

# 1

---

## EXECUTIVE SUMMARY

This page left intentionally blank.

## **1. Executive Summary**

*Executive Summary forthcoming.*

DRAFT

This page intentionally left blank.

DRAFT

# 2

---

## STUDY OVERVIEW

This page left intentionally blank.

## **2. Study Overview**

The SR 305 Corridor Alternatives Analysis Technical Study builds upon the work done as part of the SR305 Corridor Vision Study, further refining the set of alternatives to address travel needs in the corridor. This technical study provides additional data collection and analysis to evaluate transit options between the Bainbridge Island ferry terminal and SR 3 in Poulsbo.

### **2.1. Study Guidance and Participation**

This SR 305 Corridor Alternatives Analysis Technical Study and the prior SR 305 Corridor Vision Study that directed the development of alternatives were informed by an integrated stakeholder and public engagement program. Some of the key information was collected from meetings with agency staff at the local, regional, state, and federal levels, as well as meetings held with local officials during the project. Community meetings were held in December 2008 to gain a broader level of public input. Appendix B includes a compendium of comments gathered from these meetings as well as the earlier visioning phase of this project. In addition to Kitsap Transit's involvement and oversight of the study efforts, agency and stakeholder participation in the study process has included representatives from:

- Suquamish Tribe
- Kitsap County
- City of Poulsbo
- City of Bainbridge Island
- Federal Transit Administration
- Washington State Department of Transportation
- Washington State Ferries
- Puget Sound Regional Council
- Kitsap Regional Coordinating Council

Community representatives have stated a strong interest in the need for a sustainable transportation strategy for the SR 305 corridor that serves all transportation modes. With any potential improvements to the corridor, concerns have been raised about potential impacts to natural resources, wildlife, stream corridors, trees / vegetation, and other environmental resources. At the same time, people clearly recognize that implementing solutions to improve transit efficiency will bring significant environmental benefits, such as reduced congestion, pollution/emissions, and more efficient use of fossil fuels and other energy resources. It will be important for transportation solutions in the SR 305 Corridor to reinforce the planning principles of adopted local plans and policies (summarized below under Section 2.2). In Poulsbo, there is a strong interest in maintaining traffic mobility while encouraging transit and High Occupancy Vehicles (HOV) through the use of HOV lanes and intersection capacity improvements. In the vicinity of Suquamish, maintaining access to local businesses along the corridor is an important concern, along with providing enhanced facilities for transit riders, including those who walk along the corridor to access bus stops. On Bainbridge Island, community representatives have voiced aspirations regarding sustainability and an increased role for transit along the corridor and to maintain the current corridor environment with two lanes, limiting roadway widening. Proponents for non-motorized transportation have expressed a strong interest in pedestrian and bicycle

access and mobility throughout the corridor, including enhanced non-motorized access to transit, as well as maintaining space for non-motorized travel.

## **2.2. Planning Context and History**

In February 2008, Kitsap Transit completed the *SR 305 Corridor Vision – Transportation Choices for Tomorrow – Connecting Communities*. The vision plan was initiated as an update to the SR 305 Corridor Analysis and Major Investment Study (MIS) completed in 1997. Project partners, which included Kitsap Transit, City of Bainbridge Island, City of Poulsbo, Kitsap County, Washington State Department of Transportation (WSDOT), Washington State Ferries (WSF), and the Suquamish Tribe, determined that since nearly ten years had passed since the 1997 MIS, it was time to reevaluate the long-range vision for the corridor, with a particular emphasis on opportunities related to transit as a tool for:

- Relieving worsening congestion in the SR 305 Corridor;
- Increasing local mobility between the growing communities of Bainbridge Island and Poulsbo;
- Continuing to allow Washington State Ferries to effectively connect North Kitsap County and parts of the Olympic Peninsula to Seattle as part of the State Marine Highway System; and
- Reducing environmental impacts of personal transportation in the area.

The *SR 305 Corridor Vision* focused on the corridor from the Bainbridge Island ferry terminal in Winslow to the corridor's northern terminus near the junction of SR 305 and SR 3. Figure 2-1 provides a vicinity map of the project area and labels the corridor in segments used in the evaluation of alternatives.

**SR 305 Corridor Enhanced Transit Project**  
*DRAFT Alternatives Analysis Technical Study Report*

KITSAP TRANSIT

**Figure 2-1 SR 305 Transit Study Area**



**Nelson|Nygaard**  
consulting associates

The SR 305 Corridor Vision study placed a heavy emphasis on public process and input using a wide variety of forums to discuss future options for the corridor with members of the community. The study was conducted with the intent of developing a clear problem statement for the corridor that was supported by stakeholder agencies and the public. Primary messages conveyed to the project team through the public outreach process, include:

- A strong transit solution is needed to address worsening congestion in the SR 305 corridor between Poulsbo and the Bainbridge Island Ferry Terminal.
- There is strong opposition to widening SR 305 for the addition of general purpose traffic lanes, particularly on the Bainbridge Island segments.
- There is local opposition to increasing the size and capacity of parking and automobile queuing facilities at the Bainbridge Island Ferry Terminal.
- There is a need to strengthen community connectivity, particularly between Bainbridge Island and the rapidly growing community of Poulsbo.
- Transportation improvements in the corridor must strengthen the area's economic vitality and work to preserve and improve access to businesses.
- Transportation improvements must respect, preserve and enhance community character.
- Future transit should integrate with local community planning/transportation planning for future development.
- Any major transportation investment must focus on moving people via transit and high occupancy vehicle modes, not in single-occupant vehicles.
- Ongoing transit planning must be supportive of the City of Bainbridge Island's Ferry District Urban Design Study operational plans for the Washington State Ferries Bainbridge Terminal, Winslow Tomorrow Plan, 2025, and non-motorized planning efforts underway in the area.
- Transit investment is needed to reinforce compact land use planning principles and help form transportation-efficient neighborhood service centers on Bainbridge Island and in the Poulsbo area.
- Pedestrian and bicycle safety improvements are needed throughout the corridor and could be supported by development of high-quality transit stations.

### **Locally Adopted Plans and Policies**

Plans and policies adopted by the cities of Poulsbo and Bainbridge Island, as well as Kitsap County, support development of expanded transit in the SR 305 corridor. Relevant policy statements are summarized below.

#### ***City of Poulsbo Comprehensive Plan, 2010***

Community Key Goals -- Transportation:

- Develop alternative mobility options and modes of transportation to reduce reliance on cars, including infrastructure for public transit, pedestrians, and bicyclists.

KITSAP TRANSIT

- Participate in efforts to enhance the City's connectivity to the region, including telecommuting.

Public Transportation - Goal TR-10: Actively promote the use of public transportation to accommodate a larger share of the traveling public. Relevant policies:

- Policy TR-10.1  
Promote Poulsbo as a regional transportation center, connecting the greater Kitsap Peninsula with the Seattle metropolitan area and the Olympic Peninsula. Work with Kitsap Transit, Jefferson Transit, the Washington State Department of Transportation, and surrounding communities to create a Transit Plan for the City.
- Policy TR-10.2  
Encourage the use of public transportation within Poulsbo to accommodate those who work, visit and shop in Poulsbo. Coordinate with Kitsap Transit to identify opportunities to increase capacity, provide trolley or shuttle service throughout the City, reduce service deficiencies and increase ridership on under-utilized routes.
- Policy TR-10.3  
Work with Kitsap Transit to increase Park and Ride capacity within the City by identifying potential Park-and-Ride locations and explore a Bus Rapid Transit (BRT) system that will serve Park-and-Rides and connect Poulsbo to surrounding communities throughout the region.
- Policy TR-10.4  
Continue coordinating with Kitsap Transit during development permit application, for their review and comment on development proposals to facilitate convenient use and operation of appropriate transit services. Assist Kitsap Transit, as appropriate, in the implementation of their capital improvement projects within the city limits.

Other Relevant City of Poulsbo Goals and Policies:

- TR-8: Participate in regional transportation coordination plans and programs to ensure and promote Poulsbo's role in the regional transportation network.

***City of Bainbridge Island Comprehensive Plan, 2004***

Transportation Element

Goal 1: Community Character -- Develop transportation improvements that respect the Island's natural and historic character and are consistent with both the short-and long-term vision of the Comprehensive Plan.

Goal 2: Environment -- Develop, operate, and maintain a transportation system that respects the natural environment, including the quality of the Island's air, water, and natural habitat.

Goal 6: SR 305 / Through Traffic -- Coordinate with WSDOT to ensure that state facility improvements meet the goals of the Bainbridge Island transportation vision and Comprehensive Plan and minimize impacts to the local transportation system.

- TR 6.3 SR 305 Improvements and Safety

Support incremental improvements for SR 305 to reduce congestion and improve safety for through traffic, local traffic, non-motorized and transit users. These improvements should particularly address congestion and safety of cross-highway vehicle and non-motorized traffic and provision of a safe bicycle corridor along all sections of SR 305.

- TR 6.4 Park-and-Ride Facilities

Encourage the development of park-and-ride lots near commuters' point of origin throughout Kitsap County in order to minimize traffic impacts along SR 305.

- TR 6.5 Impact to State Facilities

Evaluate the Comprehensive Plan's land use designations to assess their impact on all roadways, including State-owned facilities, and include as part of the Transportation Element.

- TR 6.6 Improvements to Off-Island State Facilities

Encourage off-Island projects that will mitigate on-Island congestion to SR 305. TR 6.3

#### GOAL 8: TRANSIT

Encourage the use of public transit and encourage transit agencies to operate and maintain local and regional transit service and facilities that reduce the need for single occupant vehicles and support the needs of transit-dependent users.

- TR 8.1 Transit LOS

Encourage a transit LOS standard that identifies deficiencies and program improvement needs as defined in the Kitsap Transit Plan.

- TR 8.2 Public Transit Ferry Access

Support actions from Metro, Sound Transit, Kitsap Transit, or other appropriate agencies that:

- Promote the availability of public transit service to ferry commuters and for special events.
- Adjust bus schedules to meet ferry arrival and departure times and improve service throughout the day and during evening hours.

- TR 8.3 Multiple-use park-and-ride lots

Encourage park-and-ride use of multiple-use lots such as those located at churches, near transit connections or other locations and promote the use of those lots to Island residents.

- TR 8.4 Expansion of Island transit

Support the expansion of Island transit services that target:

- Ferry commuters;
- Non-ferry commuters, including Island employees;
- Connection of High School Road and Winslow Way;
- Non-commuter travel to other Kitsap County service and employment areas;
- Intra-Island connection to Neighborhood Service Centers and residential areas; and
- Transit dependent access, including addressing the access needs of youth, the elderly and disabled transit users.

Goal 11: Regional Coordination -- Coordinate with the local, regional, and state, public and private organizations that promote regional transportation improvements and services that are compatible with the community's vision as expressed in the Comprehensive Plan.

***Kitsap County - Countywide Planning Policies - Element H, Transportation, Adopted 2007***

The Growth Management Act requires that transportation planning be coordinated among local and state jurisdictions. The Growth Management Act further requires that transportation planning be coordinated with the land use elements of local comprehensive plans. Coordination of land use and transportation plans will allow Kitsap County and the Kitsap cities to meet three inter-related transportation goals:

- Serve Designated Centers to reduce sprawl, conserve land and make more efficient use of infrastructure,
- Preserve the natural environment, including water and air quality,
- Provide a balanced system for the efficient, safe movement of people, goods and services among Designated Centers within Kitsap County and the larger Puget Sound region.

*Countywide Transportation Policies Relevant to the SR 305 Corridor Transit Study:*

*Strategies to optimize and manage the use of transportation facilities and services:*

- a. The County and the Cities shall each emphasize the maintenance and preservation of their existing transportation network.
- b. Through the regular update of the Transportation Element of their Comprehensive Plan, the County and the Cities should each identify and prioritize operational and safety deficiencies.
- c. The County and the Cities should utilize Transportation System Management strategies such as parking restrictions, traffic signal coordination, transit queue jumps (traffic signal modification equipment that allows busses to move ahead of other vehicles), ramp metering, striping non-motorized transportation facilities, and real time sensor adjustments for traffic signals.

- d. The County and the Cities should develop and implement access management regulations that provide standards for driveway spacing and delineation and encourage the joint use of access points where practical.
- e. The County and the Cities shall actively seek opportunities to share facilities, expertise, and transportation resources, such as multiple use park & ride/parking lots or shared traffic signal maintenance responsibility.

*Reducing the rate of growth in auto traffic, including the number of vehicle trips, the number of miles traveled, and the length of vehicle trips taken, for both commute and non-commute trips:*

- a. The County and the Cities shall provide both infra-structure and policy incentives to increase the use of non-SOV modes of travel.
  - i. The range of infrastructure incentives to encourage the use of non-SOV modes of travel could include the following:
    - Provide public transit, including preferential treatments for transit, such as queue by-pass lanes (dedicated bus lanes that allow for transit queue jumps), traffic signal modifications, and safe, transit stops.
    - Provide integrated transfer points to facilitate seamless trips between transit and other modes of travel, particularly at ferry terminals, including park & ride lots, bike storage facilities, carpool/vanpool and transit advantages to ease ingress/egress, with proximity to actual connection points, and innovative transit-oriented development.
    - Provide non-recreational bicycle and pedestrian facilities, including safe neighborhood walking and biking routes to school.
    - During the development of all state, county, and city highway capacity improvement projects, consider the market for non-SOV travel, and the addition of High Occupancy Vehicle (HOV) lanes, park & ride lots, appropriate infrastructure for both bicycling and walking.
  - ii. The range of policy incentives to encourage the use of non-SOV modes of travel could include the following:
    - Increased emphasis on the Commute Trip Reduction Program already in place (including ridesharing incentives), with Kitsap Transit designated as the lead agency, including program promotion and monitoring.
    - Managed parking demand at ferry terminals, employment, and retail centers to discourage SOV use through privileged parking for HOV users, fee structure and parking space allocations.
    - Encouraging telecommuting and home-based businesses as a viable work alternative.

- Encouraging the shift of work and non-work trips to off-peak travel hours.
- Congestion pricing.
- Auto-restricted zones.
- Promotion of driver awareness through educational efforts.

*Environmental impacts of transportation policies:*

- a. Transportation improvements shall be located and constructed so as to discourage/minimize adverse impacts on water quality and other environmental features.
- b. The County, the Cities, and Kitsap Transit shall consider programming capital improvements and transportation facilities that alleviate and mitigate impacts of land use on air quality and energy consumption, such as: high-occupancy vehicle lanes; public transit; vanpool/ carpool facilities; electric and other low emission vehicles including buses; bicycle and pedestrian facilities that are designed for functional transportation.

*Transportation linkages between designated local and regional Centers:*

- a. Regional corridors shall be designated for automobile, freight, transit, HOV facilities, rail, marine, bicycle, and pedestrian travel between centers as part of the countywide transportation plan.
- b. The transportation system linking Designated Centers within the county shall be transit-oriented and pedestrian and bicycle friendly.

### **2.3. Corridor Conditions**

The SR 305 corridor contains several distinct segments with a variety of urban, suburban, and rural land uses. The general character of the corridor changes between segments starting at the urban area around the Bainbridge Island ferry terminal to the suburban area at the junction of SR 305 and SR 3. The corridor extends for approximately 13.5 miles and is one of the most congested routes in Kitsap County, serving commuters daily to and from the ferry terminal, which carries passengers to and from downtown Seattle. Right-of-way is available, but transportation decisions are greatly constrained by topography, the Agate Pass Bridge, and the proximity of environmental assets such as mature vegetation.

The SR 305 route carries extensive commuter-based traffic and transit riders as well as a growing level of local traffic and local transit riders. The corridor serves the growing communities of Poulsbo, Suquamish and the Port Madison Indian Reservation, and Bainbridge Island. Some of the major congestion choke points are located where SR 305 intersects with SR 3 and Suquamish Way, as well as the physically constrained Agate Pass bridge segment and the Bainbridge Island Ferry terminal queue. On top of these critical junctions, major congestion issues include:

- Pulsed traffic flows to and from ferry terminal resulting from ferry landings
- Long queues at arterial intersections / traffic signals

- Transit delay as a result of traffic conditions and a lack of priority treatments

Degrading traffic conditions will amplify as travel demand between Poulsbo and Bainbridge Island increases. The growth in traffic from 2008 to 2030 varies dramatically by roadway segment and is estimated to increase northbound intersection delays up to 4.5 minutes during the PM peak hour. Appendix A presents the revised (2009) estimates for congestion at key intersections. As a result, transit travel time from the ferry terminal to SR 3 is expected to increase from 38 to 59.5 minutes in the PM peak period. This growth is largely a result of an increase in intra-county travel demand stemming from population and employment growth rather than from increased auto travel from the ferry terminal. Nonetheless ferry traffic will play an important role in future SR 305 congestion as ferry demand will increase by roughly 1,680 additional ferry riders during the PM peak period<sup>1</sup>.

Another influential corridor constraint is the capping of parking capacity at the ferry terminal by City ordinance. More recently, parking capacity at the ferry terminal has been reduced by one-fifth due to recent development at Winslow Way.

## **2.4. Study Area Problem Statement**

The SR 305 corridor is unique in that it covers a range of urban and rural land uses, does not have nearby parallel corridors, and carries a high volume of auto and transit passenger traffic. It connects Bainbridge Island and the busy Washington State Ferries Terminal located at the southern terminus of the corridor to Poulsbo, the fastest growing urban area in Kitsap County to the north. The corridor is constrained by a two-lane bridge crossing of Agate Pass roughly half way between SR 3 and the Bainbridge Island Ferry Terminal. The proximity of this bridge to a busy intersection at Suquamish Way can cause significant traffic congestion. A number of other major intersections along the corridor also have significant traffic delays, with mainline queues of up to 2.5 minutes and minor leg queues several times longer. Demand for travel in the corridor is expected to grow while expansion of highway capacity is constrained by physical barriers and strong community desires to limit roadway expansion.

*The SR 305 Corridor project is addressing the **problem** of how to accommodate increased travel demand in the corridor given the constraints on increasing highway lane capacity.*

## **2.5. Study Area Purpose and Need Statement**

Following is the project's draft Purpose and Need Statement<sup>2</sup>:

*The **Purpose** of the proposed SR 305 Corridor project is to implement high-capacity public transportation service, through expanded transit capacity and service, in the SR 305 Corridor (between the Bainbridge Island Ferry Terminal and SR 3) that is less hindered by congestion and that does not develop additional general purpose travel lanes in this constrained corridor.*

The **Need** for the project results from:

---

<sup>1</sup> 2009 WSF LRP Appendix D (Ridership Forecasting Technical Report), page 16

<sup>2</sup> The purpose and needs defined here are attributable needs defined in the 2007 *SR 305 Corridor Vision*

- Historic and projected increases in traffic congestion in the SR 305 Corridor due to increases in regional and local population and employment;
- Increased transit operating costs due to lengthy transit travel times and deteriorating public transportation reliability in the SR 305 Corridor as a result of growing traffic congestion;
- The region's growing reliance on public transportation to meet travel needs in the SR 305 Corridor, including those traveling to/from Seattle via the ferry;
- The need to maintain interregional mobility across the Puget Sound via the State Marine Highway System which uses the Bainbridge Island – Seattle to transport vehicles and people. In particular, aggressive redevelopment plans in the Bainbridge Island Ferry Terminal area and planning goals adopted by the City of Bainbridge Island will make park-and-ride access to the ferry more difficult and expensive.
- Local and regional land use and development plans, goals, and objectives that identify nodes served by the SR 305 Corridor as a focus for residential, commercial and retail development to accommodate forecasted regional population and employment growth in a transit supportive manner; and
- Limitation of options for transportation improvements caused by the identification and protection of important resources in the natural and built environment in the SR 305 Corridor, including but not limited to wetlands, rare plants, and animals and their habitat.

## **2.6. Additional Data Collection**

In order to evaluate potential options for expanding and enhancing transit capacity and service in the SR 305 corridor, this study collected new and/or updated data on traffic conditions, existing transit ridership and ferry ridership projections.

The project team analyzed the operations of 39 intersections in the SR 305 corridor for the AM and PM peak hours to update models of current and future traffic conditions in the corridor. Updated data were assembled for: vehicular, pedestrian and bicycle counts, travel times, street geometry, turning movements, traffic control devices and speed limits and key locations. Appendix C summarizes the traffic data collection conducted for the study.

The project team also conducted a ridecheck to collect stop-level boarding and alighting data for the bus routes currently serving the SR 305 corridor. Transit travel time and rider travel behavior data were also collected at this time. Data on current transit use was used in the development of the transit benefits model developed for this study. Appendix E provides a detailed report on the transit data collection and analysis.

The transit benefits model also used data from the 2006 ferry passenger survey conducted by Washington State Ferries (WSF). The project team obtained the raw data from this survey in order to include ferry passenger mode choice data into the SR 305 Alternatives Analysis Technical Study modeling efforts.

WSF also updated their ridership forecast in 2008 as part of their 2009 long range plan. The revised ridership forecasts are lower than those predicted at the time the SR 305 Vision Study was completed. Appendix E highlights revised transit ridership and Park & Ride demand estimates due to increases in ferry ridership. This SR 305 Corridor Alternatives Analysis

Technical Study reevaluated travel demand in the corridor based on the new ferry ridership projections along with projected growth from non-ferry sources.

DRAFT