides assistance on the methodology for designating open space areas.~~ Designated open space areas shall not be required to be dedicated to the public, and the owner shall not be required to permit public access to

designated open space areas. Landscape buffers may be included in the open space calculation as specified in Tables 18.15.010-3 and 18.15.010-45.

Section 14: Section 17.12.030.B *Open space/Cluster Standards and Homesite Locations for Single-family Residential Subdivisions* of the Bainbridge Island Municipal Code is amended to read as follows:

- B. Cluster Short and Long Subdivisions. If an applicant chooses to apply for a cluster short or long subdivision, the open space provisions of subsection A of this section shall not apply. Clustering shall be accomplished through the design standards of Title 17 and Chapter 18.12 process specified in the flexible lot design handbook. The cluster design option is not available to properties located in the R-2.9, R-3.5, R-4.3, R-5, R-6, R-8 and R-14 zoning districts. The following requirements shall apply to cluster short and long subdivisions:
1. Homesite Clustering. The purpose of clustering is to facilitate the efficient use of land by reducing disturbed areas, impervious surfaces, utility extensions and roadways. Homesites shall be located in cluster groupings and the efficient location of infrastructure shall be used to maximize the undeveloped area. Four or more homesites shall constitute a cluster grouping in a long subdivision, and two or more homesites shall constitute a cluster grouping in a short subdivision.
 - a. All homesites in a cluster grouping shall adjoin or be located a maximum of 25 feet apart from another homesite.
 - b. The city encourages design of homesite cluster groups that create open areas large enough to accommodate crop agriculture, when such areas are created. The applicant shall record covenants making it clear to lot buyers that crop agriculture may take place on the open areas.
 - c. The location of homesite cluster groups is not required to be located near any existing home on the property.
 2. Homesite Area.
 - a. The homesite area is for development of the primary residential dwelling and accessory buildings for each lot within the subdivision.
 - b. In the R-0.4, R-1, ~~and R-2, and R-2.9~~ zoning districts, a homesite area with a maximum area of 10,000 square feet shall be provided for each lot and shall be depicted on the face of the plat.
 - c. ~~In the R-3.5 and R-4.3 zoning districts, a homesite area with a maximum homesite area of 7,600 square feet shall be provided for each lot and shall be depicted on the face of the plat.~~
 - d. ~~In the R-5, R-6, R-8, and R-14 zoning districts, a homesite area with a maximum area of 5,000 square feet shall be provided for each lot and shall be depicted on the face of the plat.~~
 - e. Other allowed uses and structures, including well houses, may be located within the lot and outside the homesite area; provided, that all other applicable requirements of the BIMC are satisfied.
 - f. Designated homesites shall not include designated critical areas or their buffers.
 - g. Fencing or signage of designated critical areas shall be required pursuant to subsection A.8.a of this section.

Section 15: Section 17.12.040 *General Residential Subdivision Standards* of the Bainbridge Island Municipal Code is amended to read as follows:

- B. Homesites. Residential homesites shall be located consistent with the design standards of Title 17 and Chapter 18.12 methodology prescribed in the flexible lot design handbook.

- E. Roads and Pedestrian Access.
 - 1. Roads and access complying with the “City of Bainbridge Island Design and Construction Standards and Specifications,” and all applicable requirements of the BIMC, shall be provided to all proposed lots consistent with the standards contained within this subsection.
 - 2. A variation from the road requirements and standards contained within the “City of Bainbridge Island Design and Construction Standards and Specifications” may be approved by the city engineer through the minor variance process described in BIMC Title 2.
 - 3. Existing roadway character shall be maintained where practical. This may be accomplished through the reduction of roadway width consistent with subsection E.2 of this section, the minimization of curb cuts, and the preservation of roadside vegetation. To minimize impervious surfaces, public rights-of-way, access easements and roadways shall not be greater than the minimum required to meet standards unless the city engineer agrees that the additional size is justified.
 - 4. Connections to existing off-site roads that abut the subject property shall be required where practicable, except through critical areas and/or their buffers.
 - 5. Street names and traffic regulatory signs shall be provided, and their locations shall be indicated on the plat/plan. The location of mailboxes and traffic regulatory signs is only required to be indicated on the plat/plan when other public improvements are required.
 - 6. Transit stops shall be provided as recommended by Kitsap Transit.
 - 7. Pedestrian and bicycle circulation and access within a subdivision and onto the site shall be provided through walkways, paths, sidewalks, or trails and shall be consistent with the Island-wide Transportation Plan nonmotorized transportation plan. Pursuant to RCW 58.17.110(1) sidewalks shall be provided, where necessary, to assure safe walking conditions for students who walk to and from school. Special emphasis shall be placed on providing pedestrian access to proposed recreational and/or open space areas.

Section 16: Section 17.28.020 *Definitions* of the Bainbridge Island Municipal Code is amended to read as follows:

- 19. “Flexible lot design” is the design process the city uses that permits flexibility in lot development and encourages a more creative approach than traditional lot-by-lot subdivision. The flexible lot design process includes lot design standards, ~~guidance on~~ for the placement of buildings, use of open spaces and circulation that best addresses site characteristics. This design process permits clustering of lots, with a variety of lot sizes, to provide open space, maintain Island character and protect the island’s natural systems.

Section 17: Table 18.12.020-1 *Flexlot Dimensional Standards for Residential Zone Districts* of the Bainbridge Island Municipal Code is amended as shown in Exhibit A:

Section 18: Table 18.15.010-3 *Perimeter Landscaping Requirements by Land Use and Zoning District* of the Bainbridge Island Municipal Code is amended as shown in Exhibit B.

Section 19: Section 18.27.020 *Transfer of Development Rights* of the Bainbridge Island Municipal Code is amended to read as follows:

18.27.020 Development rights sending areas.

- A. ~~Critical Areas Overlay District.~~ All properties located outside of designated centers within the critical areas overlay district (CAOD) as designated on the land use map of the city comprehensive plan are established as development rights sending areas. ~~A copy of the critical areas overlay district is available from the department.~~
- B. Agricultural Land. Any owner of agricultural land as defined by BIMC [16.26.020](#), ~~whether located in or outside of the CAOD~~, may elect to have the agricultural land designated as a development rights sending area through the sale or transfer of the development rights of the property.
- C. Donation of Development Rights. Any owner of real property may donate all or a portion of their development rights to the city.
- D. Property Already Restricted from Development Not Eligible. Development rights are not available for real property ~~in the CAOD or agricultural land outside of the CAOD~~ that is subject to easements or covenants preventing further development of the real property.

Section 20: Section 18.36.030 *Definitions* of the Bainbridge Island Municipal Code is amended to read as follows:

- 16. “Affordable housing” or “affordable dwelling unit” (formerly “HUD-defined affordable housing”) means a dwelling unit for use as primary residence by a household in any of the income groups described below, which may be rented or purchased (including utilities other than telephone and cable TV) without spending more than 30 percent of monthly household income. Income level eligibility threshold levels shall be set using HUD levels for the Bremerton-Silverdale Seattle metropolitan statistical area.

Section 21: The Official Zoning Map of the Bainbridge Island Municipal Code is amended for consistency with the Future Land Use Map of the 2016 Comprehensive Plan, as shown in Exhibit C:

Section 22. This ordinance shall take effect and be in force on and after five days from its passage, approval and publication as required by law.

PASSED BY THE CITY COUNCIL this _____, 2016.

APPROVED BY THE MAYOR this _____, 2016.

Val Tollefson, Mayor

ATTEST/AUTHENTICATE:

Rosalind D. Lassoff, CMC, City Clerk

FILED WITH THE CITY CLERK:	XXXX, 2016
PASSED BY THE CITY COUNCIL:	XXXX, 2016
PUBLISHED:	_____
EFFECTIVE DATE:	_____
ORDINANCE NUMBER:	2016-30

DRAFT

Table 18.12.020-1 Flexlot Subdivision Dimensional Standards for Residential Zone Districts

[Numbers in brackets indicate additional requirements listed at the end of the table.]

ZONING DISTRICT	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14
DIMENSIONAL STANDARD										
MINIMUM LOT AREA										
<p>Note: Additional regulations on lot dimensions may apply pursuant to:</p> <p>(a) BIMC 17.12.030.A, flexible lot subdivision open space development option; or</p> <p>(b) BIMC 17.12.030.B, flexible lot subdivision cluster development option. <u>Cluster option not available for properties in the R-2.9, R-3.5, R-4.3, R-5, R-6, R-8, and R-14 zoning districts.</u></p>										
Open Space Short and Long Subdivision	<p>If the parcel is served by a public sewer system or the septic drainfield is located outside of the lot: 5,000 sq. ft. located outside of critical areas and their buffers (see BIMC Title 16) in every zone district except R-14. Parcels containing liquefaction hazard critical areas are exempt from the 5,000 sq. ft. requirement.</p> <p>If the septic drainfield is located within the lot: 12,500 sq. ft., of which 5,000 sq. ft. must be located outside of critical areas and their buffers. Parcels containing liquefaction hazard critical areas are exempt from the 5,000 sq. ft. requirement. The health district may require a larger lot size.</p> <p>In the R-14 district, the minimum lot area is 3,100 sq. ft.</p> <p>For all zone districts, the minimum lot size can be reduced below 5,000 sq. ft. as an incentive for providing additional open space pursuant to BIMC 17.12.030.A.5.</p>									
Short and Long Cluster Subdivision	Lot size flexible as long as minimum homesite area met per BIMC 17.12.030.B .									
	Homesite max. 10,000 sq. ft.	NA Homesite max. 7,600 sq. ft.				NA Homesite max. 5,000 sq. ft.				
Large Lot Subdivision	5 ac or 1/128th of a section, whichever is smaller									

Table 18.12.020-1 Flexlot Subdivision Dimensional Standards for Residential Zone Districts

[Numbers in brackets indicate additional requirements listed at the end of the table.]

ZONING DISTRICT	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14
DIMENSIONAL STANDARD										
MAXIMUM DENSITY (Minimum lot area per dwelling unit)										
<p>Note: Subdivisions containing irregularly shaped lots and lots containing critical areas may not be permitted to achieve maximum density. Additional regulations on density may apply pursuant to:</p> <p>(a) BIMC 16.20.160.F.5.a, Additional Development Standards for Regulated Uses, Land Divisions and Land Use Permits, Density Calculation</p>										
Short, Long, and Large Lot Subdivisions	The maximum number of lots permitted shall be calculated by dividing the total lot area of the property (without deducting areas to be dedicated as public rights-of-way or areas to be encumbered by private road easements) by the minimum lot area for standard lots in the zone district.									
Base Density	100,000 sq. ft.	40,000 sq. ft.	20,000 sq. ft. [1]	15,000 sq. ft. [2]	12,500 sq. ft. [2]	10,000 sq. ft. [2]	8,500 sq. ft.	7,260 sq. ft.	5,400 sq. ft.	3,100 sq. ft.
Bonus Density pursuant to BIMC 18.12.030.A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,630 sq. ft.	2,074 sq. ft.
MINIMUM LOT DIMENSIONS										
<p>Note: Additional regulations on lot dimensions may apply pursuant to:</p> <p>(a) BIMC 17.12.030.A, flexible lot subdivision open space development option, or</p>										

Table 18.12.020-1 Flexlot Subdivision Dimensional Standards for Residential Zone Districts

[Numbers in brackets indicate additional requirements listed at the end of the table.]

ZONING DISTRICT	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14
DIMENSIONAL STANDARD										
(b) BIMC 17.12.030 .B, flexible lot subdivision cluster development option. <u>Cluster option not available for properties in the R-2.9, R-3.5, R-4.3, R-5, R-6, R-8, and R-14 zoning districts.</u>										
Short, Long, and Large Lot Subdivisions	Minimum lot width shall be 50 ft. unless the shoreline master program requires a larger width. Insofar as practical, side lot lines shall be at right angles to street lines or radial to curved street lines. The size, shape, and orientation of lots shall be appropriate for the type of development and use contemplated. Corner lots may be required to be platted with additional width to allow for the additional side yard requirements. When consistent with neighborhood character, subdivision lots situated along public streets should be configured to allow future houses to face the street, but this requirement does not apply to short plats or large lots.									
MAXIMUM LOT COVERAGE [3]										
Short and Long Subdivision	Same as applied to the entire property that is the subject of the subdivision application, a portion of which shall be assigned to each lot at the time of preliminary plat approval.									
Large Lot Subdivision	10%	15%	20%	25%	25%	25%	25%	N/A	25%	40%
MINIMUM SETBACKS										
Note: Landscaped areas may serve as setbacks (i.e., setbacks are not in addition to landscaped areas), and some encroachments into setback areas are permitted pursuant to BIMC 18.12.040 .										
Note: Additional setbacks may be required by:										
(a) Chapter 16.08 or 16.12 BIMC, or										
(b) Chapter 16.20 BIMC, Critical Areas, or										

Table 18.12.020-1 Flexlot Subdivision Dimensional Standards for Residential Zone Districts

[Numbers in brackets indicate additional requirements listed at the end of the table.]

ZONING DISTRICT	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14
DIMENSIONAL STANDARD										
(c) BIMC 16.28.040 , mining regulations, or (d) BIMC 18.09.030 , Use-specific standards, or (e) BIMC 18.12.030.F , Shoreline Structure Setbacks, or (f) BIMC 18.15.010 , landscaping and screening.										
Short, Long, and Large Lot Subdivisions [4]										
Bldg. to bldg.	0 ft. 10 ft. , or minimum required by the fire code, whichever is greater									
Building to exterior plat boundary line	25 ft.	15 ft.								
Building to SR 305 right-of-way	75 ft.									
Building to other arterial and collector rights-of-way	50 ft.				40 ft.					
Building to other streets	15 ft.									
Building to trail, open space or access easement (except for open space areas that are	10 ft.									

Table 18.12.020-1 Flexlot Subdivision Dimensional Standards for Residential Zone Districts

[Numbers in brackets indicate additional requirements listed at the end of the table.]

ZONING DISTRICT	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14
also roadside or landscape buffers)										
Cluster Subdivisions: Homesite clustering	All homesites in a cluster grouping shall adjoin or be located a maximum of 25 feet apart from another homesite.			NA						
Shoreline Jurisdiction	See Table 16.12.030-2, Dimensional Standards Table, and BIMC 18.12.030.F , Shoreline Structure Setbacks. For properties abutting the shoreline, the native vegetation zone required by BIMC 16.12.030 and Table 16.12.030-3 replaces the zoning setbacks along the water.									
MAXIMUM BUILDING HEIGHT										
Note: Bonus may not be available in the shoreline jurisdiction										
Short, Long, and Large Lot Subdivisions	Height requirements for standard lots apply (see end of table)									

[1] The base density for that parcel in the Lynwood Center special planning area designated as R-2 is one unit per 20,000 sq. ft., but may be increased up to 3 units per acre; provided, that a public access easement is granted for that portion of the parcel that lies to the south of Point White Drive along the waters of Rich Passage. The base density of some parcels in the Fort Ward historic overlay district may be increased as shown in BIMC [18.24.070](#).

[2] Pursuant to Chapters [18.18](#) and [18.27](#) BIMC the minimum lot area for a dwelling unit shall be 5,400 square feet for that area designated on the official land use map as the urban single-family overlay district (R-8SF). All other requirements of this chapter shall apply.

[3] Educational, governmental, cultural, religious, and health care, within residential zone districts must be processed as major conditional use permits pursuant to BIMC [2.16.110.E](#).

[4] For flexlot subdivisions and short plats, setbacks from rights-of-way may be reduced to maintain neighborhood character by establishing building setbacks equal to or greater than the existing building setbacks on the adjacent properties. Where there are no developed properties adjacent to the property being subdivided, the setbacks in Table 18.12.020-1 shall apply.

Table 18.15.010-3: Perimeter Landscaping Requirements by Land Use and Zoning District

Abutting Zoning or Land Use District	Perimeter Landscape Type	Perimeter Width (ft.)	Minimum Perimeter Width (ft.)
Multifamily in R-2, R-1 and R-0.4 Districts			
Single-family residential	Full Screen	25	25
R-8 and R-14 Multifamily Districts			
R-4.3 (urban residential)	Partial Screen	20	15
Short Plats and Subdivisions in Residential Zoning Districts [1]			
Residential subdivision in the R-0.4, R-1, <u>and</u> R-2, <u>and</u> R-2.9 districts (cluster option only)	Edge Planting Standard	25	25
Residential subdivision in the R-3.5, R-4.3, R-5, R-6, R-8, and R-14 districts (cluster option only)	Edge Planting Standard	40	40
Multifamily subdivision in the R-2, R-1, and R-0.4 zoning districts (cluster option only)	Full Screen	25	25
Park and conservation land buffer: applies to all single-family subdivisions (OS) [2]	Edge Planting Standard	25	25
Nonresidential Uses in Areas Outside Winslow Mixed Use, HSR, NSC, B/I, WD-I Districts			
Residential including multifamily	Full Screen	25	25
Nonindustrial uses	Partial Screen	20	10
Winslow Town Center Mixed Use District [3]			
Single-family residential	Full Screen	20	15
HSR I and II Districts			
Single-family residential	Full Screen	20	15

Table 18.15.010-3: Perimeter Landscaping Requirements by Land Use and Zoning District

Abutting Zoning or Land Use District	Perimeter Landscape Type	Perimeter Width (ft.)	Minimum Perimeter Width (ft.)
NSC Districts			
Residential including multifamily	Full Screen	20	15
B/I Districts			
Non-B/I	Full Screen [4]	50	35
WD-I Districts			
Residential including multifamily	Full Screen	40	30
Nonindustrial uses	Full Screen	25	15
<p>[1] Properties with less than one acre being subdivided are not subject to perimeter buffer requirements.</p> <p>[2] (OS) indicates that the buffer may be calculated in the required open space area for the subdivision.</p> <p>[3] For perimeter landscaping requirements in the ferry terminal district transition area, north of Winslow Way, reference BIMC 18.12.030.C.</p> <p>[4] This perimeter buffer applies even when a private access road separates a B/I property from non-B/I property.</p>			



City of Bainbridge Island Future Land Use Map

Port Maason
CITY OF BAINBRIDGE ISLAND

August 15, 2016

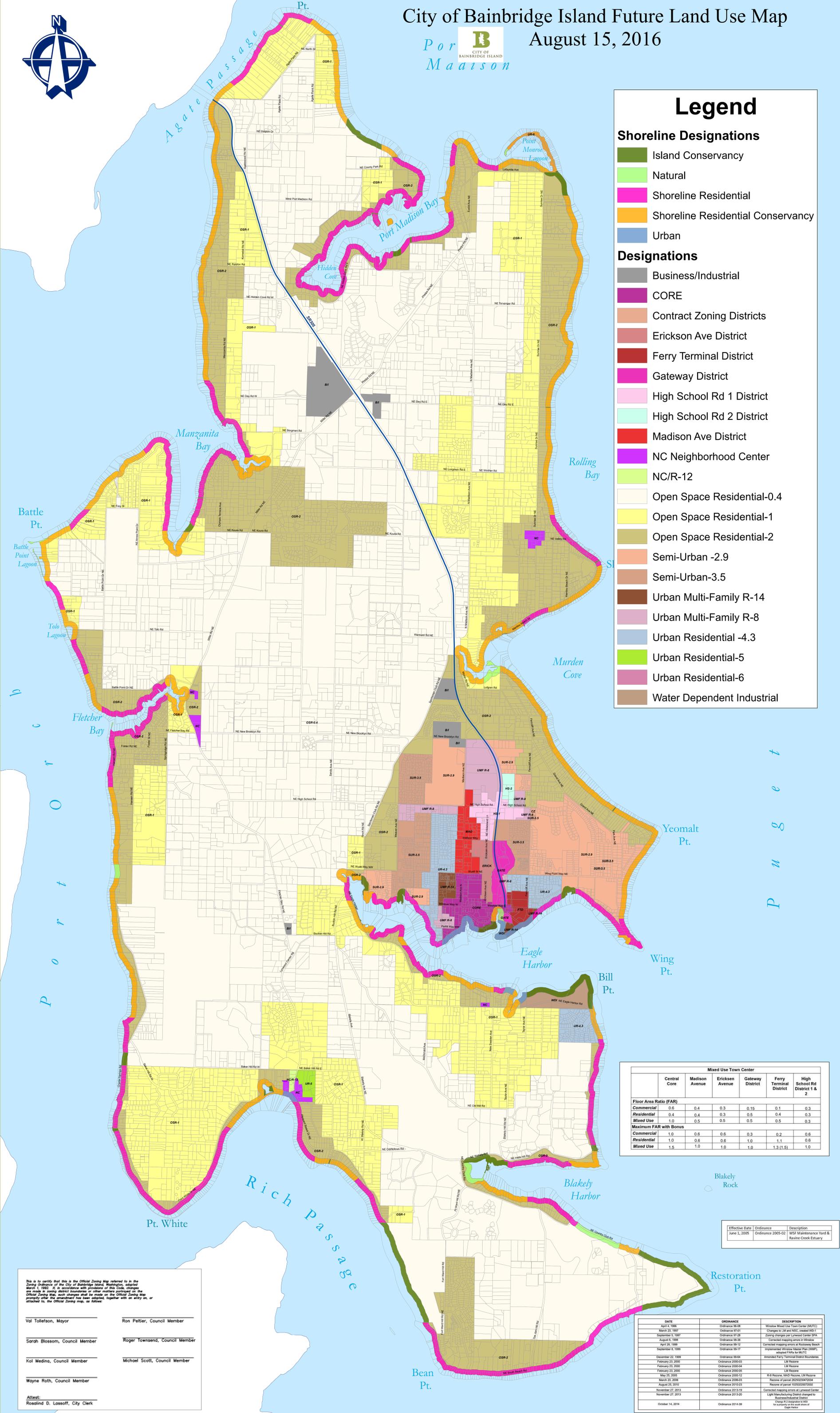
Legend

Shoreline Designations

- Island Conservancy
- Natural
- Shoreline Residential
- Shoreline Residential Conservancy
- Urban

Designations

- Business/Industrial
- CORE
- Contract Zoning Districts
- Erickson Ave District
- Ferry Terminal District
- Gateway District
- High School Rd 1 District
- High School Rd 2 District
- Madison Ave District
- NC Neighborhood Center
- NC/R-12
- Open Space Residential-0.4
- Open Space Residential-1
- Open Space Residential-2
- Semi-Urban -2.9
- Semi-Urban-3.5
- Urban Multi-Family R-14
- Urban Multi-Family R-8
- Urban Residential -4.3
- Urban Residential-5
- Urban Residential-6
- Water Dependent Industrial



Mixed Use Town Center						
	Central Core	Madison Avenue	Erickson Avenue	Gateway District	Ferry Terminal District	High School Rd District 1 & 2
Floor Area Ratio (FAR)						
Commercial	0.6	0.4	0.3	0.15	0.1	0.3
Residential	0.4	0.4	0.3	0.5	0.4	0.3
Mixed Use	1.0	0.5	0.5	0.5	0.5	0.3
Maximum FAR with Bonus						
Commercial	1.0	0.6	0.6	0.3	0.2	0.6
Residential	1.0	0.6	0.6	1.0	1.1	0.6
Mixed Use	1.5	1.0	1.0	1.0	1.3 (1.5)	1.0

Effective Date	Ordinance	Description
June 1, 2005	Ordinance 2005-02	WSF Maintenance Yard & Ravine Creek Estuary

This is to certify that this is the Official Zoning Map referred to in the Zoning Ordinance of the City of Bainbridge Island. Revisions, adopted March 7, 1992. If, in accordance with provisions of this Code, changes are made in zoning district boundaries or other matters authorized on the Official Zoning Map, such changes shall be made on the Official Zoning Map promptly after the amendment has been adopted, together with an entry on, or attached to, the Official Zoning map, as follows:

Val Tollefson, Mayor
 Sarah Blossom, Council Member
 Kol Medina, Council Member
 Wayne Roth, Council Member

Ron Pelletier, Council Member
 Roger Townsend, Council Member
 Michael Scott, Council Member

Attest:
 Rosalind D. Lossoff, City Clerk

DATE	ORDINANCE	DESCRIPTION
April 4, 1996	Ordinance 96-08	Winlow Mixed Use Town Center (MUTC)
March 23, 1997	Ordinance 97-01	Changes to LM and NCC created WSF-1
September 8, 1997	Ordinance 97-08	Zoning changes per Lynwood Center SPA
August 6, 1998	Ordinance 98-38	Corrected mapping errors in Winlow
April 28, 1999	Ordinance 99-12	Corrected mapping errors at Rockaway Beach
September 8, 1999	Ordinance 99-17	Implemented Winlow Master Plan (WMP) adopted FARs for MUTC
December 31, 1999	Ordinance 99-54	Amended Ferry Terminal District Boundaries
February 23, 2000	Ordinance 2000-03	LM Rezone
February 23, 2000	Ordinance 2000-04	LM Rezone
February 23, 2000	Ordinance 2000-05	LM Rezone
May 25, 2005	Ordinance 2005-12	R-8 Rezone, MAD Rezone, LM Rezone
March 23, 2006	Ordinance 2006-03	Rezone of parcel 262502004/2004
August 25, 2010	Ordinance 2010-23	Rezone of parcel 102502000/2000
November 27, 2013	Ordinance 2013-19	Corrected mapping errors at Lynwood Center
November 27, 2013	Ordinance 2013-20	Light Manufacturing District changed to Business/Industrial District
October 14, 2014	Ordinance 2014-38	Change R-12 designation to WSF for a portion of the south area of Eagle Harbor