

*“The outcome of the city will depend on the race between the automobile and the elevator, and any one who bets on the elevator is crazy.”*

*- Frank Lloyd Wright, Architect (1867-1959)*

## **CHAPTER 3: TRANSPORTATION & PEDESTRIAN IMPROVEMENTS**

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The Transportation Element has, as its primary focus to support the Land Use Element of the Keyport Community Plan, but also complements each of the other elements. The transportation element goes beyond a discussion of how efficiently automobiles can get into or out of Keyport, or even from one place to another within Keyport, but a real examination of what the transportation needs are to ensure an overall healthy, vibrant community. The result is an extensive dialogue about all modes of travel. The transportation element emphasizes the need to consider pedestrians and bicycles in transportation planning, the creation of a walkable center with an appealing streetscape, and setting standards on the main arterial to enable efficient automobile mobility while protecting neighborhood character and safety.

The Transportation Element responds to the numerous state and county mandates articulated in the GMA and the County Wide Planning Policies. As an

integral part of the regional transportation fabric, this plan relies heavily on working with the Washington State Department of Transportation (WSDOT), the Navy, Kitsap County, and Kitsap transit agencies to ensure safe, reliable, and effective transportation within Keyport and the surrounding areas. A well-coordinated transportation system will enhance the quality of life in Keyport and the surrounding area while increasing the efficiency of land use and the provision of quality services.

This discussion summarizes the existing conditions of transportation facilities within the Keyport planning area. This discussion also includes an analysis of the Future Conditions of the transportation facilities within the planning area and potential impacts associated with a proposed Limited Area of More Intense Rural Development. Finally, the discussion identifies proposed transportation improvements to mitigate potential impacts.

This plan is also supportive of, and consistent with, certain state, regional, and existing Kitsap County transportation plans as well as incorporating local preferences. Previous historical transportation documents have also been reviewed to acknowledge past decision that created the existing transportation network. The following documents have been reviewed and incorporated to ensure consistency of this Community Plan with current plans and adjacent areas;

- Kitsap County Comprehensive Plan 10-Year Update, December 2006
- Kitsap County Parks, Recreation & Open Space Plan, June 2000, Updated June 2006
- The Mosquito Fleet Trail Master Plan, August 2001
- Kitsap County Bicycle Facilities Plan, May 2001
- Kitsap County Greenways Plan, June 1996
- Washington State Highway System Plan, 2003-2022 (WSDOT)
- Highways of Statewide Significance – Update 2003
- Puget Sound Regional Council (PSRC), Destination 2030, Metropolitan Transportation Plan, 2001
- Kitsap Transit, Transit Development Plan 2006-2012, 2006

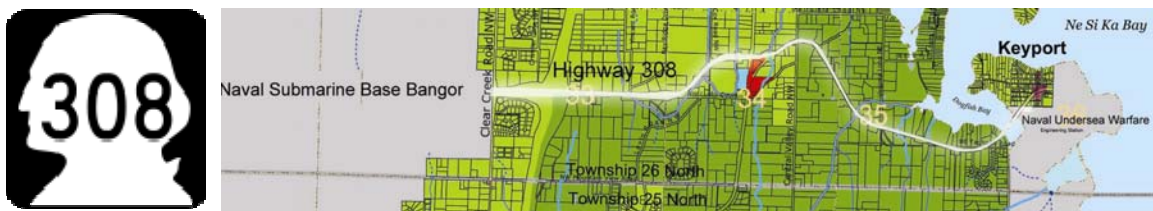
### **3.1 Vehicular Transportation Infrastructure & Services**

#### **3.1.1 Existing Roads and Infrastructure**

Below are the existing vehicular transportation infrastructure and roads available within the Keyport Village boundary.

## Washington State Facilities

State Route 308 is the sole vehicular public entry into the Keyport community and is identified as a Urban Minor Arterial under the Federal Functional Classification and Kitsap County roadway category. When the current state highway numbering system was first posted in January 1964, the highway that is now SR 308 was signed as part of SR 303. In 1971, the E-W portion of SR 303 from SR 3 to Keyport was renumbered SR 308 through the Revised Code of Washington (RCW 47.17.567). In the later 1970s, a freeway was built west of the earlier SR 3 alignment from Silverdale to Poulsbo. SR 308 was extended west from old SR 3, now Silverdale Way/Viking Way, to the freeway. The SR 3/SR 308 interchange also serves the main gate to the Bangor US Naval Submarine Base located west of SR 3. Today, SR 308 is 3.42 miles long.



**Figure 3.1.1 Washington State Route 308**

State Route 308 is a two lane roadway with a typical 100 foot right-of-way at most sections. The right-of-way widens within Keyport to 120 foot wide for a short section at the intersection of NE Fir Street. Typical travel lane width is 10-12 feet wide, with an average of four feet of paved shoulders on either side. Speeds along most of Highway 308 are 50 Miles per hour with a reduced speed of 35 miles per hour at the intersection of Keyport Trace Road as the roadway curves to meet Brownsville Highway. Within Keyport the speed limit is also 35 miles per hour.

The major intersections along the Highway 308 corridor serving Keyport are located at State Route Highway 3 overpass, the controlled light intersection of Viking Way / Silverdale Way, a controlled light intersection located at Scandia Way / Central Valley Road, the stop sign controlled intersection with Brownsville Highway, and the controlled light intersection with the main access gate to the Keyport Naval Base. An uncontrolled intersection of importance to Keyport is the intersection of Highway 308 and Washington Avenue NW

The Highway 308 entrance to the Keyport Community is across a causeway built over Dogfish Bay. The causeway right-of-way is 100 feet wide with two travel lanes of



**Figure 3.1.2 State Route 308 causeway across Dogfish Bay.**

approximately 12 feet wide each with concrete barriers on either side of the roadway to keep vehicles from veering off into the bay. The pedestrian paths across the causeway are the paved shoulders on either side of the travel lanes within the concrete barriers and vary in width from 2 feet to 6 feet. Outside of the concrete barriers includes embankments providing the road bed out of Dogfish Bay. The east side of the causeway also includes power poles and power lines that provide the electrical connection for the Keyport community.

### County Facilities

The Kitsap County roads in the Keyport community, other than State Route 308 are all designated as local access roads under the Federal classification system, with a maximum speed limit of 25 miles per hour. The Kitsap County road log number and a brief description is provided for each roadway within Keyport.

*Washington Avenue NE (Road Log #59290)* is a two lane roadway that runs North / South from the north terminus at the Port of Keyport docks to the south terminus at the Naval Undersea Museum Gate. It has a 50 foot wide right-of-way, two-lane concrete cross-section, parking on both sides, with concrete curb, gutter, & four foot wide sidewalks on both sides. Washington Avenue NE is identified as the primary commercial avenue within Keyport.

*Elwha Terrace NE (Road Log #59252)* is a two lane roadway that runs diagonally Northwest /Southeast from the north waterfront edge of Keyport to the south terminus at NE Pleasant Avenue. Elwha Terrace NE also serves as an electrical transmission corridor with an aerial tower located at the northern terminus within a 50 cul-de-sac where the overhead power lines cross Liberty Bay to link with Lemolo and to the southern terminus near NE Pleasant Avenue and the Keyport Saltwater Park where the electrical lines route over Highway 308 into the Naval Undersea Museum. The roadway consists of a 30 foot wide right-of-way, two-lane asphalt cross-section, with narrow asphalt shoulders on both sides. Elwha Terrace NE has no streetlights, curbs, gutters, or sidewalks.

*Sunset Avenue NE (Road Log #59385)* is a two lane roadway that runs North / South from the north waterfront edge of Keyport to the south terminus at NE Pleasant Avenue. The roadway consists of a 30 foot wide right-of-way, two-lane asphalt cross-section, with narrow asphalt shoulders on both sides. The Sunset Avenue NE right-of-way is undeveloped north of NE Pacific Avenue and the entire developed portion of Sunset Avenue NE has no streetlights, curbs, gutters, or sidewalks.

*Aland Lane NE (Private)* ) is a private roadway that runs North / South with the south terminus at NE Petterson Road. The roadway shows of a 20 foot wide easement, two-lane asphalt cross-section, with narrow asphalt shoulders on both sides. Aland Lane NE has no streetlights, curbs, gutters, or sidewalks.

*Cove Point Lane NE* (Road Log #59210) is a roadway at the western edge of Keyport that runs North / South, and with the south terminus at NE Petterson Road. The roadway shows of a 20 foot wide easement, two-lane asphalt cross-section, with narrow asphalt shoulders on both sides. Cove Point Lane NE has no streetlights, curbs, gutters, or sidewalks.

*NE Grandview Boulevard* (Road Log #59440) is a two lane roadway that runs East / West from western terminus near the Sunset Avenue NE right-of-way (undeveloped) to the eastern terminus that ends at the fenced property line of the Keyport Naval Station.. The roadway consists of a 40 foot wide right-of-way, two-lane asphalt cross-section, with asphalt shoulders on both sides. NE Grandview Boulevard has no streetlights, curbs, gutters, or sidewalks.

*NE Pacific Avenue* (Road Log #59180) is a two lane roadway that runs East / West from western terminus at the corner of Sunset Avenue NE to the eastern terminus that ends at the fenced property line of the Keyport Naval Station. The roadway consists of a 50 foot wide right-of-way, two-lane asphalt cross-section, parking with wide asphalt shoulders on both sides. NE Pacific Avenue has no streetlights, curbs, gutters, or sidewalks.

*NE Petterson Road* (Road Log #59200 & #59201) is a two lane roadway that runs East / West with a southern jog (thus the Road Log #59201) that terminates in the western waterfront of the Keyport peninsula to the eastern terminus with an intersection at Sunset Avenue. The roadway consists primarily of a 30 foot wide right-of-way with a varying width as wide as 40 feet for a small section, narrow 20 foot sections, and the most narrow westernmost jog of 15 foot wide. The roadway includes both a single and two-lane asphalt cross-section, with narrow asphalt shoulders on both sides. NE Petterson Road has no streetlights, curbs, gutters, or sidewalks.

*NE Poulsbo Road* (Road Log #59380) is a two lane roadway that runs East / West from western terminus at Sunset Avenue NE to the eastern terminus that ends edge of Highway 308 in the center of Keyport. The roadway consists of a 40 foot wide right-of-way, two-lane asphalt cross-section, parking with asphalt shoulders on both sides. NE Poulsbo Road has no streetlights, curbs, gutters, or sidewalks.

*NE Stiles Road* (Road Log # 59291) is a narrow roadway that was originally platted as an alley that runs East / West from western terminus at Washington Avenue NE to the eastern terminus that ends at the fenced property line of the Keyport Naval Station. The roadway consists of a 16 foot wide right-of-way, single lane asphalt cross-section, with narrow asphalt shoulders on both sides. NE Stiles Road has no streetlights, curbs, gutters, or sidewalks.

*NE Harvard Avenue* (Road Log #59250) is a two lane roadway that runs East / West from western terminus at Sunset Avenue NE to the eastern terminus that

ends edge of Highway 308. The roadway consists of a 40 foot wide right-of-way, two-lane asphalt cross-section, parking with asphalt shoulders on both sides. NE Harvard Avenue has no streetlights, curbs, gutters, or sidewalks.

*NE Pleasant Avenue* (Road Log #59420) also known as NE Pleasant Alley is a narrow roadway that was originally platted as an alley that runs East / West from western terminus at Sunset Avenue NE to the eastern terminus that ends at the intersection with Elwha Terrace NE. The roadway consists of a 16 foot wide right-of-way, single lane asphalt cross-section, with narrow asphalt shoulders on both sides. NE Pleasant Avenue has no streetlights, curbs, gutters, or sidewalks.

*NE Fir Street* (Road Log #59295) is a two lane roadway that runs East / West from western terminus at the edge of Highway 308 to the eastern terminus that ends at the intersection of Washington Avenue NE. The roadway consists of a 30 foot wide right-of-way, two-lane asphalt cross-section, parking with asphalt shoulders on both sides with the Naval Undersea Museum fence located at the southern right-of-way edge.. NE Fir Street has no streetlights, curbs, gutters, or sidewalks.

### 3.1.2 Traffic Analysis

#### Methodology

Capacity analyses are described in terms of Level of Service (LOS.) LOS is a qualitative term that describes the operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval which can range from LOS A (little or no delay) to LOS F (long delays, congestion). Measurements of LOS are a comparison of a roadway volume (V) to a roadway capacity (C), with the equation volume / capacity (V / C) measuring the ratio of the two. Kitsap County has adopted LOS C ( $v/c = 0.79$ ) as the minimal standard for roadways and intersections for rural roadways. Under current conditions, all roadways in the study area are considered to be rural in nature (minimum LOS of C), with the exception of state routes, where WSDOT has adopted LOS D as the V/C threshold and the Puget Sound Regional Council adopted LOS C as the V/C threshold.

The maximum theoretical vehicle-carrying capacity of a roadway is determined to be approximately 18,000 to 22,000 vehicles per lane per day. There are, however, many factors that can reduce the actual capacity of particular roadway segments. These factors include lower posted speeds, the presence of driveways or cross-streets, narrow lane widths, and pedestrian activity. The placement of traffic signals can also lower the capacity of a roadway segment.

## Existing Conditions

Volumes for Average Daily Traffic (ADT) on the existing network for 2007 are shown on Table 3.1.2. Volumes for 2005 were based on traffic count data collected by the Washington State Department of Transportation (WSDOT), with additional counts on county roads provided by Kitsap County Public Works in 2007. Based on the existing roadway conditions and daily traffic volumes, all roadway segments providing access to the area under normal conditions presently operate at a volume-to-capacity ratio less than 0.60 which is Level of Service A, or well above the acceptable Level of Service standards for Kitsap County roadways.

<b>Table 3.1.2: 2006-7 LOS and V/C Comparison</b>				
<b>Roadway</b>	<b>Average Daily Traffic 2005 Volumes</b>	<b>Capacity : number of vehicles at LOS C</b>	<b>Volume- to- Capacity Ratio</b>	<b>LOS</b>
Highway 308 at SR 3 off ramp (Milepost 0.10)	7,800	29,600 (4 Lanes)	.26	A
Highway 308 after Silverdale Way / Viking Way (Milepost 1.24)	11,000*	29,600 (4/2 Lanes)	.37	A
Highway 308 before Brownsville Highway (Milepost 3.00)	7,000*	14,900 (2 Lanes)	.47	A
Highway 308 after Brownsville Highway (Milepost 3.01)	6,100*	14,900 (2 Lanes)	.41	A
Highway 308 after Naval Base Keyport Exit	n/a (assumed less than 6,100)	14,900 (2 Lanes)	n/a	A (est.)

\* Based upon actual 2007 traffic counts & 2005 Annual Traffic Report, WSDOT

## Future Conditions

The capacity limits for narrowest portions of Highway 308 traffic concurrency would fall below acceptable levels of service at a capacity of 11,771 vehicles per day. With an accepted average growth rate of 2.2% per year, at the current rates, all roadway segments studied are expected to operate at or above the acceptable Level of Service standards for Keyport area Kitsap County roadways to 2025 and possibly far beyond.

### Current Scheduled Improvements

No scheduled improvements are proposed for 2007 in either the Washington State Transportation Improvement Program (STIP) for Highway 308 or 2007 improvements for any Keyport community roads for the Kitsap County Six-Year Transportation Improvement Program (TIP).

#### 3.1.3 Parking

Parking of vehicles in the Keyport community at peak employment or special event occasions is a concern for the community. Parking in Keyport is handled informally, with the majority of on street parking for the commercial district occurring in on the State Highway 308 right-of-way east of Washington Avenue NE.

The majority of public and private parking spaces are located on either side of Washington Avenue NE. The majority of parking providers in Keyport are: the Naval Undersea Museum, Keyport Bible Church, Keyport Continental Motel, the office Building on Poulsbo Avenue, Whiskey Creek Tavern, Keyport Auto Repair, Keyport Post Office, Keyport Mercantile, and the Port of Keyport.

Given the proximity of the Naval Base Keyport, existing public or private parking spaces within the Keyport community are utilized during peak employment hours (weekdays, 9 am to 4 pm) by Naval Base staff and consultants. Providing a consistent and reliable parking solution for day to day needs has been identified as a necessary component to support the revitalization efforts of the Keyport commercial district.



**Figure 3.1.3 Keyport Parking in the 1920s.**

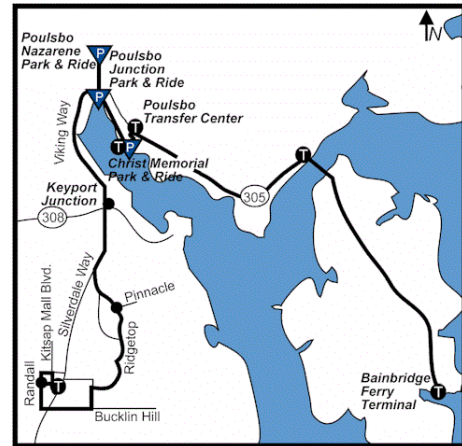
### **3.2 Transit**

#### Transit Services

Kitsap Transit is the transit provider for Kitsap County and currently provides worker vanpool and ACCESS services to the Keyport area. The low population of Keyport as an employment center, retail center, or as a residential community limits the availability of transit services enjoyed by more populous, urbanized areas of the County.

Bus Service

The nearest Kitsap Transit main Bus Route is #33 which is a commuter route from the Silverdale Mall transit center to Poulsbo with final service to the Bainbridge Ferry dock and linkages to Seattle at peak commuter times during the morning and evening hours. The Keyport community can access this bus route at an existing bus stop located at the intersection of Highway 308 and Silverdale Way / Viking Way, otherwise known as Keyport Junction. The shuttle route provides a total of

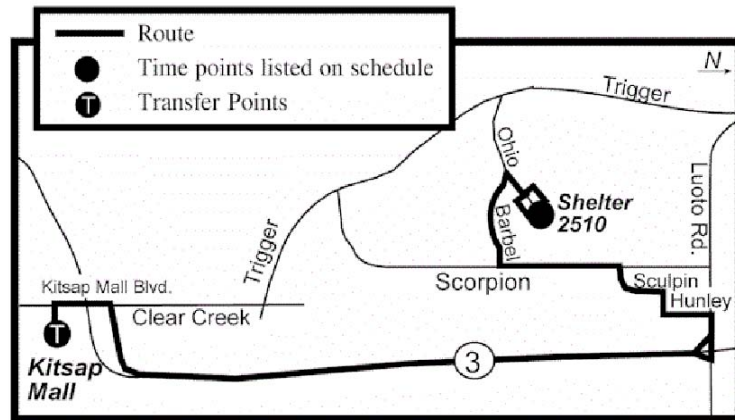


**Figure 3.2.1 Kitsap Transit Bus Route #33**

16 trips daily between those two stops. Discussions with Kitsap Transit officials have included the possibility of a Park and Ride at the Keyport Junction location to provide further access to these and other transit routes.

Shuttle Route

Presently, Kitsap Transit Shuttle Route #34 provides transit access from the Silverdale Mall transit center to the Bangor Naval Base. The shuttle route provides a total of 16 trips daily between those two stops. Discussions with Kitsap Transit officials have led to the proposal that the Shuttle Route #34 could reduce a possibility of three trips from Bangor and transfer those trips to



**Figure 3.2.2 Kitsap Transit Bus Route #34 Bangor Shuttle**

provide three services per day to Keyport.

Van Pool

Kitsap Transit’s fleet of vanpool vehicles are available for groups of five or more. Vanpools provide the flexibility of serving a number of businesses with a number of different pick-up points. Kitsap Transit also serves the disabled or elderly through their ACCESS shuttle program. These shuttles are specially designed for the needs of their clientele providing home to destination service.

## Van Link

The Van Link program is designed to provide local social agencies with vans to transport their clients. This program gives the agencies the ability to schedule client outings, work programs, daycare and training as their schedule dictates. The Kitsap Transit Van Link program gives agencies more control over scheduling client outings or work programs. Kitsap Transit has indicated the Van Link program may be a promising solution to serve the Keyport community with alternative transit options while accommodating the limited population of the community.

## Park and Ride Lots

Kitsap Transit serves and operates a network of commuter park-and-ride lots throughout Kitsap County and encourages their use to reduce traffic congestion around ferry terminals and major employment sites. Service to Kitsap County's four Washington State Ferry terminals, Kitsap Transit Foot Ferry, Puget Sound Naval Shipyard, Bangor, Keyport and other employment sites is provided by regular routed bus service, and worker/driver buses or vanpools. As an alternative to bus transit, commuters and carpools are encouraged to meet at and utilize the park-and-ride lots. Most of the park-and-ride lots have lights and shelters for passengers waiting for buses; a few have telephones and other user amenities. Many of the lots have specific rules posted as to allowed use and maximum time limits. The nearest park and ride lots serving Keyport are located at 7555 Old Military Road in Bremerton located approximately 6.5 miles to the south of Keyport or the Park and Ride lot at the Poulsbo Junction intersection of Lindvig Way and Viking Way approximately 5.4 miles to the north of Keyport.

The potential for construction of a park and ride lot at Keyport Junction (the intersection of State Route 308 and Silverdale Way) was discussed with representatives of Kitsap Transit. Keyport Junction was identified as a natural crossroads for commuters heading west to Bangor Sub Base, heading north to Poulsbo and Seattle, and for heading south to Bremerton and Port Orchard. It was noted that "the Airporter", the shuttle bus to Sea-Tac Airport, utilizes Keyport Junction as an existing stop.

The transit agency indicated that although the Keyport Junction was not identified as a transportation priority in the six year capital improvement plan, the twenty year plan may explore future improvements for Keyport Junction as the population increases in the area.

### 3.3 Other Transportation Options

#### Rail

Historically, the Keyport Naval Base included a narrow gauge rail line and electric locomotive as part of the torpedo storehouse and infrastructure in 1915. The Keyport Station railroad was built to relieve laborers of the tough job of hauling torpedoes from shop to dock with hand-drawn carts. In 1922 an electric car replaced a steam locomotive which had a tendency to throw sparks and set off grass fires. The battery operated electric train had a row of flat cars which went in one side and out the other of buildings such as this which were constructed to accommodate the Station's narrow-gauge railroad hauling torpedoes and freight to and from the piers.

Keyport is presently not served by a public rail line and within the planning horizon, no provisions or plans include installation of a rail line to the Keyport community or to Naval Base Keyport. The Naval Base Keyport narrow gauge rails on have since been paved over with concrete and the locomotive has been removed. The nearest existing rail line to Keyport is the existing Bremerton to Bangor Rail Line owned and operated by the Navy. The existing rail infrastructure is located approximately 5 ½ miles to the south west from Keyport.

#### Marine

The Keyport community was historically founded based upon Marine transport as the sole means of transportation for people and goods. In the early 1900's the Athalon was run by the Liberty Bay Transportation Company in the Seattle-Poulsbo route. In those days, it was in stiff competition with the Hyak. Every run was a race and the prize, the pick of all the freight and passengers. In 1908, the Kitsap ran from the Colman Dock in Seattle for Suquamish-Lemolo-Poulsbo-Scandia- Pearson-Keyport In 1926, the Kitsap Line ran passenger and freight ferries from Pier 3 in Seattle on the Port Madison-Keyport-Poulsbo route.

Keyport continues to benefit from both excellent public and private access to waterfront facilities that continue to provide the ability to foster marine



**Figure 3.3.1 Keyport Station Narrow Gauge Railroad – 1915, 1922, & 2006**

transportation as a viable solution for moving goods and services. Presently, the majority of marine transport in Keyport is either for recreation purposes or for the Navy. Keyport is served by private marine transport agencies such as Northwest Electric Boat Rentals and similar services.

### Air

Air transport to Keyport is limited with no existing public or private air transport facilities. Keyport is provided with proximity to “the Airporter”, a shuttle bus to Sea-Tac Airport, that utilizes Keyport Junction (the intersection of State Route 308 and Silverdale Way) as an existing stop. Keyport also benefits from the proximity to the Poulsbo Seaplane Base #83Q with water runways in Liberty Bay, Runway 13 and Runway 31 located approximately 1.5 miles to the north west of Keyport. Please refer to Chapter 5.1 *Port of Keyport* for description of existing and proposed Sea Plane public dock facilities. All private docks described in Chapter 5: *Port Improvements & Waterfront Development*, are also viable candidates for potential private Sea Plane waterfront access.



**Figure 3.3.2 Mosquito Fleet Ferry, Athalon**

Flight restriction zones have been designated in the Washington State Department of Ecology, Central Puget Sound Geographic Response Plan to minimize disturbance to certain wildlife species. An identified location could represent a marine mammal haulout site, a seabird or heron colony, or the individual nest of a sensitive species such as bald eagle. The no-fly bubble is the area within a 1,500 foot radius and below 1,000 feet in altitude around the location.

All aircraft, including those from the government, contractors or media, are expected to avoid these zones when restrictions are in effect. In the event that one of these zones must be entered during a spill response, clearance must be obtained from the Washington Department of Fish and Wildlife (WDF&W) and the United States Fish and Wildlife Service (USFWS), or when marine mammals other than sea otters are concerned, the National Marine Fisheries Service (NMFS). Sea otters are managed by the United States Fish and Wildlife Service.

PORT MADISON FLIGHT RESTRICTION ZONES / SENSITIVE WILDLIFE										1/2		Includes half of the month									
NOAA Chart 18474										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Code	Location	Seabird Colony	Seabird Conc.	Waterfowl Conc.	Marine Mammal Haulout	Sensitive Nesting Species	Shorebird Conc.	Flight Exclusion													
WC-7	Miller Bay			Yes		Yes		No													
WC-8	Keyport Dock	Yes						No													
WC-9	Keyport					Yes		Yes													
WC-10	Port Madison					Yes		Yes													
WC-16	Dyes Inlet/ Clear Creek			Yes				Yes						1/2			1/2				

\* FLIGHT AND GROUND ENTRY RESTRICTIONS

Flights below 1000 feet require clearance: See appendix on Flight Restriction Zones

Sensitive season - Minimize overflight disturbance

**Figure 3.3.3 Central Puget Sound General Response Plan: Flight Restriction Zones(Pg 6-6)**

### 3.4 Pedestrian and Non-Motorized Infrastructure & Services

Expanding the pedestrian and non-motorized road network is consistent with the overall Transportation Element Goals of both the Kitsap County Comprehensive Plan and this Community Plan. These goals encourage an integrated multi-modal transportation system and to provide a transportation system that effectively encourages non-motorized modes of travel, including pedestrian and bicycle. Both pedestrian and bicycle facilities should be an integral part of the transportation network, and the provision for these facilities should be incorporated in the transportation improvement program.

#### Pedestrian and Bicycle Safety

Pedestrian and Bicycle safety is a primary goal for any transportation improvements. The Washington State Department of Transportation evaluated pedestrian and bicycle accidents between 1988-1993 and then again between 1994-1996. Please Refer to Appendix D: Kitsap County Pedestrian / Bicycle Collision Data for complete figures.

During 1988-1993, Kitsap County sustained over 279 total bicycle collisions over the five year study (55.8 per year), with 62 of those occurring on State Highways. Of those collisions, 275 were injuries, and no fatalities occurred during that five year study.

During 1994-1996, Kitsap County sustained over 161 total bicycle collisions over the two year study (80.5 per year), with 37 of those occurring on State Highways. Of those collisions, 154 were injuries, and unfortunately, there were 4 fatalities during that two year study.

During the 1990-1995 study, Kitsap County sustained a total of 354 pedestrian accidents over the five year study (70.5 per year), with 105 of those occurring on State Highways. Of those accidents, 339 were injuries, and unfortunately, there were 15 fatalities during that five year study. Also during 1996, Washington State Department of Transportation analyzed all accidents on State Route 308, which included a total of 9 property damage accidents, 5 injury accidents and no fatalities between Silverdale Way and Keyport.

Significant efforts have been made in Kitsap County to improve pedestrian and bicycle safety since those studies. This plan analyzes the existing pedestrian and bicycle facilities serving the Keyport Community and will propose infrastructure and safety improvements to encourage safe, non-motorized transportation alternatives.

### Pedestrian Facilities

The pedestrian facilities in Keyport, including sidewalks, trails and other walking infrastructure are more limited in Keyport than other similar historic communities. The majority of sidewalks in the community are located in the commercial core of Keyport, Washington Avenue NE, with four foot sidewalks on the majority of either side of the street. Washington Avenue has limited street lights and directional or community signage. There is one existing pedestrian cross walk across State Route 308 at Washington Avenue NE (Figure 3.4.2).

Sidewalks also are provided on the north side of NE Pacific Avenue adjacent to the Keyport Community Park. The Naval Undersea Museum has provided five foot width sidewalks from their front entrance to the traffic light located on the edge of State Route 308, but there is no crosswalk or pedestrian button for providing

#### **Going Home? “Slow Down!”**



**The day is over; you are on your way out the gate,** slowly weaving your way through the serpentine at the required 20 miles per hour, then out to the light at the intersection with Keyport Hwy 308.

The light turns green; you turn left, and hit it! Pedal to the metal and you can actually hit 50 mph before you reach the causeway!

#### **The speed limit is 35 mph folks!**

Residents of the Keyport community request drivers from NUWC Keyport “Slow Down!” Pedestrians are concerned about potential accidents and their safety on the roadway. The causeway is a favorite place to fish or watch wildlife and many people walk, jog, or ride bikes on this stretch of highway.

A resident’s request to reduce the speed limit to 25 mph between the NUWC Keyport Main Gate and Keyport Trace neighborhood (on the left about a quarter mile west of the bridge) has been submitted. The State Patrol will monitor rush hour traffic periodically, but that shouldn’t be necessary.

**Be a good NUWC Keyport neighbor and obey the speed limit!**

**Figure 3.4.1 Keyport Undersea Warfare Center News Article.**

a safe means for pedestrians to cross from that sidewalk end to the Keyport Saltwater Park.

The remainder of pedestrian routes and walkways within public rights-of-way are either asphalt or gravel shoulders. The shoulders are of ample width on the wider roadways such as NE Pacific Avenue, NE Grandview Boulevard, NE Poulsbo Ave, and NE Harvard Avenue, but are much narrower on streets such as Elwha Terrace NE, Stiles Road, Sunset Avenue NE, Petterson Road NE, and NE Fir Street. The Keyport citizens expressed in public meetings and in the Keyport Online Survey that paved or gravel shoulders were preferable for most of the

residential areas except for Washington Avenue NE and the State Route 308 corridor.



**Figure 3.4.2 Washington Avenue NE Crosswalk across State Route 308.**

State Route 308 is the sole pedestrian egress path for entry or exit in the Keyport Community. The right-of-way for the Highway 308 corridor is a minimum of 100 foot wide for the entire length within Keyport and across the causeway. The paved surface is on average 30 feet wide with two 12 foot travel lanes with shoulders on either side ranging from approximately 2 feet to 6 feet. At the edge of the shoulders on the upland side of the State Highway 308 are shallow ditches for storm water drainage. Of significant concern to pedestrians and bicyclists are the narrow shoulder widths on the Causeway across Dogfish Bay and the concrete barriers at the edge of those shoulders. The close proximity of the travel lanes and the inability to provide a safe area of pedestrian refuge on the causeway has been of significant concern and has actually contributed to impeding pedestrian and non-motorized travel into and out of Keyport.

### Bicycle Facilities

Figure 3.4.4 illustrates the existing Kitsap County bicycle routes serving the Keyport Community planning area. There is one designated bicycle route that would serve Keyport, Bicycle Route #39:

- 39 Bicycle Route 39 travels along State Route 308 from the Naval Base Bangor main gate 3.2 miles to the west of Keyport, and runs south east along Brownsville Highway and Illahee Road to tie into the City of Bremerton in the Mannette neighborhood.



**Figure 3.4.3 State Route 308 causeway across Dogfish Bay.**

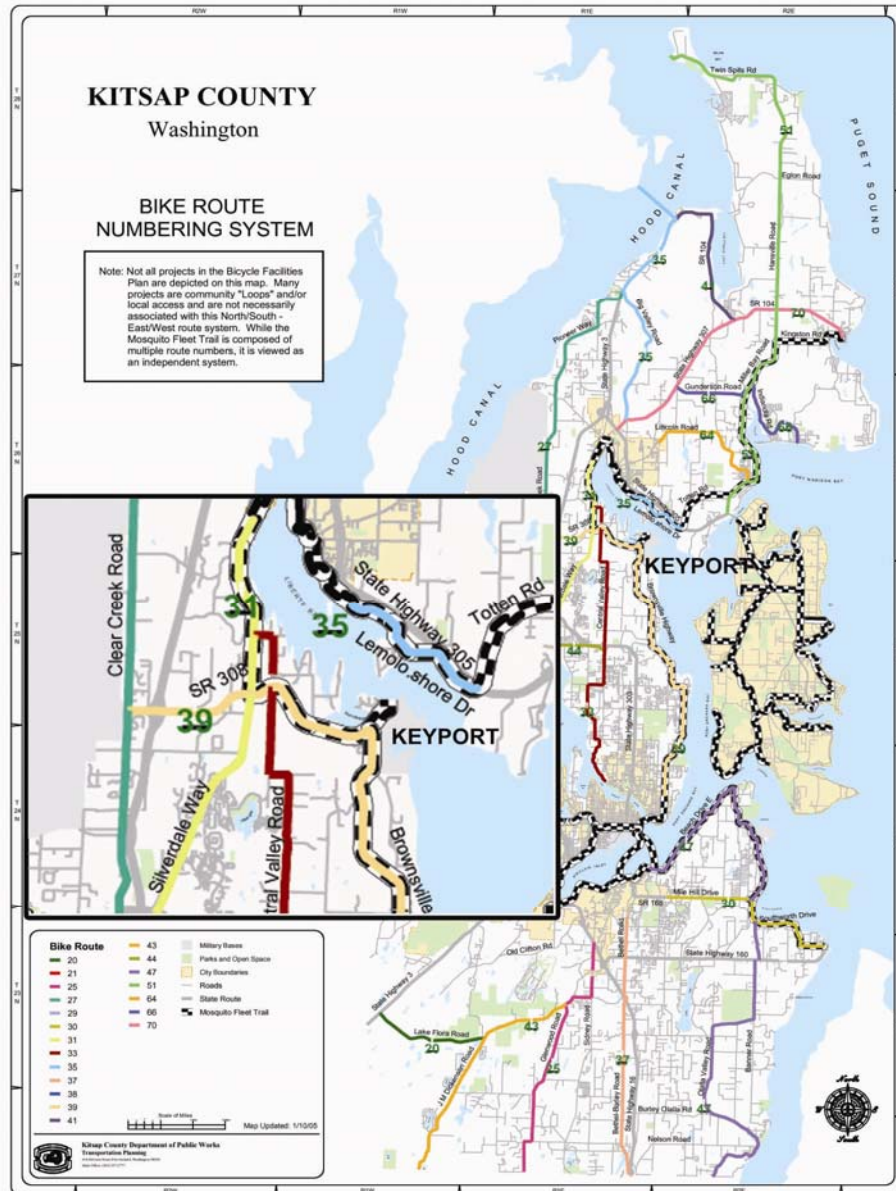


Figure 3.4.4 Keyport Bicycle Routes, Kitsap County Bicycle Facilities Plan, May 2001

### Mosquito Fleet Trail

From the very beginning of settlement in the Puget Sound region over 150 years ago, the most efficient and effective way to move from one area to another was by boat. The early settlers depended on water-based transport, small steamers that buzzed around the Puget Sound so quickly and regularly that they came to known as the “Mosquito Fleet.”

Many of the “ports of call” were crude docks that could accommodate a few neighbors if the tide was high, to very formidable docks that could handle freight and an ever-growing number of passengers. Many of these structures are long

gone, but at some sites piling still exist. At other locations replacement docks have been built at their original locations, and some are still functioning today as they did decades ago. These sites are identifiable along the shoreline from Olalla in South Kitsap all the way north to Bainbridge Island . Each has a “history” associated with it, as well as a rich community heritage. This fleet was operational until the middle of the 1900’s when roads and bridges were developed to link communities together. Eventually, larger and faster ferries were brought into service thus eliminating the need for these small vessels and they vanished from our legacy.

The Mosquito Fleet Trail is a proposed Kitsap County public trail designed to connect the historic Mosquito Fleet ferry docks and landing sites while promoting waterfront access, scenic views, and historic landmarks. Figure 3.4.5 illustrates Keyport’s role as a destination and historic port of call and ferry landing for the Mosquito Fleet Trail.

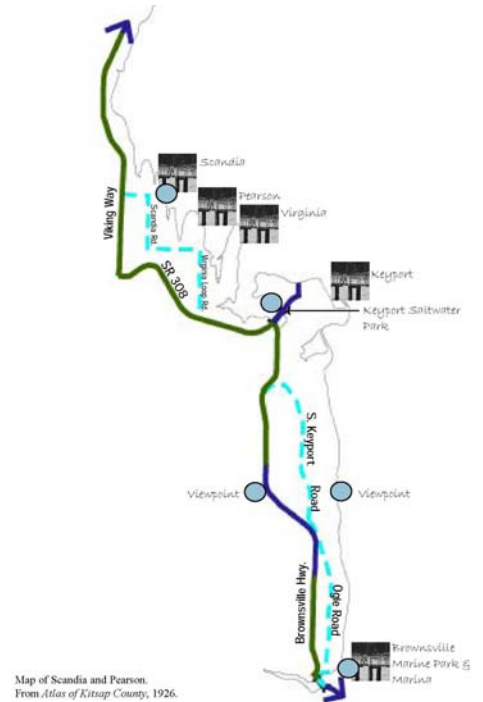
The Mosquito Fleet Trail is intended to primarily serve cyclists and pedestrians and where possible, equestrians as well.

When designing cross section alternatives it was necessary to balance the needs of particular user groups against the constraints of the existing conditions. In addition federal funding sources require that facilities for pedestrians and cyclists meet certain minimum standards. With these considerations in mind, multiple cross section alternatives were considered as described below.

**Project 4: Poulsbo to Brownsville**



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MOSQUITO FLEET TRAIL MASTER PLAN

**Figure 3.4.5 Mosquito Fleet Trail Master Plan – Keyport (Page 42)**

Mosquito Fleet Trail Plan Proposed Pedestrian Improvements

Various paths, trails, lanes, and segments are proposed for different portions, segments, and terminations of the Mosquito Fleet Trail. The following plan excerpts relating to Keyport transportation infrastructure improvements are from

the Mosquito Fleet Trail Master Plan, and associated Mosquito Fleet Trail documents.

### Separated Trails

Separated Trails are proposed in the Mosquito Fleet Trail Plan In areas where the road right-of-way is wide enough, a two-way separated path for shared usage is proposed. As with the off-road trail cross section, surfacing options include asphaltic concrete, Portland cement, gravel, or soft surface. Separated trails are typically preferred by less skilled cyclists, who do not feel comfortable maneuvering along traffic or in narrow, dangerous conditions such as crossing the SR 308 causeway. Often bicycle commuters and more skilled cyclists prefer to use on-road bicycle facilities due to the predictability of traffic and the desire to ride at higher speeds. For this reason, the separated trail cross section includes the provision of paved shoulders alongside the roadway.

Roadways are rarely located in the center of road right-of-way. Without a survey of the corridor, it is difficult to determine in the field how much right-of-way is available on either side of the roadway. In some instances, accommodating a separated trail could involve shifting the road centerline to one side or the other. To maximize the waterfront experience, a separated trail is preferred on the waterside of the roadway where the corridor is adjacent to the shoreline.

### Separated Paths

Separated paths are two-way facilities for shared use by bicyclists and pedestrians, and if desired, equestrians as well. The recommended width for a 2-way multi-use path is 10 feet for areas of anticipated low usage and 12 feet for areas of high volume usage. The recommended spacing between the road edge and the edge of path is 5 feet (6 feet is preferred). Planting in the separation should be selected for its appropriateness within the local landscape, using native species as much as possible, and should not interfere with sight distance and visibility. A paved surface (asphaltic concrete or Portland cement) is recommended for both reasons of durability and to accommodate road bikes. If equestrian use is expected, an adjacent soft surface is preferred. Refer to the Kitsap County Bicycle Facilities Plan (December 2000) for specific design guidelines on separated pathways.

A separated path should not replace on-road bicycle facilities. Portions of the trail corridor that have a separated path, should include either bicycle lanes (4 to 5 feet) or paved shoulders (2 to 4 feet) along the roadway.

### Bicycle Lanes

The bicycle lanes cross section accommodates cyclists in a designated striped lane and pedestrians either in the shoulder or on a sidewalk in the case of a

curbed roadway. For reasons of safety, bicycle lanes are always one-way facilities traveling in the direction of traffic designated for exclusive use by bicyclists. For safety reasons, bicycle lanes are designated for exclusive use by bicyclists and should not be used by pedestrians. Pedestrians should be provided with sidewalks in urban areas. Along rural roads and in less developed areas, pedestrians should be provided with a 3' gravel or paved shoulder outside the bicycle lane. On one-way streets the bicycle lane should be located on the right hand side of the roadway. Refer to the Kitsap County Bicycle Facilities Plan (December 2000) for more detailed information on the design of bicycle lanes.

**For Bicyclists and Pedestrians, incorporate recommendations of the Mosquito Fleet Trail Master Plan, including:**

- Providing off-road routes or separated trails within the ROW, wherever possible, especially across the SR 308 causeway in coordination with WSDOT.
- Providing signed bike lanes, paved shoulders or widened curb lanes for bicycle commuters and faster cyclists.
- Minimizing street crossings for bike/pedestrian paths.
- Creating a minimum 5'-wide planting area between separated trails and roadway.
- Provide alternate signed routes for bicyclists, to lessen conflicts and make accessible greater scenic variety.
- Establish a "Share the Road" campaign that educates residents, visitors, bus drivers and others about bicyclists using the roadway.
- Provide signage with area maps and location finders

**Mosquito Fleet Trail Improvements For Pedestrians:**

- Provide sensible, accessible connections to area trails
- Provide direct and accessible connections to local destinations (schools, parks, retail)
- Provide smooth transitions from pedestrian trails to local sidewalks

**Mosquito Fleet Trail Improvements for Cars:**

- Provide nighttime lighting and/or reflective surfaces along the travel route
- Provide gently sloping shoulders or widened curb lanes, where possible, along the route.
- Provide well- and consistently-signed directional routing at intersections and area attractions.
- Evaluate design speeds of roadways for consistency.
- Develop recommendations for making design speeds more uniform along any given roadway.
- Develop traffic-calming measures where appropriate, including:
  1. At entries to urban areas
  2. At entries/proximity to residential neighborhoods
  3. Along county roads with fast-moving traffic
  4. Where design speeds and/or route direction dramatically shift

### **3.5 Transportation Goals & Policies**

**Goal 9 Encourage development of an efficient multimodal transportation system and develop a funding strategy and financing plan to meet its needs.**

Policy Key-13 All future Washington State Route 308 Improvements, are encouraged to include separated, continuous, 5-foot paved bicycle / pathways for pedestrian use. These walkways shall be coordinated with the Mosquito Fleet Trail Plan as necessary.

Policy Key-14 Developments abutting County rights-of-way within the Keyport Village Commercial zone shall require sidewalk construction.

Policy Key-15 The County shall facilitate the development of the Mosquito Fleet Trail improvements within the Keyport Village Boundary.

Policy Key-16 Transit travel should be facilitated in all ways reasonable. Encourage the expansion of Kitsap Transit's shuttle route #34 to provide a base level of trip frequency within the Keyport Village Boundary.

**Goal 10 Provide the citizens the opportunity to participate in the development of transportation planning policy.**

Policy Key-17 Encourage Keyport participation by citizens, organizations or individuals, in County and State transportation planning efforts within or adjacent to the Keyport Village.

**Goal 11 Reduce accidents and potential accidents by providing a safe transportation system through good design practices.**

Policy Key-18 Analyze accident data to determine where safety-related improvements are necessary. Prioritize and implement safety-related improvements during the transportation planning process.

**Goal 12 Minimize negative environmental impacts by the transportation system.**

Policy Key-19 Maintain environmental standards and mitigation requirements that are the same or higher than those placed upon the private sector, especially adjacent to or upstream from salt-water marine environments.

### **3.6 Transportation Key Projects**

**1. Mosquito Fleet Trail Segment – Keyport:**

Completion of the Keyport segment of the Mosquito Fleet Trail has been identified as a Key Project by the community and should be considered the primary focus for transportation infrastructure improvements in the Keyport. Primary components of the Mosquito Fleet Trail include the blind curve along State Route 308 after the Keyport Trace Intersection, a separated pedestrian connection or pedestrian bridge across Dogfish Bay, and pedestrian improvements including cross walks and pedestrian signal lights along State Route 308 from the main entrance of the Keyport Naval Station to the pedestrian sidewalks on Washington Avenue NE.

**2. Traffic Calming through special treatment for Keyport Town Square (Intersection of State Route 308 & Washington Ave NE).**

Coordination with WSDOT and inclusion of traffic calming (specialized paving, raised table, signage, and pedestrian safety improvements) for the Keyport Town Square at the intersection of State Route 308 and Washington Avenue NE has been identified by the community as a Key Project. This would include specific identification of the State Route 308 and Washington Avenue NE intersection as the cultural focal point and geographic and commercial center of the Keyport community. The traffic calming elements of the proposal would address the pedestrian risks from vehicular speeds through the uncontrolled intersection.

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