

ISLANDCOUNTY













TRANSPORTATION ELEMENT

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ISLAND COUNTY

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Introduction

The Transportation Element provides the framework to guide the growth and development of the County's transportation infrastructure. It also integrates land use and transportation by ensuring existing and future developments are adequately supported by the transportation system. The Transportation Element addresses the development of a balanced, multimodal transportation system for the both the County's rural and urban areas by recognizing the regional nature of the transportation system and the need for continuing interagency coordination.

The Transportation Element establishes the County's goals and policies for developing the transportation system within the County. The Transportation Element is based on a 2014 study of the existing transportation network, combined with projections of future growth and transportation needs in 2036. The transportation element is comprised of five sections:

1. Goals and Policies
2. Existing Condition of Transportation Facilities
3. Travel Forecasts Evaluation
4. Transportation Systems Plan
5. Financing Program

The Transportation Element is intended to serve as a guide for making transportation decisions to address both short and long term needs. To meet Growth Management Act (GMA) requirements, the Transportation Element must identify existing transportation system characteristics, establish standards for levels of service, and identify existing and future deficiencies based on land use growth projections. The Transportation Element also discusses roadway mobility and accessibility needs, identifies improvements necessary to enhance safety, bicycle and pedestrian travel, and public transit. Consistent with the other elements of the Comprehensive Plan, the Transportation Element establishes a policy framework for making decisions consistent with the County's vision, and describes a strategy for accomplishing the County's vision over the 20 year planning horizon.

Plan Development

The development of the Island County Transportation Element Update was approved by the Board of Island County Commissioners in the fall of 2013 to provide an update to the adopted 2004 Island County Transportation Element. The purpose of the 2016 Transportation Element is to provide an update to the existing Transportation Element by identifying and evaluating the transportation improvement plans for the County through the years 2016 and 2036.

The plan was developed to address future land use growth and identify transportation needs to support the expected growth. The plan is needed to satisfy Growth Management Act (GMA) requirements and to update the County's transportation improvement projects funding program. The following sections summarize the regulatory setting and regional planning efforts that guided the development of the Transportation Element.

Growth Management Act Requirements

Under the Growth Management Act (RCW 36.70A.070), referred to herein as the GMA, the Transportation Element is required to assess the needs of a community and determine how to provide appropriate transportation facilities for current and future residents. The Transportation Element must contain:

- Inventory of existing facilities;
- Assessment of future facility needs to meet current and future demands;
- Multi-year plan for financing proposed transportation improvements;
- Forecasts of traffic for at least 10 years based on adopted land use plan;
- Level of service (LOS) standards for arterials and public transportation, including actions to bring deficient facilities into compliance;
- Transportation Demand Management (TDM) strategies, and;
- Identification of intergovernmental coordination efforts.

Additionally, under GMA's Concurrency Mandate, development may not occur if the development causes the transportation facility to decline below the County's adopted level of service standard unless existing infrastructure exists or strategies to accommodate the impacts of the development are made *concurrently* with the development; specifically the impacts must be mitigated within six years of the development's completion. This mandate extends to include highways of statewide significance in counties consisting of islands, which applies to Island County.

Finally, the Transportation Element must include a reassessment strategy to address how the plan will respond to potential funding shortfalls.

Countywide Planning Policies

The GMA also requires that counties adopt Countywide Planning Policies (CWPPs) to guide and coordinate issues of regional significance. The Island County Department of Planning and Community Development developed CWPPs in conjunction with the City of Oak Harbor, the City of Langley and the Town of Coupeville in 2014. The policies are anticipated to be adopted by each agency in 2015. Section 3.8 of the proposed CWPPs addresses transportation and includes nine specific policies that are intended to ensure that the transportation system evolves in a coordinated manner to best serve the diverse land uses in Island County, both now and in the future.

Healthy Communities

Recognizing the growing need for physical activity among citizens, the Washington State Legislature amended the GMA in 2005 with the Healthy Communities Amendment, ESSB 5186. Comprehensive plans are directed to address the promotion of Healthy Communities through urban planning and transportation approaches. The two amendments to the GMA require that communities:

1.1 Consider urban planning approaches that promote physical activity in the Land Use Plan; and

2.1 Include a bicycle and pedestrian component in the Transportation Element.

Clean Air Conformity Act

The Transportation Element is also subject to the Washington State Clean Air Conformity Act that implements the directives of the Federal Clean Air Act. Because air quality is a region wide issue, the County must support the efforts of state, regional, and local agencies as guided by WAC 173-420-080.

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1. Goals and Policies

Island County has developed broad goals, along with specific policies, to provide the framework for the Transportation Element. They were established through the feedback solicited at the public meetings conducted in 2014 and input from the Project Advisory Committee, the Board of Island County Commissioners and the Island County Planning Commission. The statements were developed to be consistent with the statewide goals articulated in the Washington Transportation Plan (WTP) 2035[1] and Island County's Countywide Planning Policies[2].

The Goals

1. Provide a **safe**, comfortable and reliable transportation system that provides adequate **mobility** for people, goods and services;
2. **Preserve** prior investments in the transportation system;
3. Support land use development and **economic vitality** by providing context-appropriate transportation infrastructure;
4. Minimize negative **environmental** impacts;
5. Build strong relationships between Island County and other local and regional agencies to **engage in cooperative planning** of common transportation improvements;
6. Promote **physical activity** by expanding options for active transportation modes.

Specific policies to help achieve these goals are described under each goal below.

Goal No. 1: Provide a safe, comfortable and reliable transportation system that provides adequate mobility for people, goods and services.

1.1 Base transportation investment decisions on clearly stated, rational criteria;

1.2 Implement measures to reduce the number and severity of collisions;

1.3 Identify and work to reduce gaps that hinder the efficient movement of people and goods;

1.4 Seek alternative solutions to mobility problems instead of high-cost capital projects;

1.5 Promote transportation facilities that provide for everybody, including people of all ages, abilities, ethnicities, incomes and neighborhoods;

1.6 Promote alternatives to single-occupant vehicle travel such as walking, riding transit, carpooling, vanpooling, and bicycling.

[1] Washington Transportation Plan. Washington State Department of Transportation and Washington State Transportation Commission. August 2014. Available at: http://wtp2035.com/
[2] Countywide Planning Policies. Island County. April 2015. Available at: http://islandcounty2036.org/wp-content/uploads/2014/12/Approved-Resolution-CWPPs-4-24-2015.pdf

Goal No. 2: **Preserve prior investments in the transportation system.**

2.1 Prioritize maintenance over new construction;

2.2 Emphasize the most cost-effective solutions that meet the needs of the transportation system;

2.3 Operate in compliance with the *Standards of Good Practice* established by the County Road Administration Board (CRAB);

2.4 Follow established maintenance and repair procedures in order to reduce the long term costs of operating and maintaining the County's transportation system;

2.5 Restrict new transportation projects that increase capacity unless the project proposal shows that sufficient revenues exist to adequately maintain both existing facilities and the proposed expansion.

Goal No. 3: **Support land use development and economic vitality by providing context-appropriate transportation infrastructure.**

3.1 Implement a concurrency program that supports the development of the transportation system to adequately support land use development;

3.2 Monitor cumulative impacts on the transportation system over time to ensure the concurrency program is meeting its objective;

3.3 Transportation infrastructure and services within urban areas should be reflective of urban design, supporting urban development; Particular attention should be given to ensuring that roadway design standards in urban areas provide a high level of connectivity and promote pedestrian circulation;

3.4 Transportation infrastructure and services in rural areas should be consistent with rural design.

Goal No. 4: Minimize negative environmental impacts.

4.1 Foster transportation investments that avoid negatively impacting critical areas;

4.2 Follow the County's established best management practices for storm water runoff during construction of transportation infrastructure;

4.3 Identify potential environmental constraints and impacts as early as possible in the conceptual design phase of new transportation projects in order to minimize costly mitigation measures and expedite the delivery of transportation services and facilities;

4.4 Involve environmental permitting authorities as early as possible in the design and location of new transportation projects;

4.5 Consider mitigation sequencing requirements as early as possible in the design phase to ensure that a full range of mitigation options can be considered;

4.6 Identify opportunities to improve the natural environment.

Goal No. 5: Build strong relationships between Island County and other local and regional agencies to engage in cooperative planning of common transportation improvements.

5.1 Provide regular forums for both elected officials and staff to collaborate with the Washington State Department of Transportation (WSDOT), Washington State Ferries (WSF), Island Transit, Port of Coupeville, Port of South Whidbey, Naval Air Station Whidbey Island, local jurisdictions and other relevant agencies;

5.2 Explore opportunities to collaborate and develop cost effective solutions with state, county and local organizations;

5.3 Coordinate with adjoining jurisdictions and transit service providers to develop and provide better connections between Island County and regional employment centers;

5.4 Public services and facilities should be accessible by all transportation modes. In particular, public services and facilities serving low income or mobility impaired citizens should be located in close proximity to transit stops and in areas with a well developed network of sidewalks and paths;

5.5 Give particular attention to improving pedestrian, bicycle, and transit facilities in areas surrounding ferry terminals in order to facilitate a greater share of walk-on ferry passengers;

5.6 Work with WSDOT to ensure that new development in Island County is consistent with the Concurrency Memorandum of Understanding (MOU) between Island County and WSDOT;

5.7 Work with local and regional municipalities to identify future transportation corridors and plan transportation needs based on planned land use within Urban Growth Areas (UGAs).

Goal No. 6: **Promote physical activity by expanding options for active transportation modes.**

6.1 Promote coordination between jurisdictions in the planning and implementation of bicycle, transit, pedestrian and other alternative transportation facilities to establish continuous networks that support healthy communities;

6.2 Install paved shoulders on County arterial and collector roadways where feasible;

6.3 New projects in NMUGAs will be designed and constructed considering pedestrian facilities;

6.4 Promote connections between modes of transportation at public transit facilities;

6.5 Promote a connected system of multi-use paths to encourage active transportation, recreation and physical activity;

6.6 Promote public beaches for human-powered water craft access;

6.7 Encourage innovative and cooperative approaches among public agencies and private parties to provide recreation opportunities and public access;

6.8 Encourage linkage of parks, recreation areas and shoreline public access points with linear systems, such as hiking trails, bicycle routes, and scenic drives.

2. Existing Condition of Transportation Facilities

The inventory of existing transportation facilities describes the foundation for the transportation and land use conditions utilized for analysis, decision-making, and the Goals and Policies (Chapter 1). This chapter contains maps, statistics, and other information that provide a picture of the transportation system in its current condition.

Personal vehicles are the predominant mode of transportation within the County, where the majority of Island County residents work within the County. Snohomish County is the largest work destination outside of Island County, where residents may commute by personal vehicle or ferry route. For ferry routes to/from Mukilteo in Snohomish County or Port Townsend in Jefferson County, commuters may connect to off-island transit providers or other modes.

Island County is unique due to its composition of two disconnected islands. This arrangement creates an interesting challenge for those who need to travel between Whidbey and Camano Islands. For those without personal water or aircraft, moving between the islands currently requires either taking the Clinton-Mukilteo Ferry and travelling through Western Snohomish County, or crossing Deception Pass Bridge and travelling through both Skagit County and the Northwestern corner of Snohomish County. The result is a minimum 90 minute trip to travel less than five miles.

The first section of this chapter provides an overview of planning standards and classification schemes used to manage the County's transportation system. The sections that follow describe the existing infrastructure in Island County's unincorporated areas by each of the travel modes (vehicles, ferries, transit, non-motorized, and other) included in the County transportation network.

2.1. Planning Context

Long-range transportation plans build on existing transportation facilities available for residents to travel to home, work, and other destinations. There are almost 35,000 people that make up the workforce within Island County. The majority of these workers are Island County residents. There are also a significant number of Islanders who travel to other nearby counties for work. Over 5,000 people commute to Snohomish County, where many are employed by Boeing at the airplane factory located adjacent to Everett's Paine Field. Skagit and King Counties are also significant employment destinations, with over 2,000 Island County workers commuting to each of those counties. In addition, there are also over 1,500 workers living in Snohomish County that come to jobs located in Island County. Skagit County also adds substantially to Island County's workforce, with almost 1,000 people arriving each workday via the Deception Pass Bridge.

Most travel within Island County occurs on roadways, which provide public space for vehicles, transit, bicycles, and pedestrians. Roadways are classified by their intended function and desired service to provide a hierarchy of roadways. The County recognizes two functional classification systems that are maintained at the County and Federal levels. This section provides an overview of the planning context for the Transportation Element and includes

descriptions of functional classification systems for roadways, concurrency management, level-of-service standards (LOS), and State Environmental Policy Act (SEPA) requirements.

Island County Functional Classification

The Island County Functional Classification defines the characteristics of individual roadways to accommodate the travel needs of all roadway users. The design of cross-sections for existing and planned roadways is tied to the functional classification as described in *Island County Code: Title 11.01*. Island County has classified its street system into five primary categories: State Highways, Major Arterials, Secondary Arterials, Collectors, and Local Access streets. The following sections describe the general characteristics of each functional classification designation. A map of the existing County functional classification is provided in Figure 2-1.

State Highway

The State Highway system serves as the primary arterial roadway system within Island County. State Highways connect many of the subareas within the County, including Oak Harbor and Clinton on Whidbey Island and Camano Island to the City of Stanwood. WSDOT classifies certain State Highways as highways of Statewide Significance (as described later in this section). The three state highways in Island County are SR 20, SR 525, and SR 532.

Major Arterial

Major Arterials are county maintained roadways that prioritize moving traffic as efficiently as possible within the arterial roadway system. These roadways connect State Highways and provide mobility in areas between towns and communities. Major arterials may also provide access to large land areas or serve a large traffic generator, providing the function of local access. These roadways typically have the highest traffic speeds and volumes of all county roadways.

Secondary Arterial

Secondary Arterials support the Major Arterial system by providing another tier of mobility and access between the Major Arterial and Collector networks. These roadways also connect two or more communities and may serve as an alternate route to a Major Arterial or State Highway. While still some of the busiest roadways on the county roadway network, Secondary Arterials typically have lower traffic speeds and/or volumes as compared to Major Arterials.

Collector

Collectors provide both access and mobility within Island County between the arterial network and local access streets. The predominant function of these roadways is to collect traffic from neighborhoods and local streets. They may provide for considerable local traffic that originates or is destined to points along the corridor, while providing direct access to adjacent properties.

Local Access

Local access streets provide for direct access to adjoining properties, commercial businesses, and similar traffic destinations. Local access roads typically carry low volumes of traffic to low activity land uses. While these roadways typically have low speeds, some of the rural access roadways have higher posted speeds.



Island County Roadway Functional Classification

Island County Transportation Element

FIGURE **2-1**

Federal Functional Classification System

In addition to the Functional Classification system adopted by Island County, there are Federal and State roadway designations that are used to determine funding eligibility under Federal-Aid programs. The Federal Functional Classification system provides a hierarchy of roadways as defined by the Federal Highway Administration (FHWA) and is maintained for Washington State roadways by WSDOT[4]. This classification defines the operation of roadways as a network, and arranges the hierarchy of roadways based on the regional function of the system. As a result, the Federal Functional Classification includes several differences to the Island County Functional Classification, which generally focuses on the function of individual roadways as related to adjacent land uses.

Changes to the Federal Functional Classification may be requested through WSDOT with review and approval by the FHWA. Requests are submitted by the local agency for review by the Regional Local Programs Engineer and FHWA. FHWA provides approval, denial, or conditional approval for the request that is supplied back to the local agency. This process is usually completed in 3 months or less. Designations for the National Highway System (NHS) and Highways of Statewide Significance (HSS) are also maintained at the Federal and State levels. A map of the existing Federal functional classification is provided in Figure 2-2.

National Highway System

The National Highway System (NHS) includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility as defined by the Federal Highway Administration (FHWA). SR 20, from I-5 to the Coupeville Ferry Terminal, and Ault Field Road from SR 20 to Langley Boulevard are designated as NHS facilities. The Strategic Highway Network (STRAHNET) is a subsystem of the NHS for facilities which have strategic defense significance. SR 20, from I-5 to the Naval Air Station Whidbey Island, is a designated STRAHNET facility.

Highways of Statewide Significance

WSDOT designates interstate highways and other principal arterials that are needed to connect major communities in the state as Highways of Statewide Significance (HSS). This designation assists with the allocation of some state and federal funding. These roadways typically serve corridor movements having travel characteristics indicative of substantial statewide and interstate travel. SR 20 and SR 525 are classified as Highways of Statewide Significance.

[4] WSDOT Functional Classification Map Application. Available at: http://www.wsdot.wa.gov/mapsdata/travel/hpms/functionalclass.htm



Federal Functional Classification

Island County Transportation Element

FIGURE
2-2

LOS Standards

Level of service (LOS) is a qualitative measure describing the operating conditions for a given transportation facility such as a roadway or intersection. Transportation level of service can be measured by criteria such as level of congestion, travel times or speeds, volume of traffic compared to capacity, frequency of transit service, comfort and convenience, or safety. LOS standards can be based on roadway sections or on intersections, or combinations of facilities or services.

LOS standards are part of the mandatory elements of the County's Comprehensive Plan as required by the GMA. The GMA indicates that the transportation element shall include "level of service standards for all locally owned arterials and transit routes to serve as a gauge to judge performance of the system. These standards should be regionally coordinated." The transportation element needs to identify specific actions and requirements for bringing into compliance locally owned transportation facilities or services that operate or will operate below the established level of service standard.

For purposes of the Transportation Element, the County has adopted LOS standards for transportation facilities under its jurisdiction as required under GMA. Island County must also address level of service standards on highways of statewide significance and ferry routes serving the County. However, the LOS standards for these facilities are set by WSDOT.

Evaluating LOS for roadways with transit service is vital to maintaining the on-time performance of local transit service. Roadways with transit routes are evaluated under Island County's LOS standards for the roadway network (Section 2.2). Island Transit does not currently maintain transit LOS standards that pertain to the frequency and quality of transit within the County.

In addition, the County needs to review its LOS standards within the context of the regional policies established by WSDOT. Furthermore, the County needs to coordinate its LOS standards with cities located within the County, especially as they apply to development within future designated Urban Growth Areas (UGAs).

Transportation Concurrency Management

The County must ensure the transportation system meets the needs of new development. The primary regulatory mechanism to achieve this is referred to as concurrency, which is mandated in the GMA. The requirements in the GMA (RCW 36.70A.070(6)(b)) state that:

> *"…local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development… concurrent with development shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years."*

The County uses a concurrency management program to ensure transportation facilities are constructed as development occurs. Island County is unique under current state law which requires counties made up of islands to apply concurrency to those facilities designated as

Highways of Statewide Significance (HSS). In other counties, the concurrency requirements do not apply to HSS facilities. While this requirement might seem to unfairly penalize Island County, the GMA offers some flexibility by allowing local jurisdictions to define, measure, monitor, and maintain LOS according to the land use and transportation system priorities adopted in their unique local Comprehensive Plan.

Concurrency Service Areas

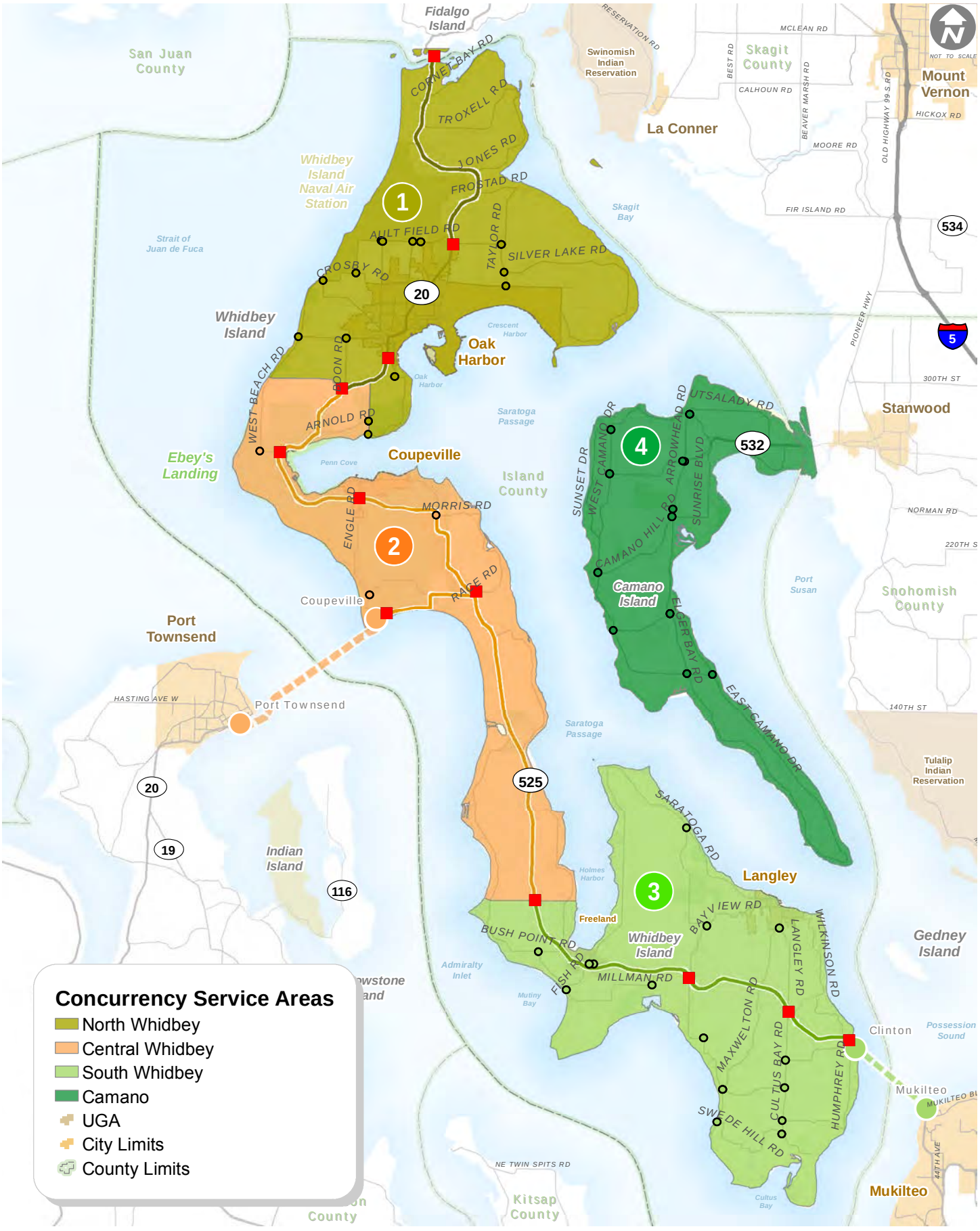
Creating Concurrency Service Areas (CSAs) allows concurrency issues to be defined by the location of the development proposal within the County. This ensures that concurrency evaluations in one part of the County do not prohibit development where different major transportation facilities are used in another part of the County. The proposed CSAs coincide with the Island County Planning Areas (Camano Island and North, Central, and South Whidbey) as shown in Figure 2-3.

The concurrency service areas are used to apply the LOS standards to the state highways, ferry routes, and County intersections as described in the following section. The details and agreement of LOS standards on state facilities are contained in the Memorandum of Understanding (MOU) between the County and WSDOT.

Prior to the 2015 update of its Transportation Element, Island County used an intersection-based LOS standard for managing concurrency. For county-owned facilities located within designated urban areas, the standard was LOS D. For county-owned facilities located in outlying rural areas, the standard was LOS C. In locations where county facilities intersect non county-owned facilities (such as city streets or state highways) the standard was LOS E for urban areas and D for rural areas. As part of the 2015 update, the County revised its LOS standard as part of a parallel update to the Concurrency Ordinance.

The County determined that two components were important to defining the adequacy of its transportation system for the purposes of concurrency. The first was the ability to maintain a reasonable travel speed for major corridors serving the County. Additionally, the County wants to ensure that intersections on state highways and arterials operate without extensive delays during peak travel periods. To accommodate these two objectives, the County established a travel speed-based LOS standard for designated corridors and a second standard for designated intersections.

In addition to establishing LOS standards for corridor travel speeds and designated intersections, the County periodically reviews intersection operations through updates to the Transportation Element. The most recent results from the 2015 update to the Transportation Element and a comparison to the results from the previous 2000 Transportation Element is contained in the Traffic Operations section of this chapter. This is an important methodology for assessing the overall health of the roadway network as it provides an update on how the transportation system has changed since the previous plan. Intersection safety is also part of State Environmental Policy Act (SEPA) requirements as described later in this section.



Concurrency Service Areas and Transportation Facilities

Island County Transportation Element

FIGURE **2-3**

Concurrency LOS Standards

As part of the Transportation Element update, the County determined that three components of the transportation network are most important to defining the adequacy of its transportation system. The facilities tested for concurrency include:

- Highways of statewide significance corridors serving the County are evaluated based on minimum average travel speeds during peak travel periods that correspond to LOS thresholds in the Highway Capacity Manual (Transportation Research Board, 2010);
- Ferry service to and from Whidbey Island is evaluated based on the level of service standards set by Washington State Ferries (WSF); and
- Intersections of roadways federally-classified as arterials or collectors (including roadways with transit routes) with other arterials or collectors are evaluated based on intersection delays during peak travel periods.

Corridor Level of Service Standards

Island County and WSDOT have agreed that weekday PM peak hour travel speeds along state highways are critical to maintaining the adequacy of these routes. Highways within Island County are generally two-lane facilities intersected by unsignalized intersections and driveways. The majority of these highways pass through rural areas of light to moderate development. There are also some segments that pass through commercial areas with greater amounts of development. Speed limits are generally lower on these stretches of highway. These characteristics are generally consistent with the Class III two-lane highway definition in the *Highway Capacity Manual* (HCM 2010). HCM 2010 defines LOS for these facilities by the percent of free flow speed for traffic, which represents the ability of vehicles to travel at or near the speed limit, on highway segments.

The percent of free-flow speed (PFFS) range that represents LOS D for Class III two-lane highways is between 66.7 and 75 percent. LOS D was selected based on the table of *Level of Service Standards for Washington State Highways* (WSDOT, 2010). For each concurrency corridor, a minimum average travel speed based on the PFFS will be applied to concurrency review. The average travel speeds on the corridors are set at 70 percent of the posted speed limit (within the range for LOS D). The standards are applied during over the weekday evening commute, typically from 4:00 to 6:00 p.m., where roadways regularly experience the highest traffic volumes and slowest travel speeds within the County. The travel speeds account for the total average speed of a vehicle, including delays at the intersections between the limits of each segment.

For each of the corridor segments, the County has established a minimum average travel speed which will be applied to concurrency review. These corridors measured for LOS consist of several segments along the three state highways within the County. The extents of the corridors end at major intersections, including at near city limits, or CSA boundaries. The following corridors and extents are contained within one of the four CSAs and have LOS standards set as described in the *Island County Transportation Concurrency Management Program* (2015):

- SR 20
    - Deception Pass Bridge to Oak Harbor City Limits

    - Oak Harbor City Limits to Hastie Lake Road
    - Hastie Lake Road to Libbey Road
    - Libbey Road to Main Street (Coupeville)
    - Main Street (Coupeville) to Race Road/SR 525
    - Race Road/SR 525 to Coupeville Ferry Terminal
- SR 525
    - Race Road/SR 20 to Mutiny Bay Road (Freeland)
    - Mutiny Bay Road (Freeland) to Bayview Road
    - Bayview Road to Langley Road/Cultus Bay Road
    - Langley Road/Cultus Bay Road to Clinton Ferry Terminal

As part of a new Memorandum of Understanding (MOU) with WSDOT, the status of these corridors will be updated periodically.

Ferry Routes

For the purposes of concurrency, ferry routes are considered extensions of the roadway network and subject to concurrency LOS standards. The details of the level of service standards for the ferry routes are contained in the Ferry Service section of this chapter. Ferry routes serving the County are operated by WSDOT under the Washington State Ferries (WSF). The Port Townsend-Coupeville and Mukilteo-Clinton ferry routes are included in the Central Whidbey CSA and South Whidbey CSA, respectively.

Ferry LOS is reviewed for concurrency in the associated CSAs according to the LOS standards established in the *Final Long-Range Plan* (WSF, 2009). WSF LOS standards include two levels, where Level 1 LOS standards indicate when additional pricing and operational strategies might be needed, and Level 2 LOS standards indicate when additional service might be needed.

For purposes of implementing the County's concurrency program, "Level 2/Mitigated" is the LOS standard. This standard requires implementation of transportation mitigation when the level of service for ferry routes exceeds Level 2 standards. While WSF may implement potential mitigation strategies once Level 1 standards are exceeded, the County will require development proposals within CSAs exceeding Level 2 standards to implement mitigation measures as part of the condition of development approval. Decisions on what mitigation measures are appropriate will be determined on a case-by-case basis by the Island County Public Works Director.

Intersection Level of Service Standards

The County has established LOS standards for intersections on Arterials, Collectors, and transit routes. The standards apply to both signalized and unsignalized intersections according to the standard practices contained in the *Highway Capacity Manual* (Transportation Research Board, 2010).

Signalized intersection LOS is defined in terms of a weighted average control delay for the entire intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control as well as provides a surrogate measure for driver discomfort

and fuel consumption. Signalized intersection LOS is stated in terms of average control delay per vehicle.

Unsignalized intersections LOS criteria can be further reduced into two intersection types present within Island County: all-way stop control and two-way stop control. All-way stop control intersection LOS is expressed in terms of the weighted average control delay of the overall intersection or by approach. Two-way stop-controlled intersection LOS is defined in terms of the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns. The County establishes LOS standards based on the type of intersection as described below.

- **Traffic Signals, Roundabouts, and All-Way Stop Controlled Intersections** – LOS D or better based on overall average delay per vehicle.
- **Unsignalized Two-Way Stop Controlled Intersections** – LOS E or better for worst traffic movement. On a case-by-case basis, the County may allow the level of service for traffic movements from the minor streets at two-way stop controlled intersections to operate below the adopted standard, if the County determines that no significant safety or operational issues will result.

The lower LOS standard for unsignalized, two-way stop controlled intersections reflects the desire to minimize delays on the major street and through street traffic, while supporting safe and efficient operations for minor streets. The County typically will apply the intersection LOS standard to the weekday PM peak hour. The County may, however, define additional evaluation periods for intersection review in order to identify if potential impacts would occur. These could include weekday AM peak hour, weekends, or other time periods depending on the type and location of a proposed development.

State Highway Level of Service Standards

WSDOT sets LOS standards for Washington State Highways of Statewide Significance (HSS) jointly with regional transportation planning organizations (RTPOs) across the state. These LOS standards can also be used for SEPA evaluations and are contained in Appendix 29 of the *Development Services Manual*[5].

WSDOT has established LOS standards for Urban and Rural designations in Island County based on UGA boundaries. For HSS located in Urban areas the standard is LOS E, and for HSS located in Rural areas the standard is LOS D. Within Island County, these standards apply to SR 20 and SR 525. LOS standards for state highways of non-HSS are established at the same thresholds: LOS E for Urban areas and LOS D for Rural areas. SR 532 is a non-HSS route in Island County.

[5] Development Services Manual. WSDOT. 2005. Available at: http://www.wsdot.wa.gov/Publications/Manuals/M3007.htm

State Environmental Policy Act (SEPA)

Island County and WSDOT will continue to use SEPA to review the impacts of new development on roadways and intersections. The SEPA review would be used to evaluate impacts on:

- Safety, such as horizontal curvature issues, sight distance, non-motorized, and other
- Intersection operations, level of service, and queue impacts
- Roadway congestion
- Transit and Non-motorized transportation

SEPA review is based on the development project having an adverse impact. Assessment of transportation impacts under SEPA depends on the conditions for each transportation facility or service serving a new development. If adverse impacts are identified, the County can condition the development to provide mitigation to offset or reduce its impacts. This mitigation would help improve the transportation system, at least to the extent of mitigating project impacts.

2.2. Roadway Network

The street and highway system provides mobility and access for the majority of travelers and accommodates multiple types of modes. Roadways on Whidbey and Camano Island do not directly connect to one another, but both include major roadways within the transportation system. These roadways comprise the predominant routes of travel within Island County and include a range of purposes, which are analyzed for operations in this transportation plan.

- Camano Island – A series of major and minor county roadways circulate around Camano Island. These roadways connect to SR 532 on the northeast end of the island. SR 532 serves as the primary connection to the mainland across Davis Slough and the Stillaguamish River via the Camano Gateway Bridge, connecting to the City of Stanwood in Snohomish County.
- Whidbey Island – SR 20 and SR 525 transect Whidbey Island and serve as the primary north-south facilities for roadway travel. SR 525 provides access to the Clinton Ferry at the south end of the Island. The Clinton Ferry takes passengers, bicyclists, and motor vehicles to the City of Mukilteo in Snohomish County. SR 20 provides access to the Coupeville Ferry at approximately the mid-point of the island. The Coupeville Ferry takes passengers, bicyclists, and motor vehicles to Port Townsend in Jefferson County on the Olympic Peninsula. SR 20 also provides a roadway connection to the mainland via the Deception Pass Bridge. The Deception Pass Bridge is at the north end of Whidbey Island and connects to Skagit County. Other roads feed into these state highways and connect local neighborhoods, cities, towns, and recreational areas at wider sections of the island.

Separate summaries for the traffic volumes and traffic operations at intersections are presented in the following sections.

Traffic Volumes

This section describes vehicle traffic volumes on Island County roadways. Traffic counts have been collected at several locations on State Highways and County roadways. Traffic counts are continuously collected on SR 20 near Coupeville by a permanent traffic recorder and maintained in a statewide database by WSDOT. Traffic counts are also collected at select locations by WSDOT on an annual basis to provide traffic volumes based on seasonally adjusted traffic counts.Traffic counts on County roads are maintained in a database at the County Road Administration Board. These are typically updated on a three-year rolling basis to maintain a base of traffic counts throughout the county.

State Highways

State Highways carry the majority of vehicle volumes in Island County. These roadways have the greatest number of travelers and are maintained by WSDOT. Traffic counts collected on these roadways are summarized into Average Annual Daily Traffic (AADT) volumes that are seasonally-adjusted to account for fluctuations in travel due to summer peaks or winter lows. AADTs are reported in Island County for the sole permanent traffic recorder location, which is on SR 20 east of Rhododendron Park Drive (Station #706). Exhibit 2-1 shows the AADT for this location on SR 20 from 1994 through 2013.

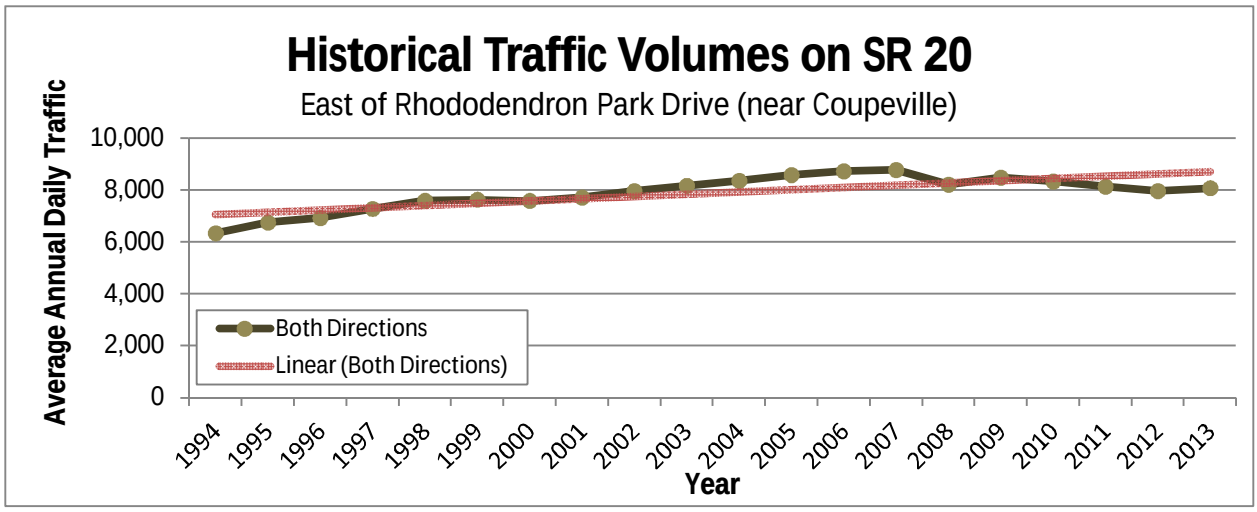


Exhibit 2-1 Historical AADT for SR 20

As shown in the graph above, traffic volumes on SR 20 in Island County have grown slightly over the past two decades, but have generally remained steady. Traffic volumes on SR 20 at this location are around 8,000 average daily trips for the most recent year available. The linear trend line shows an average of 1.3 percent growth in roadway volumes per year. However, the upward trend in traffic volumes has slowed and even reversed since 2007. In a recent five year period of available data, there has been a decline in traffic volumes at a rate of approximately 1.5 percent per year between 2007 and 2012, followed by a slight increase in traffic volumes.

Island County Roadways

An extensive data collection effort is performed by Island County for many Arterial and Collector roadways each spring. Tube counts are collected along several roadways on Whidbey and Camano Islands to collect average daily counts (ADT) and peak hour counts by direction. Traffic volumes at key locations are shown in Figure 2-4. Peak hour traffic counts at major intersections throughout the County are also collected periodically to support analysis of intersection traffic operations. The most recent turning movement counts (TMCs) were available from 2008 through 2010 at many of the key study intersections previously studied in the *Island County Transportation Element* (2000). TMCs were adjusted based on the tube counts collected by WSDOT and Island County to arrive at traffic volumes for the 2012 analysis year.



2012 Existing PM Peak Hour Traffic Volumes

Island County Transportation Element

FIGURE **2-4**

Traffic Operations

Existing traffic operations were evaluated for intersections previously studied in the 2000 plan and other locations that were selected as locations that the County is aware of potential operational or safety concerns. This is an important methodology for assessing the overall health of the roadway network as it provides an update on how the transportation system has changed since the previous plan. In addition, intersection traffic operations provide a snapshot of the health of the roadway network by providing:

- Delays experienced by drivers at intersections,
- Information on pinch points in the system, and
- A picture of non-motorized mode use through counts collected at intersections.

Traffic operations includes a technical analysis to evaluate how drivers experience traveling through the roadway system. It is applied to existing and forecast conditions to assist in identifying issues and potential improvement options. Traffic operations are compared to level of service (LOS) standards established by jurisdictions and local agencies.

Existing Operations Results

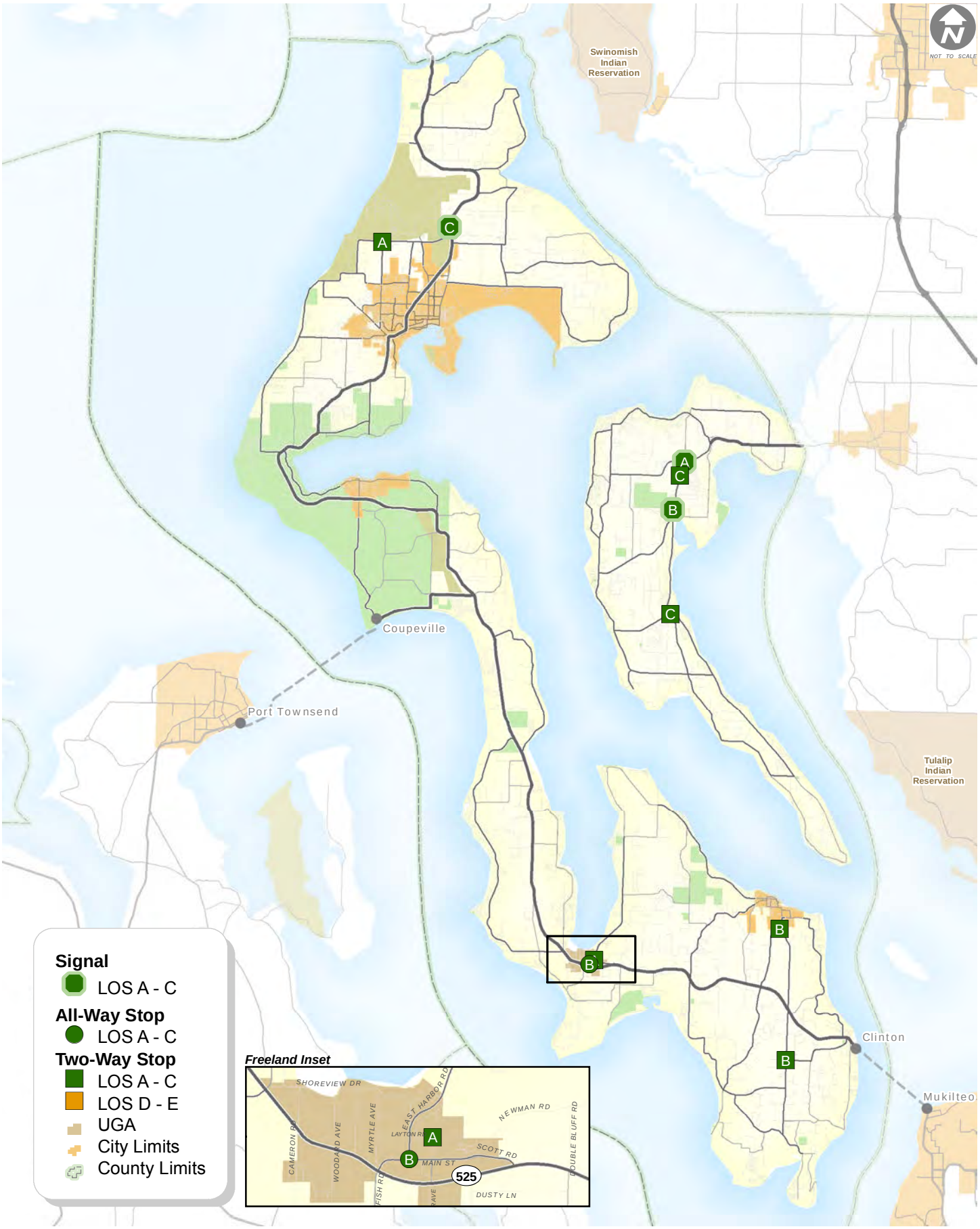
Intersection traffic operations were evaluated at several intersections in the County based on the standards and practices contained in the *Highway Capacity Manual* (Transportation Research Board, 2010). Intersection levels-of-service were evaluated using a traffic planning and analysis software called Synchro version 8.0 for the PM peak hour. The evening peak hour was selected due to the higher typical traffic volumes occurring during that time period for a single hour between 4 and 6 p.m. Exhibit 2-2 shows the LOS results and provides a comparison back to the 1996 LOS results contained in the previous Transportation Element to observe changes over time at key intersections in the County.

As shown in the table, all of the intersections operate at LOS C or better during the weekday PM peak hour. The installation of a signal at East Camano Drive/ Cross Island Road has maintained or improved operations at that intersection. A couple of other locations show an improvement to LOS at unsignalized, two-way stop-controlled intersections. This is likely due to changes in the HCM methodology that have been applied in newer versions of the manual. The 2012 PM peak hour results are also shown Figure 2-5.

Exhibit 2-2 Year 2012 Existing Conditions LOS Summary

Intersection	Jurisdiction	Intersection Control[2]	1996 PM Peak Hour LOS	2012 PM Peak Hour		
				LOS[3]	Delay[4]	CM[5]
SR 20 / Ault Field Road	WSDOT	Signal	-	C	29	--
Heller Road / Clover Valley Road / Ault Field Rd	Island County	TWSC	C	A	9	EB
Harbor Avenue / Layton Road[6]	Island County	TWSC	-	A	9	WB
East Harbor Road / Main Street	Island County	AWSC	C	B	11	EB
Langley Road / Maxwelton Road	Island County	TWSC	B	B	10	EB
Cultus Bay Road / Deer Lake Road	Island County	TWSC	B	B	12	WB
East Camano Drive/ Cross Island Road	Island County	Signal	C[1]	B	12	--
East Camano Drive / McElroy Drive[6]	Island County	Signal	-	C	15	WB
East Camano Drive / Camano Hill Road	Island County	Signal	B[1]	A	6	--
East Camano Drive / Elger Bay Road / Monticello Drive	Island County	TWSC	B	C	20	EB

[1] – Unsignalized intersection LOS evaluation.
[2] – Signal - Traffic Signal; AWSC - All-Way Stop Control; TWSC - Two-Way (or one-way) Stop Control.
[3] – Level-of-service based on *2010 Highway Capacity Manual* methodology.
[4] – Average delay in seconds per vehicle.
[5] – Worst movement reported for unsignalized intersections.
[6] – Not subject to Concurrency requirements.



2012 Existing PM Peak Hour Intersection Level of Service

FIGURE **2-5**

Island County Transportation Element

Traffic Safety

Collision records for the most recent complete five-year period were reviewed for all collisions reported in Island County. Historical safety data was collected from WSDOT for the period of January 1, 2008 to December 31, 2012. Exhibit 2-3 summarizes the collision history records by year for State Highways and County Roads.

Exhibit 2-3 Island County Collision History (January 1, 2008 to December 31, 2012)

Location	2008	2009	2010	2011	2012	5-Year Total
State Highway Collisions						
Fatality[1]	1	0	3	1	4	9
Injury[2]	93	102	95	100	98	488
PDO[3]	198	216	174	213	203	1,004
Subtotal	*292*	*318*	*272*	*314*	*305*	*1,501*
County Road Collisions						
Fatality	2	1	2	3	2	10
Injury	97	113	77	95	96	478
PDO	156	178	152	163	161	810
Subtotal	*255*	*292*	*231*	*261*	*259*	*1,298*
State Highway and County Roads Collisions						
Fatality	3	1	5	4	6	19
Injury	190	215	172	195	194	966
PDO	354	394	326	376	364	1,814
Total	*547*	*610*	*503*	*575*	*564*	*2,799*

Source: WSDOT Collision Reports
1. Collisions with at least one fatality
2. Collisions with at least one injury
3. Collisions with property damage only

As shown in the table, there were nearly 2,800 reported collisions in Island County over the five year study period. This is an average of 560 collisions reported per year, with slightly more occurring on State Routes (average of 300 per year) than County Roads (average of 260 per year). The year with the highest number of collisions is 2009, where 610 collisions were reported on State Highways and County Roads. Many of the collisions that occurred on County and State roadways are single vehicles running off the road or striking fixed objects. While some of these collisions occurred along curves on roadway, there are few discernible patterns to these types of roadway collisions.

Collision records for State Routes were further analyzed to calculate historical collision rates for comparison to statewide averages. Collision rates are calculated based on the number of vehicle miles traveled (VMT) derived from the roadway length and AADT volumes. This provides a common denominator for comparing the number of collisions on roadways with different traffic volumes and lengths.

Exhibit 2-4 summarizes collision rates for State Highways in Island County over the 5-year study period.

Exhibit 2-4 State Route Collision Rates (January 1, 2008 to December 31, 2012)

Roadway	Length (mi.)	5-Year Total Crashes	Crashes / Year	AADT[1]	MVM[2]	Collision Rate[3]
State Highways						
SR 20	29	1,005	201	22,000	232.9	0.86
SR 525	22	425	85	10,000	80.6	1.05
SR 532	3	71	14	17,000	18.0	0.79
Total	**54**	***1,501***	***300***	***49,000***	***332***	***0.91***

Source: WSDOT Collision Reports
1. AADT – Average Annual Daily Traffic for 2012 (from WSDOT Traffic Report)
2. MVM – Million Vehicle Miles
3. Average number of crashes per million vehicle miles traveled

Statewide in 2010, Principal Arterials (as classified by the Federal Functional Classification) experienced a collision rate of 1.68 crashes per million vehicle miles of travel on Principal Arterials[6]. As shown in Exhibit 2-4, collision rates per million vehicle miles of travel on the Principal Arterials within Island County range between 0.86 for SR 20 and 1.05 for SR 525, both below the statewide average. Collectors experienced a statewide collision rate of 1.37 crashes per million vehicle miles of travel, while SR 532 in Island County had an average collision rate 0.79, also below the statewide average.

The severity of collisions on State Highways was summarized to determine the number of fatality, injury, and property damage collisions that were reported on the roadways. Exhibit 2-5 shows the severity of collisions on state routes recorded during the most recent 5-year period of crash data obtained from WSDOT.

Exhibit 2-5 State Route Collision Severity Summary (January 1, 2008 to December 31, 2012)

		Number of Collisions			Number of Occupants		
Roadway	Total Crashes	Fatality[1]	Injury[2]	PDO[3]	Fatalities[4]	Injuries[5]	Vehicles[6]
State Highways							
SR 20	1,005	6	345	654	8	483	1,789
SR 525	425	2	111	312	2	147	691
SR 532	71	1	32	38	1	47	144
Total	***1,501***	***9***	***488***	***1,004***	***11***	***677***	***2,624***

Source: WSDOT Collision Reports
1. Number of collisions with at least one fatality
2. Number of collisions with at least one injury
3. Number of collisions with property damage only (PDO)
4. Total number of fatalities
5. Total number of injuries
6. Total number of vehicles involved

As shown in the table, there were 11 fatalities on State Highways in Island County over the 5-year study period due to 9 separate collisions. Over the same period, there was an average of 1.39 injuries per collision that resulted in an injury. Similarly, an average of more than 2 vehicles was involved in each property damage only reported collision, showing that many collisions reported during the study period involved multiple vehicles.

[6] *Washington State Collision Data Summary*. WSDOT. 2010.

Freight Routes

The Washington State Freight and Goods Transportation System (FGTS) classifies highways, county roads, and city streets according to the average annual gross truck tonnage they carry. Truck tonnage values are derived from actual or estimated truck traffic count data that is converted into average weights by truck type[7]. The FGTS uses five truck classifications, T-1 through T-5, depending on the annual gross tonnage the roadway carries.

- T-1: more than 10 million tons per year
- T-2: 4 million to 10 million tons per year
- T-3: 300,000 to 4 million tons per year
- T-4: 100,000 to 300,000 tons per year
- T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year

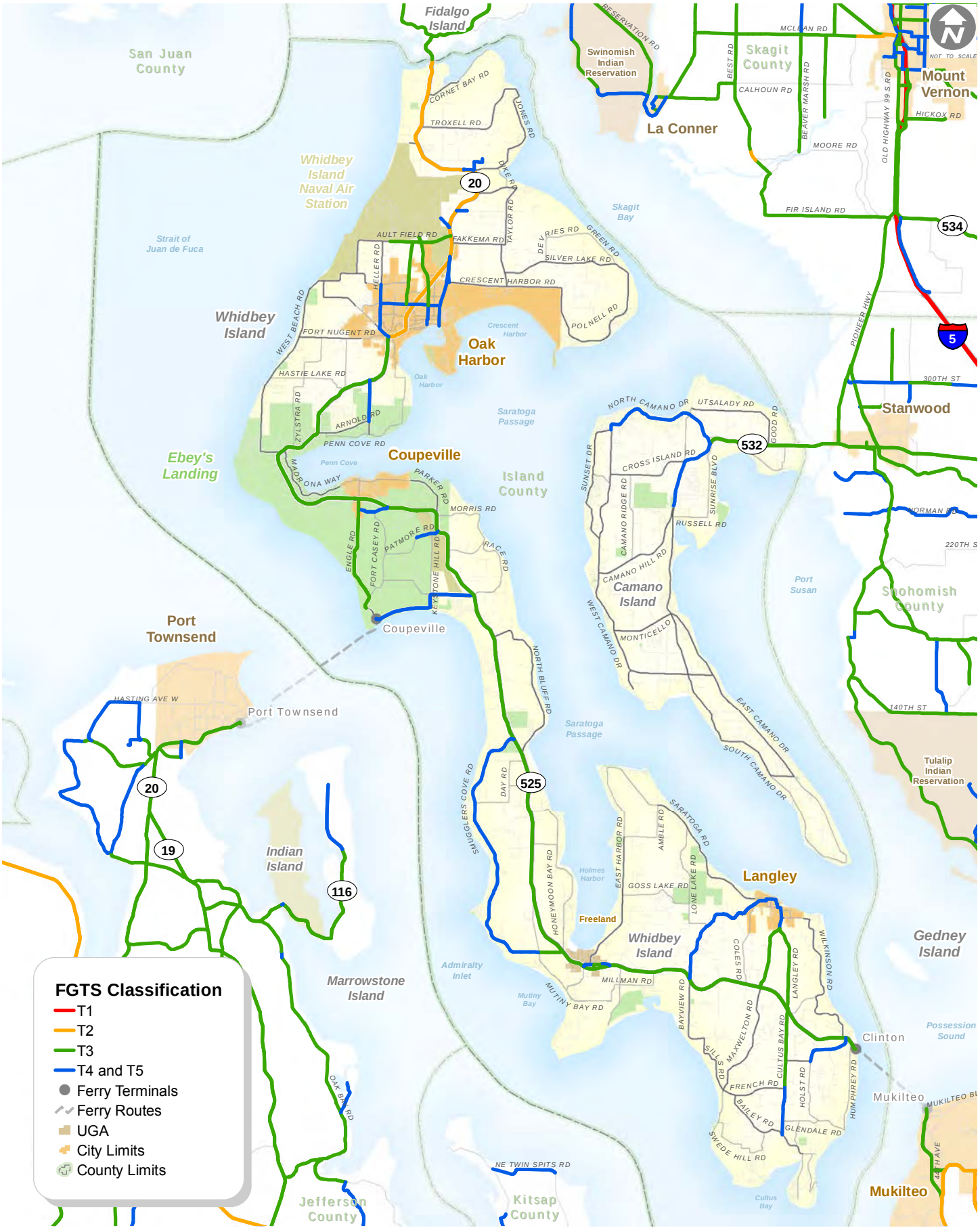
Routes with the highest annual gross tonnage, T-1 and T-2 routes, are also identified as Strategic Freight Corridors.

Figure 2-6 shows the FGTS classifications in Island County. The highest classification road in Island County is for SR 20 from Deception Pass Bridge through the City of Oak Harbor which is classified as a T-2 route. The remaining segments of SR 20, SR 525, and SR 532 are T-3 routes, along with short spurs to ferry terminals and towns. Several other important freight routes are county roads on Whidbey and Camano Islands

Freight Movements

As part of the Eastern Washington Intermodal Transportation Study (EWITS)[8], a statewide freight truck origin and destination study was conducted to collect statewide freight data. This survey included 30,000 truck driver interviews at 20 separate locations across the state. The results of this survey indicated that the majority of truck traffic originating from or destined to Island County comes from the City of Oak Harbor. The predominant routes for all truck trips include SR 20, SR 525 and SR 532 for all or part of their trip within Island County.

[7] *Washington State Freight and Goods Transportation System (FGTS) 2011 Update*. WSDOT. 2011.
[8] *The Eastern Washington Intermodal Transportation Study*. Washington State University. 1999.



Freight and Goods Transportation System

FIGURE **2-6**

Island County Transportation Element

2.3. Ferry Service

Scheduled ferry service to Island County is provided by the Marine Division of the WSDOT, generally referred to as the Washington State Ferries (WSF). Ferry routes are depicted in figure 2-7. This system provides two connections to Whidbey Island via the following routes:

- **Mukilteo–Clinton Route** links southern Whidbey Island at Clinton to the Everett/Seattle metropolitan area at Mukilteo in Snohomish County.
- **Coupeville–Port Townsend Route** links the central portion of Whidbey Island near Coupeville to the Olympic Peninsula at Port Townsend in Jefferson County.

These two routes serve several trip purposes, including recreational-related and tourist trips, commuter-related and business trips, and freight movements as an extension of the highway system. In 2013, WSF completed a comprehensive origin-destination study that documents the travel patterns of their customers. The study was intended to help WSF better match services with customer needs, make ferry operations as efficient as possible, and capture more data that will feed into the ferry travel model for use in the upcoming update of the WSF Long-Range Plan. The complete 2013 study is available on the WSF website[9].

Mukilteo-Clinton Ridership

WSF provides ferry service for vehicles and pedestrians directly to Whidbey Island from Mukilteo through the ferry terminal located in Clinton. Historically, ferry ridership grew rapidly between the mid-1970s and late-1990s until reaching a generally steady state since about 2000. Ferry ridership to and from Whidbey Island, via the Clinton and the Mukilteo Terminals for the most recent 15 years of available data is shown in Exhibit 2-6.

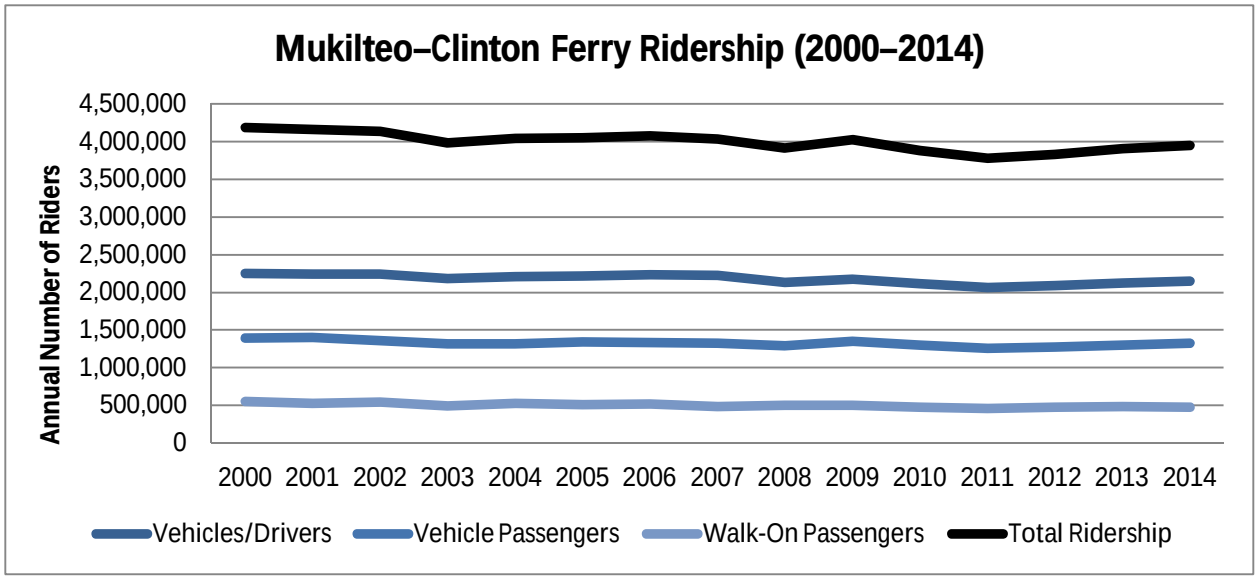


Exhibit 2-6 Historical Mukilteo-Clinton Ferry Ridership

[9] The website for the 2013 study was http://www.wsdot.wa.gov/Ferries/Planning/odsurvey.htm at time of writing.

As shown in the chart, there have been approximately 4 million annual riders on the Mukilteo-Clinton route over the last 15 years. This dipped slightly between 2009 and 2011, but is shown to be rising again with the most recent data available from 2014. Typically there is a slight increase in ridership on this route during the summer, with about 30% of total ridership occurring during the third quarter. The first quarter sees the lowest ridership, with about 21% of the total represented. The Mukilteo-Clinton route caters slightly more to commuters, which describes the more consistent ridership as compared to other ferry routes in the region. There have also been approximately 500,000 annual walk-on passengers. These ferry riders either access the terminal via transit, non-motorized modes, or the park-and-ride facilities located near the Clinton terminal.

Coupeville-Port Townsend Ridership

WSF provides ferry service for vehicles and pedestrians directly to Whidbey Island from Port Townsend through the ferry terminal located near Coupeville. Similar to the Mukilteo-Clinton route, ferry ridership grew rapidly between the mid-1970s and late-1990s. Ferry ridership to and from Whidbey Island, via the Coupeville and the Port Townsend terminals, for the most recent 15 years of available data is shown in Exhibit 2-7.

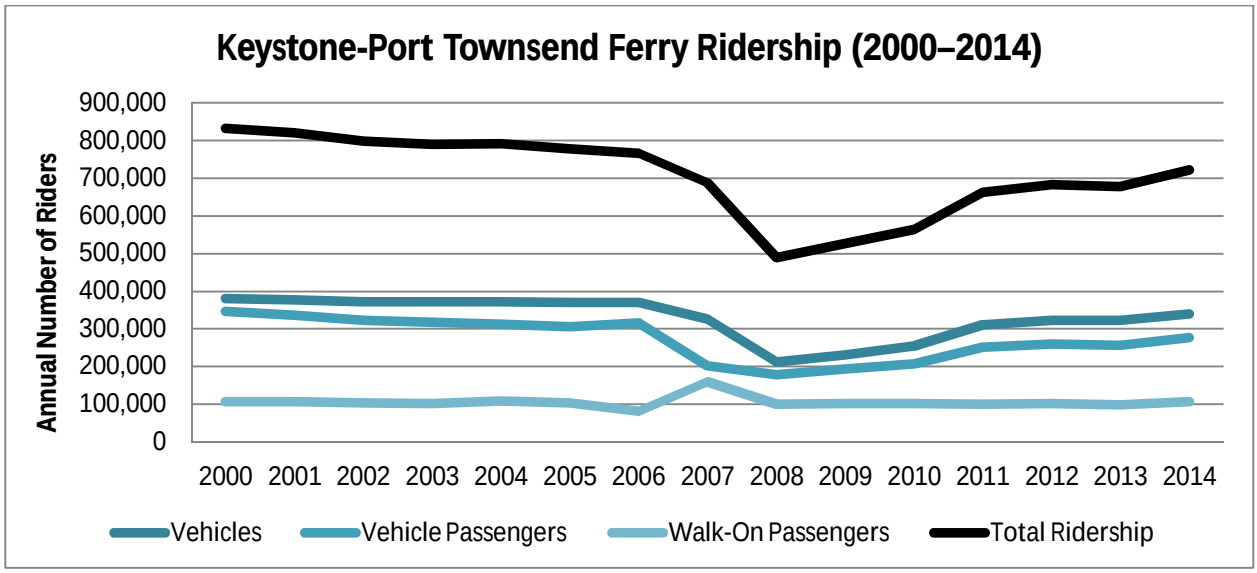


Exhibit 2-7 Historical Keystone-Port Townsend Ferry Ridership

As shown in the figure, there was a significant dip in the number of total passengers between 2006 and 2008. During this same period, however, there was a rise in the number of walk-on passengers. This significant change in ridership is due to a period of service disruption where there was no vehicle service from December 2007 through January 2008. Between February 2008 and October 2010, there was a smaller boat operating on the run until a full-sized vessel continued service from November 2010 through June 2011. Service was restored in July 2011 with the addition of a second boat during the peak season. The most recent ridership numbers available show over 700,000 total annual riders and approximately 100,000 walk-on passengers on the Coupeville-Port Townsend route in 2014. The summer months see the highest percentage of total annual ridership, with 40% of boardings occurring during the third quarter. The first quarter represents the lowest proportion at 15% of total annual boardings for this route.



Ferry Routes

Island County Transportation Element

FIGURE
2-7

LOS Standards

The *Final Long-Range Plan* (WSF, 2009) established a new methodology for assessing levels-of-service (LOS) on ferry routes. The approach includes two LOS standards that allow WSF to first employ targeted adaptive management strategies on a route before adding capacity. This tiered approach to measuring congestion is based on the percent of sailings that are full during three months of the year: January, May, and August.

The *Final Long-Range Plan* includes an analysis of 2006 ridership data and LOS standards by route. LOS Standards are adjusted for different months of the year. For example, the percent sailings full is higher in August as compared to other months during the year to account for peak travel on ferry routes in the summer. A future update to the *Final Long-Range Plan* may include LOS standards that are different from those in the most recent plan.

Level 1 and Level 2 LOS Standards are measured by the percent of sailings full during the evening commuter period from 3-7 p.m. When the Level 1 LOS Standards are exceeded, they may trigger a demand management mechanism. When the Level 2 LOS Standards are exceeded, they may trigger additional ferry service. More recent ridership data and LOS results are anticipated to be included in an update to the *Final Long-Range Plan* that WSF is expected to begin in the summer of 2015. Exhibit 2-8 summarizes the results of the data currently available for the Mukilteo-Clinton and Coupeville-Port Townsend Routes.

Exhibit 2-8 2006 Existing Estimated Percent Sailings Full and LOS Standards by Route

Route	Estimated Percent Sailings Full (2006)	Level 1 LOS Standards[1]	Level 1 Exceeded?	Level 2 LOS Standards[2]	Level 2 Exceeded?
Mukilteo-Clinton Route					
January	**22%**	25%	No	65%	No
May	**32%**	25%	**Yes**	65%	No
August	**39%**	30%	**Yes**	75%	No
Port Townsend-Coupeville Route					
January	**12%**	25%	No	75%	No
May	**14%**	30%	No	75%	No
August	**37%**	35%	**Yes**	85%	No

[1] – Level 1 LOS Standards indicate when additional pricing and operational strategies might be needed.
[2] – Level 2 LOS Standards indicate when additional service might be needed.

Based on 2006 ridership data, both routes are under Level 1 LOS Standards for the month of January, and the Coupeville-Port Townsend is also within Level 1 LOS Standards for May. However, the estimated percent sailings full for the remaining three analysis periods exceeds the LOS standard set for that particular route.

For both routes, adaptive strategies have already been initiated; fares have started (with the 2013 and 2014 fare changes) to increase at a slightly faster rate for vehicles than passengers to encourage more passengers than vehicles in response to higher ridership. Additionally, beginning in 2011, small cars (under 14 feet in length) were given a fare break compared to standard cars to encourage more travelers to use smaller cars when possible, freeing up car

deck space. The Port Townsend route also implemented a vehicle reservation system starting in 2009 to increase reliability for travelers on this route.

2.4. Transit

Transit service is a fundamental piece of the transportation network that operates on state highways and county arterials, as well as county collectors on both Whidbey and Camano Islands.

The transit services available in Snohomish and Skagit Counties are important to residents of Island County, particularly weekday commuters who work on the mainland. The primary locations where Islanders can access these services are in Mukilteo, Port Townsend, Stanwood, and March's Point Park and Ride in Anacortes.

Mukilteo offers the most transit options. There are currently three different transit providers with stops within walking distance from the ferry terminal;

- Sound Transit's *Sounder* commuter train offers four trips into Seattle's King Street Station on the North Line during the morning commute hours, and four return trips in the afternoon. During the rainy season, however, the tracks are prone to landslides and service disruptions are not uncommon.
- Community Transit provides five commuter bus trips to and from downtown Seattle on weekdays, as well as service to the Lynnwood Transit Center six days per week. The Lynnwood Transit Center is well connected to Sound Transit's frequent express bus service as well as a significant number of local routes operated by Community Transit that extend to major destinations throughout Snohomish County.
- Bus service to downtown Everett is provided by Everett Transit throughout the day each weekday, and also operates four shuttle trips to the Boeing factory during peak commute times.

Community Transit also offers reliable service from Stanwood that is useful for Camano Island residents, including two weekday commute trips to Boeing and two to downtown Seattle. Service is also available to Smokey Point throughout the day, six days per week. Island Transit provides a shuttle between Terry's Corner Park and Ride and Stanwood to make it easy for Camano residents to leave their car on the island when connecting to transit in Snohomish County.

In addition to bus service, Island Transit currently has over 60 registered vanpools that Island County residents use to commute. Over 40 percent of these vanpools, travel to the Boeing factory in Everett from either Whidbey or Camano Islands. Major off-island destinations include the Microsoft campus in Redmond, various other Eastside locations, and Downtown Seattle. Vanpoolers travelling aboard ferries enjoy registered high-occupancy vehicle status, making them exempt from having to wait in line at the terminals.

Fixed Route Service

Transit service is funded through a tax-based transit district and operated by Island Transit. There are close to 15 fixed service bus routes on Whidbey and Camano Islands. These routes serve communities across the county. Island Transit has more frequent service during peak hours, particularly those serving commuter travel.

Paratransit Service

Island Paratransit is a curb-to-curb service for registered, eligible persons of disability who are unable to use the regular bus service. Island Paratransit is based upon the same days and hours, by route structure, as the regular scheduled route service. The basic service is a corridor centered on the scheduled route and extending three-fourths of a mile on either side of the route.

Vanpool Program

Island Transit operates a vanpool program for groups of people that have similar schedules and share a commute to and from work or school. In 1988, Island Transit's Board of Directors adopted a vanpool administration policy modeled after the policy developed by the Municipality of Metropolitan Seattle's (Metro) Commuter Pool Program. This policy provides a clear schedule of reimbursements as well as comprehensive rider and driver agreements.

Park-and-Rides

Park-and-rides allow transit users to drive private vehicles to a centralized location and ride transit to their ultimate destination. In rural areas these can be a critical component of the transit system as they extend the reach of transit routes to farther origins or destinations. There are nine park-and-ride lots in Island County at the sites shown in Exhibit 2- 9.

Exhibit 2- 9 Park-and-Ride Facilities

Name	Location	Number of Parking Spaces
Clinton Park and Ride	SR 525 / Deer Lake Road	200
Bayview Park and Ride	SR 525 / Bayview Road	85
Freeland Park and Ride (Trinity Lutheran Church)	SR 525 / Woodard Road	70
Greenbank Park and Ride	SR 525 / Bakken Road	20
Langley Noble Creek Transit Park	Camano Avenue / Sandy Point	64
Coupeville Prairie Station Transit Park	SR 20 / S Main Street	48
Oak Harbor Park and Ride	SR 20 / Hoffman Road	33
Soundview Shopper Park and Ride	SR 20 / Troxell Road	15
Terry's Corner Park and Ride	SR 532 / Sunrise Boulevard	80

Source: WSDOT Park and Ride Database

As shown in the table, approximately 615 parking spaces are available across all park and ride facilities in Island County. The Clinton Park and Ride has the highest number of total parking spaces, with 200 available for personal vehicles. Island Transit has purchased several additional properties, shown in Exhibit 2-10 to accommodate future park & ride lots as funding becomes available. No formal studies on the usage of park and rides in Island County were available at the time of this report.

Exhibit 2- 10 Future Park-and-Ride Opportunities

SR 525 / Bush Point Road intersection near Freeland
SR 20 / SR 525 Intersection near the Coupeville Ferry
South Camano Dr / East Mountain View Road Intersection near Camano State Park
SR 20 / Parker Road near main transit facility

Transit Ridership

Ridership information is collected by transit operators to observe the annual and seasonal trends for transit service provided. Island Transit ridership increased steadily from 2010-2013 and decreased in 2014 due to service cuts and alterations. The most recent year of data available shows Island Transit had approximately 760,000 annual riders.

LOS Standards

Evaluating LOS for roadways with transit service is vital to maintaining the on-time performance of local transit service. Roadways with transit routes were evaluated under Island County's LOS standards for the roadway network (Section 2.2). Island Transit does not currently maintain transit LOS standards that pertain to the frequency and quality of transit within the County.

2.5. Non-Motorized

The non-motorized transportation network consists of facilities for residents and visitors to participate in active transportation and recreation activities in Island County. A combination of on-street facilities and off-street pathways provide the core network for walkers, cyclists, and other non-motorized users to travel. A comprehensive non-motorized network will provide "linkages between communities, access points, major parks and natural areas, points of interest, and other destinations." (*Island County Non-Motorized Plan*, 2006).

The existing non-motorized facilities documented in this section of the plan are based on an inventory conducted in the summer of 2005, as documented in the *Island County Non-Motorized Plan*, and updated with new facilities as they were constructed.

Non-Motorized Facilities

Non-motorized facilities vary across Island County to include a range of types that are suited for pedestrians, cyclists, and other types of non-motorized users.

Sidewalks

Sidewalks are the primary pedestrian facility within towns and developed areas. Many of the downtown areas including Freeland, Oak Harbor, Coupeville, and Langley provide sidewalks. Along with off-street trails, sidewalks are the primary facility type for pedestrians. Cyclists may also use sidewalks within many of these jurisdictions provided they yield right-of-way to pedestrians. Because sidewalks are typically focused on serving local travel within Island County, they are not shown on any of the non-motorized system maps.

On-Street Facilities

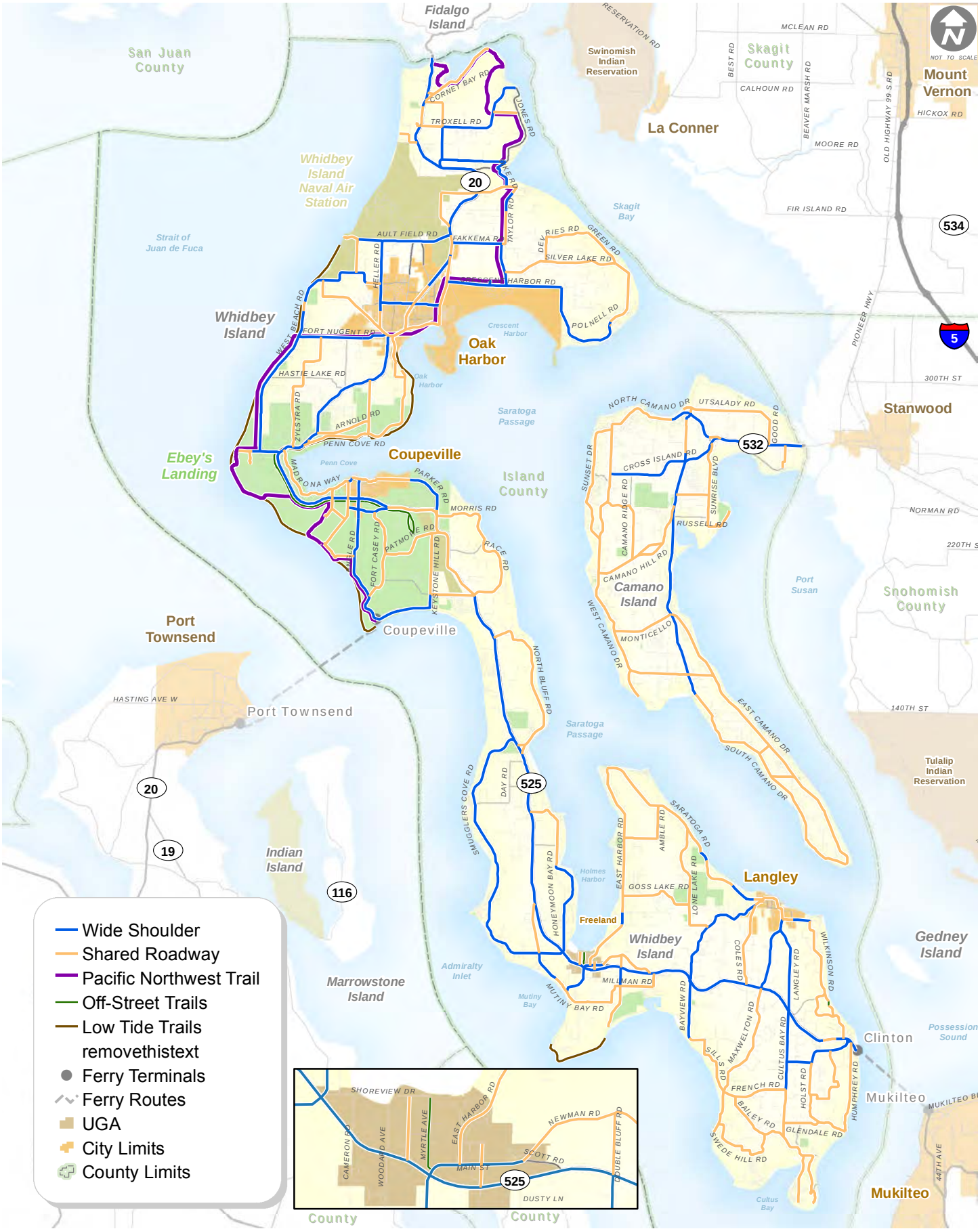
On-street facilities include the bicycle lanes, striped shoulders, and shared roadways that comprise the non-motorized facilities on State Highways and County Roads. These facilities are primarily used for commuter and utility travel between and within the urbanized areas of Island County. Recreational and tourist activities in the county also use these routes. The on-street facilities are shown in Figure 2-9.

Bicycle Lanes

Bicycle lanes are dedicated striped roadway space for cyclists that are typically in both directions on the edge of the traveled way. They are marked with a wide white stripe and parking is prohibited. Main Street and Harbor Avenue in Freeland are currently the only county roads that have sections with bike lanes.

Striped Shoulder

Striped shoulders are on the edge of the traveled way for vehicles. Striped shoulders are considered non-motorized facilities where there is a reasonable distance available for pedestrians and cyclists to travel with minor impact to motor vehicles. For the purposes of this plan, this facility type only includes roadways with striped shoulders 4 feet or greater in width. Striped shoulders with at least 4 feet of usable width typically provide enough comfortable space for non-motorized users, while narrower striped shoulders often result in non-motorized users being forced into the other travel lanes.



Non-Motorized Transportation System

Island County Transportation Element

FIGURE **2-8**

C:\Users\B.Wood\Desktop\TEGIS\Figure 2-9 Non-Motorized Facilities.mxd

Shared Roadway

Shared roadways include roadways with striped shoulders less than 4 feet wide, roadways without striped shoulders, and roadways with curbs. On shared roadways, non-motorized users share the travel lane with motor vehicles.

Off-Street Facilities

Off-street facilities include the trail network and recreational beach walks comprised of the low-tide trails in Island County. These types of facilities are generally used for recreational purposes, but may also serve commuter and utility travel between urban areas in Island County. The off-street facilities are shown in Figure 2-9.

Trails

The Island County Non-Motorized Plan designates both high-standard, medium-standard, and Wildland Trails. For the purposes of the county-wide transportation element, standard trails are separated from the roadways and vary in width from approximately 5 feet to 12 feet wide. ADA access is provided on many trails, but not all.

High-standard trails are typically, a well engineered multiuse trail with a paved or compacted surface (no loose gravel), formal access, and high-quality user amenities. A high-standard trail follows easy to moderate grades and is generally ADA accessible. Tread width may vary from six to twelve feet or more, although eight to ten feet is more common. This facility type tends to be more common in urban areas but may be used for major regional connections as well, and some may be suited to touring bikes.

Medium-standard trails have a smooth, durable surface that may be paved, gravel, or native soil, and they are generally well constructed and maintained. They are usually narrower than high-standard trails and often vary between often vary between three and six feet in width, with five feet being more common. Occasional steep grades are possible. Formal access is normally provided, along with limited user amenities. ADA accessibility may or may not be provided. These trails are common in urban, rural, and wildland locations.

Wildland trails can range from primitive user-built trails that are poorly built or maintained, to well maintained, but relatively narrow trails on a native soil surface, with varying grades, dips, and turns. They are generally less than three feet in width and can have many steep sections, drainage challenges, or occasional obstructions. Most lack user amenities and tend to be located in rural or wildland areas with limited (or lacking) formal access.

Low-Tide Trails

Low-tide trails, or beach walks, are regionally significant stretches of firm sand or gravel that allow for walking during low to moderate tides. These do not follow a constructed pathway, but are shown as trails on the non-motorized maps. Only walkable beaches that are owned by the public, are of significant length, and have reasonable access are included in the inventory.

Non-Motorized Volumes

The number of non-motorized travelers is increasing across the state of Washington. As part of the Washington State Bicycle and Pedestrian Documentation Project, bike and pedestrian

counts were conducted in 2008, 2011, and 2012 at three different locations in Oak Harbor. Statewide counts of pedestrian and cyclists conducted every fall since 2008 have shown an overall increase of 10 percent up to the most recent counts available from 2012[10].

[10] *Washington State Bicycle and Pedestrian Documentation Project*. WSDOT. 2012.

Non-Motorized Safety Data

Collision records were reviewed for pedestrian and bicycle crashes on State Highways and Island County roadways. Collision records during the most recent 5-year period of crash data obtained from WSDOT were analyzed for collisions that involved non-motorized users. Exhibit 2-11 shows the total and severity of these collisions within Island County.

Exhibit 2-11 Non-Motorized Collision Summary (January, 1 2008 to December 31, 2012)

Roadway User	Total Crashes	Fatality Collisions[1]	Injury Collisions[2]	PDO Collisions[3]	Number of Fatalities[4]	Number of Injuries[5]	Number of Vehicles[6]
State Highway Collisions							
Pedestrian	21	3	15	3	3	20	26
Cyclist	11	0	11	0	0	11	11
Subtotal	*32*	*3*	*26*	*3*	*3*	*31*	*37*
County Roadway Collisions							
Pedestrian	12	0	11	1	0	11	12
Cyclist	11	0	11	0	0	11	11
Subtotal	*23*	*0*	*22*	*1*	*0*	*22*	*23*
State Highway and County Roads Collisions							
Pedestrian	33	3	26	4	3	31	38
Cyclist	22	0	22	0	0	22	22
Total	*55*	*3*	*48*	*4*	*3*	*53*	*60*

Source: WSDOT Collision Reports

1. Number of collisions with at least one fatality
2. Number of collisions with at least one injury
3. Number of collisions with property damage only (PDO)
4. Total number of injuries
5. Total number of fatalities
6. Total number of vehicles involved

As shown in the table, there were 55 total crashes involving non-motorized roadway users on State Highways and Island County roadways. Over the 5-year study period, three fatalities and 53 injuries (from 48 injury collisions) were recorded.

2.6. Other Modes

This section of the report covers other transportation modes that are not explicitly present within Island County, but may be included in the future. These modes include air, rail, and equestrian facilities.

Air Transportation

Island County has three privately owned airfields that allow access;

- Camano Island Airfield, a single runway on North Camano
- A.J. Eisenberg Airport, a single runway on North Whidbey
    - The airport previously had scheduled passenger service provided by Kenmore Air, which ended operations to Oak Harbor in 2008.
- Whidbey Airpark a single runway on South Whidbey

WSDOT's Aviation Division provides information about each of these airports including aerial photos, reference guides and facility reports.[11]

In addition to these locations, there are two naval airfields located at the Whidbey Naval Air Station and Coupeville Naval Outlying Field.

- The Whidbey Naval Air Station is the major air facility in Island County with an air traffic control tower and an instrument approach system. At present, it is used exclusively by military aircraft.
- Coupeville's Naval Outlying Field is also used exclusively by military aircraft. It is primarily used by Navy pilots practicing aircraft carrier landings.

Rail

No rail service presently exists within Island County, although rail terminals are within close proximity of Whidbey Island and Camano Island at nearby towns. Passenger rail service in the region is provided by Sound Transit and Amtrak. While not within the county, rail lines provide key connections for freight and passenger service to the region. Connection to nearby rail facilities may be made via the highway system or water transportation routes extending out from Island County.

Sound Transit operates *Sounder* regional commuter transit service. The closest Sounder train station is located in Mukilteo, which is served by the north line that operates between Everett and Seattle. Sounder trains make four roundtrips per weekday and it takes approximately 50 minutes to travel from Mukilteo to Seattle.

The closest Amtrak rail stations are located in Everett, Mount Vernon, and Stanwood. Intercity passenger rail service is available on the *Cascades* route that operates between Vancouver, BC and Eugene, Oregon.

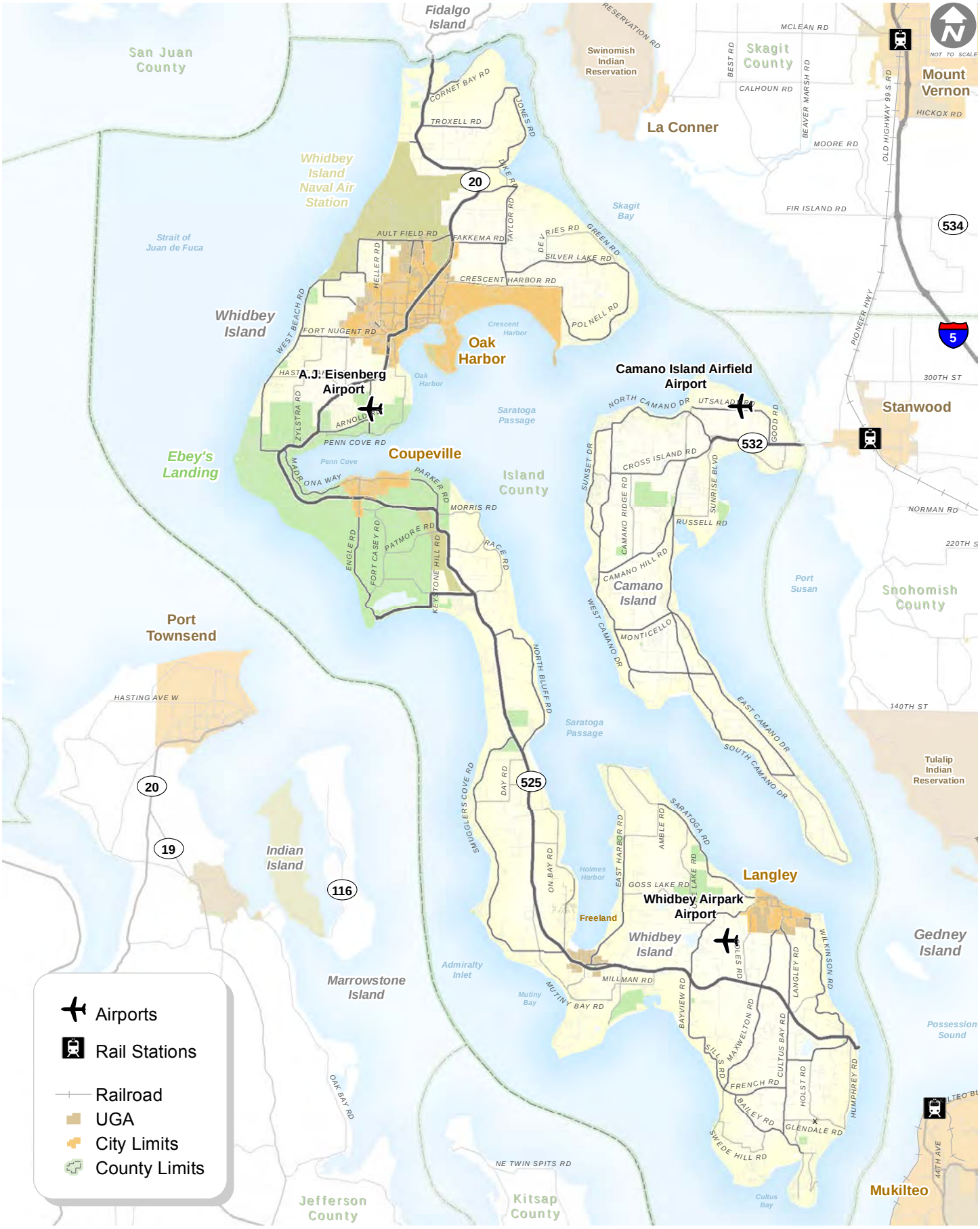
Equestrian Facilities

Currently, there are no public equestrian facilities located in the unincorporated areas of Island County; however, there are multi-use trails including the Kettles Trail in Coupeville, the Putney Woods Trails in Langley, and the Trillium Woods Trails in Greenbank that permit equestrian use. There are also some private riding facilities and trails throughout the County and Langley that have separated horseback riding trails, such as along Anderson and Baker Road rights-of-way and within a separate easement through Cedars Trail residential development. In addition, there are exercise and riding areas at the county fairground near Langley.

Motorcycles

Motorcycles are a popular option for ferry commuters, particularly with Boeing employees who contend with substantial parking lots surrounding the campus. Due to their small footprint, motorcycles are allowed to park closer in to the factory worksite and, like vanpools, are also permitted to bypass long lines of cars at the ferry terminals that are typical during the peak tourist season. These perks make riding a motorbike a reliable way to streamline the commute time for Whidbey Island residents

[11] Available at http://www.wsdot.wa.gov/aviation/AllStateAirports/WashAirports_Northwest.htm at the time of writing.



Air and Rail Transportation Facilities

FIGURE **2-9**

Island County Transportation Element

3. Travel Forecasts Evaluation

The County maintains its transportation system to accommodate future growth and development. The Growth Management Act (GMA)[12] requires that the transportation planning horizon be at least ten years in the future. For the 2016 Transportation Element, the County decided that a longer-range horizon should be used and selected 2036 as the forecast year for vehicle travel. The longer-range horizon year allows the County to better plan for and scale transportation facilities that are needed as the County grows over the next two decades.

A travel demand model for the region was built to support the County's transportation planning efforts in coordination with the Skagit Council of Governments (SCOG), which is the lead agency for the Skagit Metropolitan Planning Organization. The model provides a means for forecasting traffic volumes based on population and employment growth allocations for the County. The tool was developed to allow Island and Skagit Counties to plan independently, while including the transportation connection between the two counties at Deception Pass.

Ferry service is another important component of the transportation system for Island County that is operated and maintained by the Marine Division of the Washington State Department of Transportation, otherwise known as Washington State Ferries (WSF). Planning for the two ferry routes operating between Mukilteo-Clinton and Port Townsend-Coupeville is contained in WSF's *Final Long-Range Plan*[13]. Ridership forecasts for these two routes are based on statewide planning efforts and were evaluated to find any potential constraints on ferry travel to and from the County.

3.1. Land Use Forecasts

Land use forecasts are based on anticipated changes in population and employment within Island County. The travel demand model utilizes forecast land use assumptions to estimate various types of trips that are applied to the transportation network. The land use forecasts included in the travel demand model are intended for planning purposes only. They represent an estimate of future conditions rather than a planned or desired outcome and do not restrict or require specific land use actions.

The land use assumptions are based on the zoning available at the time the model was created. Future forecasts must also incorporate growth in travel demand entering and exiting the County. These travel demands are based on regional population and employment trends as summarized below. More detailed assumptions for land use growth within the County are available in the *Island County Population and Employment Forecast and Allocation Methods* (BERK Consulting, 2014).

The findings in the report indicate that the population is expected to grow by 11%, and employment is expected to grow by 9% over current (2013) numbers for Island County as a

[12] Washington State 36.70A RCW. Available at http://apps.leg.wa.gov/rcw/default.aspx?cite=36.70A.
[13] Washington State Department of Transportation, Ferries Division. Available at http://www.wsdot.wa.gov/ferries/planning/.

whole. The distribution of this increase varies for population throughout Island County's four planning areas; three areas on Whidbey Island and one on Camano Island. Employment is expected to grow uniformly across the county. Exhibit 3-1 and Figure 3-1 summarize 2013 and 2036 total population and number of employees for all four planning areas.

Exhibit 3-1 Existing and Forecast Land Use

Planning Area	Population				Employment			
	2013	2036	% Total Growth	Growth Share	2013	2036	% Total Growth	Growth Share
North Whidbey	37,171	42,989	16%	67%	16,586	18,011	9%	69%
Central Whidbey	12,617	13,448	7%	10%	2,864	3,110	9%	12%
South Whidbey	13,757	14,841	8%	13%	3,552	3,857	9%	15%
Camano Island	15,805	16,679	6%	10%	960	1,042	9%	4%
Total	***79,350***	***87,957***	***11%***	***100%***	***23,962***	***26,020***	***9%***	***100%***

As shown in the table, population is anticipated to grow to nearly 88,000 by 2036. Employment growth for the county is expected to reach 26,000 jobs by 2036.

Population

The County's allocation of 2036 population to the four planning areas is shown in Exhibit 3-2. The amount of population split between urban and rural locations was determined based on the assumption that urban and rural areas will continue to grow relative to each other at the current rate, which is reflected in Exhibit 3-3. The County's official allocations are based on a base year of 2010 and a horizon year of 2036. For purposes of transportation modeling to a more recent base year, the numbers were adjusted to 2012 population figures based on the State Office of Financial Management's annual population estimates for the County and cities.

Exhibit 3-2 Island County Planning Area Population Growth – Baseline/Alternative 1

Planning Area	2010 Pop Census	2012 Pop OFM Est.	2036 Island County Assumed Increase	2036 Island County Pop Est.	2010-2036 Growth	2012-2036 Growth
North Whidbey	36,757	37,171	17.0	42,989	6,232	5,818
Central Whidbey	12,458	12,617	7.9%	13,449	991	832
South Whidbey	13,630	13,757	8.9%	14,841	1,211	1,084
Camano Island	15,661	15,805	6.5%	16,679	1,018	874
Total	***78,506***	***79,350***	***-***	***87,958***	***9,452***	***8,608***

Sources: BOCC Resolution PLG-001-14; OFM 2013; BERK Consulting 2014

Exhibit 3-3 Island County Planning Area Population Growth – Urban and Rural Shares (Baseline/Alternative 1)

Planning Area	Urban/Rural Split		2012-2036 Growth	2012-2036 Pop Net Allocation		
	Urban	Rural		Urban	Rural	Total
North Whidbey	60%	40%	5,818	3,491	2,327	5,818
Central Whidbey	15%	85%	832	125	707	832
South Whidbey	19%	81%	1,084	206	878	1,084
Camano Island	0%	100%	874	0	874	874
Total	***-***	***-***	***8,608***	***3,822***	***4,786***	***8,608***

Sources: OFM 2013; BERK Consulting 2014

The forecast population in Island County is anticipated to grow the most in the North Whidbey planning area, which includes the City of Oak Harbor. Population forecasts for that area show a total growth of approximately 5,800 residents due primarily to additional squadrons expected to be stationed at NAS Whidbey. The other three planning areas are expected to have more modest growth of approximately 2,800 new residents among the three areas.

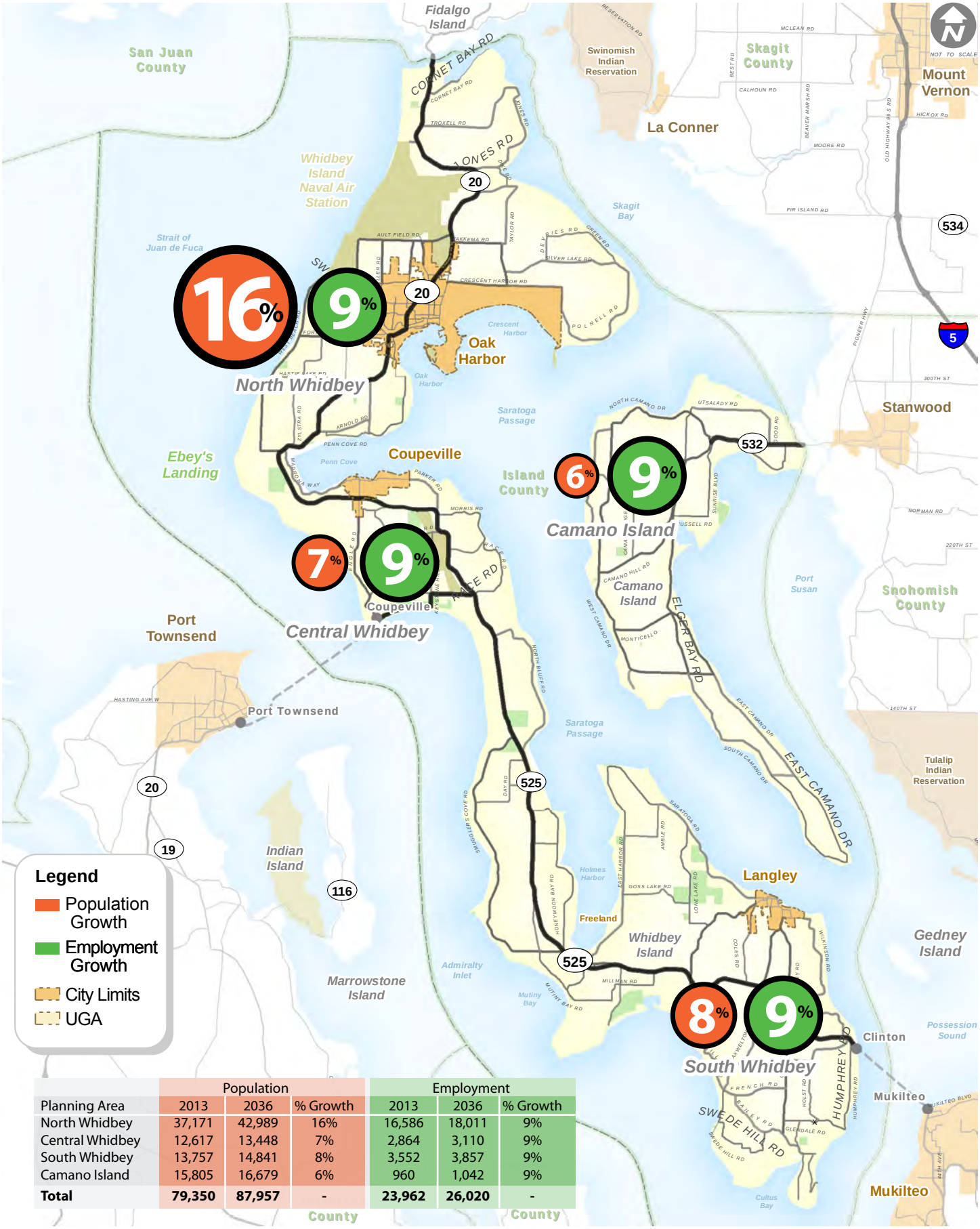
Employment

Forecast employment in Island County is anticipated to grow uniformly Countywide; however the planning areas with the most current (2013) jobs are expected to add the highest number of jobs in the future. The North Whidbey planning area is anticipated to account for approximately 69 percent of the approximately 2,000 jobs to be added Countywide. The other three planning areas would account for approximately 600 jobs in 2036. See Exhibit 3-4.

Exhibit 3-4 Shares of Employment by Planning Area and Urban/Rural Split

Planning Area	2012 Total	2036 Total	County Share	2036 Employment		Urban/Rural Split	
				Urban	Rural	Urban	Rural
North Whidbey	16,586	18,083	69%	7,587	10,496	42%	58%
Military	*7,300*	-	-	*380*	*8,234*	-	-
Central Whidbey	2,864	3,070	12%	2,024	1,046	66%	34%
South Whidbey	3,552	3,841	15%	1,963	1,878	51%	49%
Langley	*592*	-	-	*647*	-	-	-
Freeland	*1,211*	-	-	*1,316*	-	-	-
Camano Island	960	1,026	4%	-	1,026	0%	100%
Total	***23,962***	***26,020***		***11,574***	***14,446***		

Sources: ESD, 2013; SCOG, 2014; BERK, 2014



	Population			Employment		
Planning Area	2013	2036	% Growth	2013	2036	% Growth
North Whidbey	37,171	42,989	16%	16,586	18,011	9%
Central Whidbey	12,617	13,448	7%	2,864	3,110	9%
South Whidbey	13,757	14,841	8%	3,552	3,857	9%
Camano Island	15,805	16,679	6%	960	1,042	9%
Total	**79,350**	**87,957**	-	**23,962**	**26,020**	-
		County			County	

2036 Population and Employment Forecast

FIGURE **3-1**

Island County Transportation Element

3.2. Forecast Travel Conditions

Forecast travel conditions determine where future bottlenecks may occur on the roadway network based on 2036 forecast travel demand and fully funded transportation system projects. Forecast travel demand is based on the forecast land use contained in the travel model and allocated to Transportation Analysis Zones (TAZs). TAZs are defined geographies that contain a mix of land uses and generate trip estimates based on population and employment forecasts. The aggregation of those trips on County roadways provides planners with future snapshot of the transportation system as a whole.

2036 Baseline Traffic Volumes & Improvements

The travel demand model was calibrated with 2014 traffic counts and used to forecast 2036 traffic volumes and travel patterns based on anticipated changes in land use. The forecast traffic volumes show small changes in overall growth on roadways within Island County. Additionally, two other scenarios that represented a higher concentration of growth in urban and rural areas, respectively, showed only minor differences in impacts on future travel patterns. The highest areas of traffic growth are north of Oak Harbor. Roadways within the communities of Langley and Freeland also are anticipated to have additional traffic volumes due to future land use growth concentrated in these communities. Both 2014 and 2036 traffic volumes are shown in Figure 3-2.

The 2036 baseline model and LOS results included roadway capacity improvement projects identified in Island County transportation improvement plans. WSDOT project lists were also consulted for additional roadway safety or capacity improvements. The types of projects included in the 2036 baseline travel demand model from planned and funded County and WSDOT lists only include those that would substantially impact the capacity of roadway links and vehicle travel patterns. The following projects are included in the future baseline model and LOS results:

- Roadway
    - Race Road to Houston Road Connector

- Intersection
    - Honeymoon Bay Road turn lane at Highway 525
    - Harbor Avenue turn lane at Highway 525 (part of minor safety improvements)
    - Clover Valley Road Intersection Improvements
    - Crescent Harbor / Regatta Avenue Intersection Improvements
    - Swantown Road / Heller Road Intersection Improvements



2012 Existing & 2036 PM Peak Hour Traffic Volumes

FIGURE **3-2**

Island County Transportation Element

Forecast Evaluation

The evaluation of the forecast travel model includes an operations analysis of key intersections within the County. The intersections included in the forecast evaluation are the same locations evaluated with the *Highway Capacity Manual* (2010) methodology described in the Inventory of Existing Transportation Facilities (Chapter 2) and are the locations with the most potential for growth. The outcomes of the forecast evaluation are typically used to identify future project locations to improve safety, mobility, and access on County roadways outside of any potential projects driven by concurrency. In this case however, the forecast analysis did not show any significant capacity, safety, or operational issues on County roadways.

As shown in Exhibit 3-5 below, all of the County-controlled intersections are forecast to operate at LOC C or better during the weekday PM peak hour. The sole intersection of a federally-classified arterial with a WSDOT-controlled facility, SR 20 at Ault Field Road, is forecast to operate at LOS D.

Exhibit 3-5 Year 2036 Forecast Conditions LOS Summary

Intersection	Jurisdiction	Intersection Control[2]	2012 PM Peak Hour LOS[3]	2036 PM Peak Hour		
				LOS[3]	Delay[4]	CM[5]
SR 20 / Ault Field Road	WSDOT	Signal	C	D	37	--
Heller Road / Clover Valley Road / Ault Field Rd	Island County	TWSC	A	A	10	EB
Harbor Avenue / Layton Road[1]	Island County	TWSC	A	A	9	WB
East Harbor Road / Main Street	Island County	AWSC	B	B	11	EB
Langley Road / Maxwelton Road	Island County	TWSC	B	B	10	EB
Cultus Bay Road / Deer Lake Road	Island County	TWSC	B	B	13	WB
East Camano Drive/ Cross Island Road	Island County	Signal	B	B	13	--
East Camano Drive / McElroy Drive[1]	Island County	Signal	C	B	14	WB
East Camano Drive / Camano Hill Road	Island County	Signal	A	A	6	--
East Camano Drive / Elger Bay Road / Monticello Drive	Island County	TWSC	C	C	22	EB

[1] – Not subject to Concurrency requirements.
[2] – Signal - Traffic Signal; AWSC - All-Way Stop Control; TWSC - Two-Way (or one-way) Stop Control.
[3] – Level-of-service based on *2010 Highway Capacity Manual* methodology.
[4] – Average delay in seconds per vehicle.
[5] – Worst movement reported for unsignalized intersections.

The forecast evaluation showed that the majority of traffic continues to travel along state routes. Four of the intersections along the state routes on Whidbey Island are forecast to have notable changes to intersection LOS. Of them, SR 20 / Ault Field Road is the most important as it is the only location in Island County where a federally-classified arterial intersects with a state highway. Under existing conditions, this three-legged signalized intersection operates at LOS C. With the forecast volumes along SR 20, the operations at the intersection worsens slightly to LOS D.

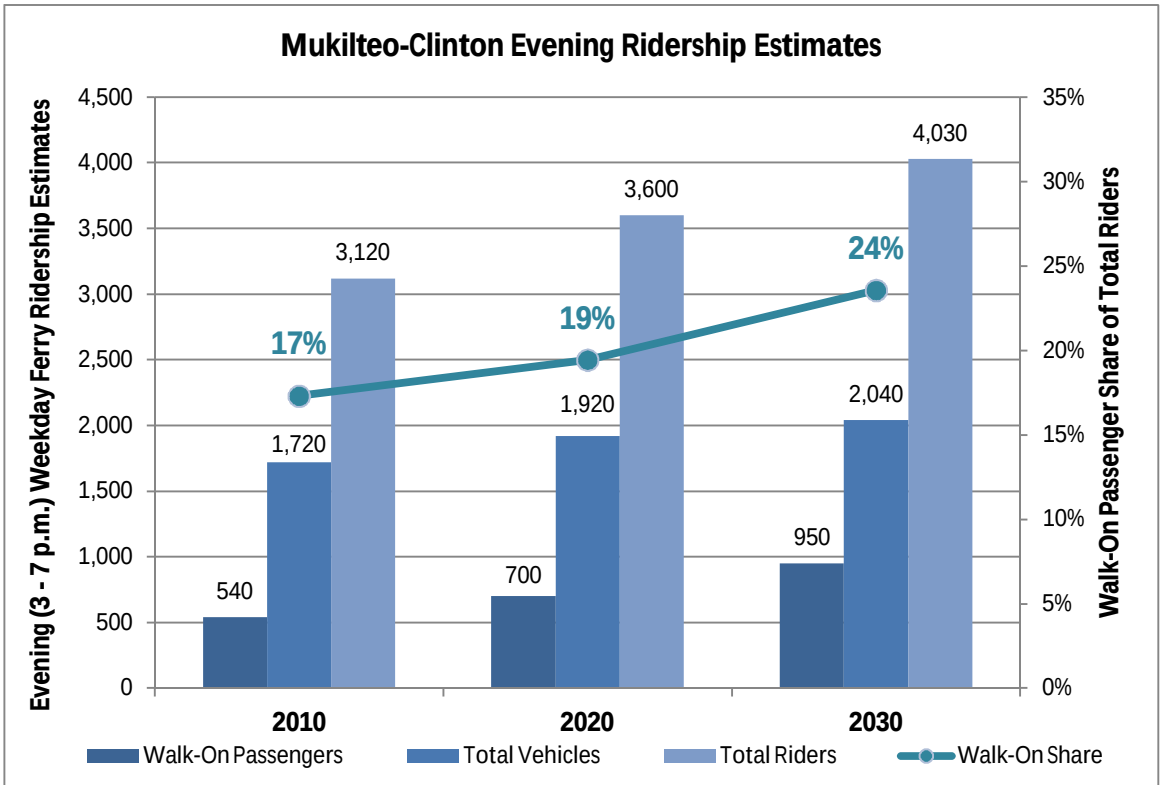
The other three intersections along state highways where changes to LOS are possible are SR 20 / Banta Road, SR 525 / Honeymoon Bay Road, and SR 525 / Double Bluff Road. WSDOT and Island County should consider monitoring these locations as conditions warrant.

3.3. Ferry Service

Ferry service on the Mukilteo-Clinton and Port Townsend-Coupeville routes is anticipated to continue serving Island County residents and recreational travelers in the future. Demand on both routes is forecast to increase, as documented in the *Final Long- Range Plan* (WSF, 2009). An update to the *Final Long-Range Plan* is expected to begin in the summer of 2015 that may have ridership estimates different than those in the existing plan. Ferry ridership is influenced by updates to the County land use plans and shifts in regional travel patterns, both of which may reduce the number of vehicle trips on ferry routes serving Island County.

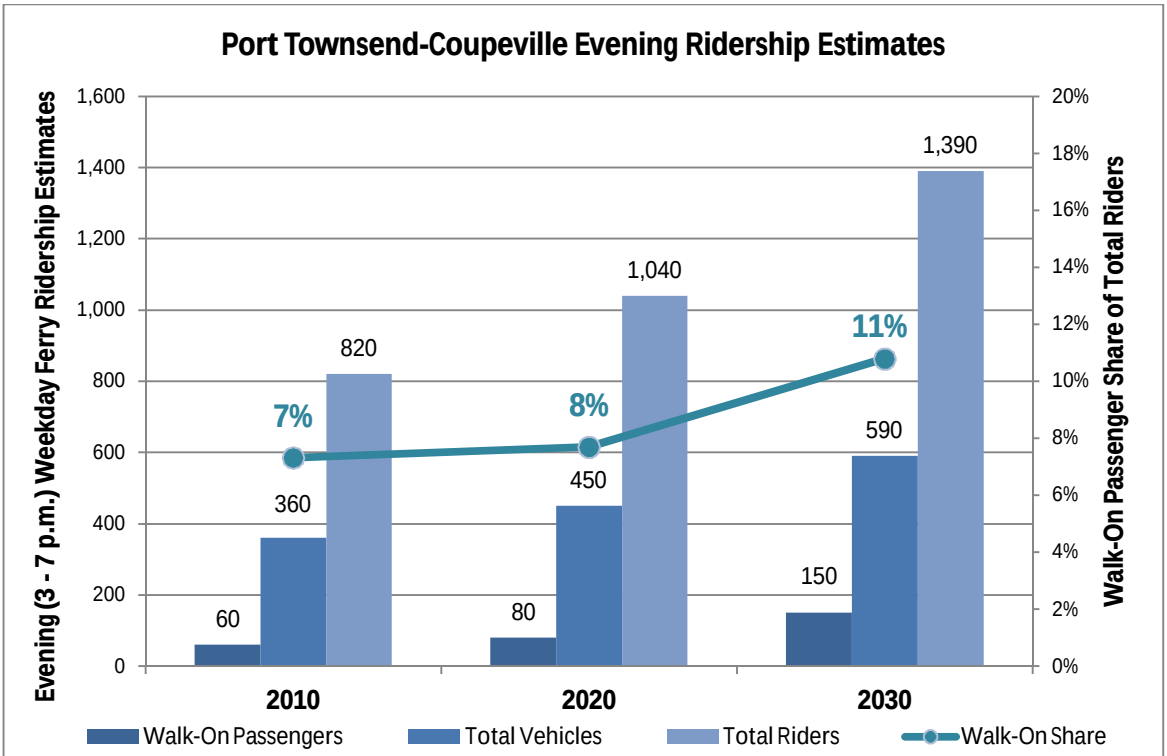
Forecast Ridership

Forecast evening (3:00 – 7:00 p.m.) ridership for ferry routes to and from Whidbey Island is available in the current long-range plan for 2010, 2020, and 2030. Forecasts for the Mukilteo-Clinton and Port Townsend-Coupeville routes are shown in Exhibit 3-6 and Exhibit 3-7. The ridership estimates include 2010, for reference, as the existing ridership when the forecasts were produced.



Data source: *Final Long-Range Plan*. Washington State Ferries, 2009.

Exhibit 3-6 Mukilteo-Clinton Ridership Forecasts by Boarding Method



Data source: *Final Long-Range Plan*. Washington State Ferries, 2009.

Exhibit 3-7 Port Townsend-Coupeville Ridership Forecasts by Boarding Method

As shown in Exhibit 3-6, overall ridership for the Mukilteo-Clinton route is expected to increase for all boarding methods. Growth in the number of passengers is anticipated to outpace growth in vehicle trips. The result is an overall increase in the proportionate share of walk-on passengers, where they are estimated to constitute 24 percent of all trips in 2030.

The forecasts for the Port Townsend-Coupeville route, shown in Exhibit 3-7, also indicate an overall increase in ridership for all boarding methods with growth in the number of passengers outpacing growth in vehicle trips. The result is an overall increase in the proportionate share of walk-on passengers for the Port Townsend-Coupeville route, where they are estimated to constitute 11 percent of all trips in 2030.

Ferry Forecast Evaluation

The *Final Long-Range Plan* established a new methodology for assessing levels-of-service (LOS) on ferry routes. The approach includes two LOS standards that allow WSF to first employ targeted adaptive management strategies on a route before adding capacity. This tiered approach to measuring congestion is based on the percent of sailings that are full during three months of the year: January, May, and August. Similar to the existing ferry results presented in Section 3.3, LOS Standards are higher in August as compared to other months during the year. This is to account for peak travel on ferry routes in the summer.

The *Final Long-Range Plan* also includes a summary of 2030 ridership forecasts and LOS standards by route. Exhibit 3-8 summarizes the forecast percent of sailings full for the Mukilteo-Clinton and Port Townsend-Coupeville routes.

Exhibit 3-8 2030 Forecast Percent Sailings Full and LOS Standards by Route

Route	Estimated Percent Sailings Full (2030)	Level 1 LOS Standards[1]	Level 1 Exceeded?	Level 2 LOS Standards[2]	Level 2 Exceeded?
Mukilteo-Clinton Route					
January	**30%**	25%	**Yes**	65%	No
May	**51%**	25%	**Yes**	65%	No
August	**62%**	30%	**Yes**	75%	No
Port Townsend-Coupeville Route					
January	**89%**	25%	**Yes**	75%	**Yes**
May	**84%**	30%	**Yes**	75%	**Yes**
August	**97%**	35%	**Yes**	85%	**Yes**

[1] – Level 1 LOS Standards indicate when additional pricing and operational strategies might be needed.
[2] – Level 2 LOS Standards indicate when additional service might be needed.

As shown in the table, the Port Townsend-Coupeville Route has a higher LOS 2 Standard during all months under evaluation. This is to maximize utilization among the many recreational trips and those customers that have the most flexibility on this route. Ridership on the Mukilteo-Clinton route tends to include more commuters that have less flexibility in the timing for taking these trips.

Demand on both routes is forecast to increase, as documented in the *Final Long- Range Plan* (WSF, 2009). An update to the *Final Long-Range Plan* is expected to begin in the summer of 2015. The forecast ferry ridership estimates included in the update may show differences in ridership than in the existing plan based on updates to the County land use plans and shifts in regional travel patterns that may reduce the number of vehicle trips on the ferry routes serving Island County.

Based on the 2030 ridership forecasts available, both routes are expected to exceed Level 1 LOS Standards for all three months of analysis. When Level 1 LOS Standards are exceeded, this indicates when additional pricing and operational strategies may be used to reduce the number of vehicle trips. These strategies generally make walk-on passenger trips more attractive and could be completed in conjunction with other improvements to ferry dock access for non-motorized roadway users.

According to the forecasts summarized in the *Final Long-Range Plan,* as presented in Exhibit 3-8, the Port Townsend-Coupeville route is anticipated to exceed Level 2 LOS Standards for all three months shown. When Level 2 LOS Standards are exceeded, this indicates to WSF that the existing ferry capacity is being used most effectively and additional investment in service could be considered.

3.4. Transit Service

Transit service is anticipated to continue providing a fundamental piece of the transportation network in Island County. In light of the many Island County residents who work in neighboring counties, an important future goal would be to establish more coordination with inter-regional transit partners to improve the availability and efficiency of trips out of Island County.

Human Services Transportation

Island County coordinates with Island Transit and other human services providers to promote transportation options to people with special needs, including seniors, people with low-incomes, veterans, and people with disabilities.The Skagit-Island Human Services Transportation Plan[15] (HSTP), updated in 2014, guides planning efforts in the region. The HSTP documents existing services, identifies needs/service gaps, defines regional priorities and recommends projects for state and federal grant funding. Plan implementation strategies include the following:

- Preserve Existing Services - maintain or restore existing service levels and vehicle fleet
- Expand Services - increase service levels
- Address High Need Areas - provide service to areas scoring high in human services transportation need index
- Improve Regional Connections - improve cross-regional connections
- Increase User Knowledge - increase knowledge of available transportation options to targeted users
- Improve Existing Service Timeliness - improve quality of timeliness of service
- Utilize Existing Services - improve utilization of existing transportation services
- Expand Driver Training - promote driver training to encourage “compassionate professionalism”
- Improve Provider-User Coordination - improve coordination between transit service providers, human services providers and users
- Utilize Technology - utilize technology to provide improved efficiency and user access to mobility options
- Inform Users of Mobility Options - assist human service providers in guiding users to the most efficient mobility options
- Improve Provider Regional Coordination - improve coordination between regional and cross-regional transit service providers
- Promote Innovation - promote innovative programs, processes and tools that improve efficiency and reduce cost
- Promote Environmental Sustainability - incorporate environmentally sustainable practices into regional coordinated transportation planning and services
- Leverage Funding - further leverage available funding

[15] Available at http://www.scog.net/Meeting_Materials/SpecialNeeds/Skagit-IslandHumanServicesTransportationPlan2014.pdf at time of writing.

4. Transportation Systems Plan

The transportation systems plan provides a long-range strategy for Island County to address future transportation issues and needs. Because only modest population and employment growth is expected, the County's emphasis should be on preserving the existing transportation system and implementing safety projects rather than adding more roadway capacity.

Additionally, opportunities to enhance the connectivity of the transportation network should be considered. The connectivity of transportation systems is increasingly important as local, state, and federal planning agencies seek to improve the efficiency and cost effectiveness of transportation systems. System connectivity improvements such as walkways and bicycle routes are also important for increasing physical activity and integrating transportation system planning with the broader planning objectives identified in the Countywide Planning Policies.

4.1. System Components

This chapter begins with a description of the travel characteristics for the range of modes that comprise the transportation system. Roadways are used by nearly every travel mode, not just personal vehicles, and represent the bulk of the transportation improvements described later in the chapter. Highways in the County make key connections to the ferry system which is a critical component for inter-County travel. While ferry service is the primary function of the State of Washington, connections to ferry terminals are impacted by projects initiated by the County. The non-motorized transportation network supports commute, utility, and recreational trips throughout the County. The following sections describe the common characteristics among these transportation modes within the County.

Roadways

Streets and state highways are the core of the transportation system serving the County and its communities. Major routes connect Island County to surrounding communities via bridges and ferry terminals. The street network provides for the overall movement of people and goods, for a wide range of travel modes that includes private vehicles, transit, vanpools, carpools, trucks, bicyclists, and pedestrians.

Planned improvements to the state highway and county roadway system are implemented on an annual basis through the development of six-year Transportation Improvement Programs (TIP) by Island County and Washington State Department of Transportation (WSDOT). In these six-year programs, emphasis is given to safety improvements and roadway preservation.

Motorized Travel

Motorized travel is the dominant transportation mode in Island County so even smaller efforts to understand motor vehicle impacts and improve efficiency and safety can have a comparatively large impact. Often, such improvements increase access and mobility for other modes as well. Small network connections and improvements can decrease travel time, congestion, emissions and the potential for crashes. Safety can be further enchanced with new technologies that target rural transportation systems. Additionally, newer vehicle technology can be supported through infrastructure such as high-efficiency charging stations at key locations around the county.

Ferry Service

Improvements to ferry service in the County are the primary responsibility of the Washington State Ferries (WSF) with support services provided by WSDOT, Island County, and Island Transit. WSF maintains the Clinton-Mukilteo Route and the Coupeville-Port Townsend Route. At this time there are no service increases planned for any of the routes serving Island County.

Many ferry commuters rely on personal vehicles for one or both legs of their trips to and from work. Some park near the Clinton terminal and walk onto the ferry, then connect to transit. Others leave a vehicle in Mukilteo, though demand for overnight parking there is high and the supply is very limited. The City of Mukilteo currently discourages overnight parking. There are plans to embark on a feasibility study in 2016 to evaluate options for a new parking garage in Mukilteo that may include space for overnight parking. Island County and the Port of South Whidbey are contributing money towards this effort.

Passenger Only Ferries

Washington State Ferries no longer supports passenger only ferry service, however in 2003 the state legislature authorized locally sponsored passenger only service. The feasibility of passenger ferry service between Whidbey and Camano islands has been explored in the past and it was determined that substantial demand for interisland service exists. In addition, the Puget Sound Regional Council (PSRC) indentifies several potential passenger only routes in its long range transportation plan. Given the significant number of Island County workers that travel to the PSRC for employment it is important to consider the feasibility of passenger ferry service between our respective regions.

Transit

Improvements to the transit system are the primary responsibility of Island Transit. In order to maximize the impact of limited funding and meet rider needs, Island Transit has been engaged in ongoing public outreach efforts and service analysis. Those interested in current and future transit services in Island County are directed to the Island Transit website at islandtransit.org

Non-Motorized

The non-motorized transportation network includes both pedestrians and bicyclists. These modes have many different characteristics, but share many facilities throughout the County including roadway shoulders, multiuse pathways, unpaved trails, sidewalks, and shared roadways in certain locations. An update to the 2006 Island County Non-Motorized Trails Plan is expected to be completed in 2016. This document is expected to provide a more in-depth look at non-motorized transportation needs and identify and prioritize specific projects.

Pedestrians

Every trip begins and ends with a walk. People walk to their cars and drive somewhere where they will walk into a building or facility. Or they need to walk to the bus stop. The County hopes to connect more destinations with walking paths so as to encourage walking between trip destinations. Walking paths not only help people get from “Point A to Point B” but also promote physical activity and recreation.

The County will continue to develop pedestrian and bicycle facilities as part of its transportation system improvements and has adopted street standards that provide for a range of facilities including sidewalks, wider roadway shoulders, and multiuse pathways.

A viable pedestrian network consists of connections to pedestrian generators, such as major employers, schools, residential areas, parks, and transit stops through a system of pedestrian

facilities. Land use and neighborhood street design patterns can also form barriers to pedestrian travel. For example, overly large blocks and the lack of mid-block crossings cause pedestrians to travel further to reach local destinations, often resulting in a decision to utilize a vehicle for short trips that could otherwise be completed on foot. The pedestrian projects currently scheduled in the Transportation Improvement Program are primarily trail connections that would be constructed following a feasibility study. The County is also systematically evaluating locations to add new shoulders to roads in order to better provide space for people to walk. Completing these projects will provide greater connectivity for pedestrian travel within the County.

Bicycles

Bicycling is an important and growing mode of travel for people in Island County. When appropriately planned, bicycle routes have a role in reducing congestion, improving air quality, providing travel choices, encouraging exercise and recreation, and providing greater mobility for those both with and without access to a motor vehicle. Encouraging or facilitating bicycle tourism may also represent an important economic development opportunity for the County. The County encourages the use of bicycles; endeavors to coordinate linkages between off-road and on-road bicycle facilities; considers impacts on bicycles when designing and engineering roadways; and emphasizes continuous bicycle linkages to existing facilities. The County is interested in incorporating adjacent bicycle lanes, wide shoulders, and other design treatments, as appropriate, into roadway construction projects whenever the right-of-way is sufficient and funding can be secured.

The bicycle network includes a range of transportation enhancement investments on these corridors to facilitate and increase the number of bicycling trips. Specific bicycling improvements may include widening shoulders on existing or planned roadways, installing signs to assist cyclists with wayfinding and to alert drivers to the likelihood of cyclist presence, or developing on street and off-street bicycle paths. For many corridors in the County's bicycle network, specific roadway improvements have not yet been identified.

Island County has developed a countywide bicycle network as part of the Non-Motorized Plan (2006) that identifies several roadways for use as future bicycle routes. These corridors are expected to serve as key recreational and commuter connections that would provide the most benefit for serving bicycle destinations within the County. An update to the 2006 Non-Motorized Plan is anticipated to begin in 2016.

Other Modes

Air, Rail and Equestrian

The other modes discussed in Chapter 2 are not anticipated to have future changes that are under the jurisdiction of Island County. As such, these modes are not discussed in this chapter.

4.2. Transportation Projects & Programs

Transportation projects and programs are vital to maintain and enhance transportation within and through the County. These are anticipated to serve the County's safety, circulation, and non-motorized goals over the planning horizon year of 2036.

The transportation improvements list does not include specific capacity projects, as no significant capacity or operational issues were identified in the existing and forecast analysis. As a result, the project list focuses on programs for maintaining the transportation infrastructure critical to a safe and efficient transportation system. Failure to maintain existing roadways by not providing dedicated funding to maintenance and operations programs could result in more substantial capital projects and road rehabilitation projects in the future. Island County budgets for recurring Transportation Improvements based on need in five categories.

Miscellaneous Guardrail Projects

An ongoing work program focused on guardrails throughout Island County. This program evaluates and prioritizes sites for new guardrails to be designed and installed, as funds are available.

Miscellaneous Hot-Mix Asphalt Structural Overlays

An ongoing annual work program focused on preservation and maintenance of roadways throughout Island County. Roads identified in the County's annual program are based on recent road conditions and site evaluation of surface needs and other factors.

Intersection Alignment Improvement Projects

An ongoing work program focused on realigning intersections to close to perpendicular. The primary benefit of realignment is increasing safety by making it easier for motorists to see traffic on the cross roads.

Miscellaneous Right-of-Way and Minor Safety Improvements

An ongoing work program focused on minor safety improvements based on collision patterns and deteriorating levels of service. These locations are evaluated for potential improvements and prioritized based on several factors.

Shoulder Widening Program

An ongoing work program focused on installing shoulders on arterial and collector roadways. This program also assists the non-motorized system to improve conditions for pedestrians and bicyclists. Potential sites are evaluated and prioritized based on a number of factors. Right of way needs are identified and acquired as necessary.

In addition to the capital improvement programs, the County also has Maintenance and Operations costs related to overseeing and operating existing transportation assets. They generally include the normal cost of maintaining and preserving existing roadways and other transportation infrastructure, as well as the cost of administering transportation programs in the County.

Exhibit 4-1 identifies and provides a brief description of the transportation projects and programs for Island County. The table identifies projects that are currently part of the County's 2015 - 2020 Transportation Improvements Plan (TIP). Planning level cost estimates for each project are included in Exhibit 4-1. Cost estimates are based on the annual budget amount included in the TIP. These cost estimates have been expanded to address the 20-year planning horizon, ending in 2036.

Exhibit 4-1 Island County Transportation Improvements Projects and Programs List

Type	Project Name	Project Description	% of Sub-Total	2015-2035 Total Cost Estimate
Capital Transportation Improvements	**Miscellaneous Guardrail Projects**	Inspect existing guardrails and determine if upgrades are required Countywide. Also evaluate and prioritize new guardrail sites	10%	$2.30 M
	Miscellaneous HMA Structural Overlays	Preservation and maintenance of roadways Countywide	30%	$6.89 M
	Intersection Alignment Improvement Projects	Realigning intersections Countywide	9%	$2.07 M
	Miscellaneous Right-of-Way and Minor Safety Improvements	Identify collision patterns and deteriorating levels-of-service for potential improvements and prioritized for minor safety improvements Countywide	17%	$3.90 M
	Shoulder Widening Program	Install shoulders on arterial and collector roadways Countywide	34%	$7.81 M
Sub-Total Capital Costs			**100%**	**$22.97 M**
Maintenance & Operations	Maintaining and preserving existing roadways and other transportation infrastructure, as well as administering transportation programs		100%	$274.34 M
Sub-Total Maintenance & Operations Costs			**100%**	**$274.34 M**
Total Project Costs			**-**	**$297.31 M**

5. Transportation Funding Situation Assessment

The transportation improvement projects and programs were identified to address existing and future transportation system needs for Island County. The estimated costs of these projects and programs were summarized and compared to projections of existing transportation-related revenues to assess the County's ability to implement the Transportation Element. As with most local agencies and counties, existing transportation revenues will not allow Island County to fund all of its needed maintenance, operations, and capital improvements. This chapter of the Transportation Element identifies ways to balance the transportation budget, including through prioritization of capital improvement projects and new policies that could generate additional revenue. Any funding strategy must balance the County's transportation goals against its system of sustainable revenue sources. This is even more pressing given the limited policy mechanisms counties have at their disposal for raising revenue.

The purpose of this financial and funding analysis is to provide a foundational understanding of the funding challenges facing Island County and develop a funding strategy for the County's Transportation Element which seeks to build, replace and maintain its transportation system. The analysis of transportation funding includes the following key elements:

1. **Funding and Revenues.** An assessment of historical and current funding of transportation in Island County, and forecasts of future funding based on current policies and trends.
2. **Expenditures and Capital Needs.** An assessment of historical and current transportation expenditures and capital needs in Island County, and forecasts of future funding needs based on current policies and trends.
3. **Financial Capacity Analysis.** Estimate net funding needs by comparing the current policy funding and revenues with the current policy expenditures and capital needs. Net funding needs represents the estimated shortfall between current policy funding forecasts and current policy expenditure forecasts and capital needs.
4. **Methods to Meet Transportation Funding Needs.** Explore opportunities available to Island County in addressing identified gaps in transportation funding. The funding analysis considers options to align resources with needs both in terms of the timing of project investment requirements as well as the potential of increasing overall funding availability through implementation of new funding mechanisms.

5.1. Background and Context

Over the past ten years, a combination of statewide initiatives and legislative actions has altered the landscape for local governments. The most sweeping changes have revolved around voters' decisions to (1) end the Motor Vehicle Excise Tax and (2) create strict limits on the growth of property taxes. Across Washington State, the effect of these actions has varied by jurisdiction. Cities and and counties, are facing increasing difficulty given their reliance on the two items listed above. Washington's counties are different from cities and special service districts in fundamental ways. These differences are brought into stark relief by considering the interplay of four factors:

1. Counties face strict limits on their taxing authority (per RCW…?);

2. Counties are heavily reliant on property taxes (whose purchasing power is eroding due to I-747,which limited regular levy increases to 1%, well below inflation rates);
3. Counties face a long list of regional service obligations that are mandated by the state; and
4. Counties have a complex set of relationships with multiple constituencies
    a. They collect regional taxes and provide regional services for all constituents in the county; and,
    b. They collect local taxes and provide local services to unincorporated areas.

Given this combination of factors, Washington's counties have found themselves squeezed between two positions. They have a long list of service obligations that are non-negotiable, they face structural erosion in their most important revenue source, and they have few statutory options for securing new revenue streams. As they look to the future, Washington's counties face a fundamental, structural challenge—a challenge that will become increasingly unmanageable over time. Island County is no exception and this larger systemic issue is at the core of their long-term transportation funding issues.

The Growth Management Act (GMA) requires the Transportation Element of the Comprehensive Plan to include a multi-year financing plan based on the identified improvement needs in the transportation systems plan. The financing plan is to be the basis in developing the required six-year Transportation Improvement Program (TIP). If probable funding is less than the identified needs, then the transportation financing program will have to balance several goals, including financial solvency, maintenance and operations of the existing system, and supporting an appropriate transportation level of service. To do this, the Transportation Element includes a discussion of how additional funding could be raised to a level that balances those goals or how land use assumptions will be reassessed to assure that level of service standards will be met. If no revenue sources to balance the budget are identified or supported by the County, it could, alternatively, consider lowering its level of service standards.

5.2. Funding and Revenues

Funding and Revenue Sources

To build a foundation for the development of funding strategies, this section examines current County revenues and past trends in County transportation expenditures to provide context for future funding challenges.

The data for this analysis comes from the County's Public Works budget, as well as reports from the Washington State Department of Transportation (WSDOT). Historically there are seven main sources of revenues that have been used to fund transportation projects in Island County:

- Federal Funding Sources
    1. Federal Entitlements and Grants
- State Funding Sources
    2. State Fuel Tax
    3. Capron Funds

4. State Entitlements and Grants

- Local Funding
    5. Property Taxes
    6. County General Fund Transfers
    7. Local Entitlements and Grants

Federal Funding Sources

Federal Entitlements and Grants

Federal transportation grants are funded through the federal portion of the Fuel Excise Tax. The federal gas tax rate has remained consistent since 1994 at approximately $0.184 per gallon. The majority of these funds are deposited into the Highway Trust Fund and disbursed to the states through the Highway and Mass Transit Accounts. The Federal share of funding has represented a relatively small portion of overall funding and is sporadic and generally tied to success in grant applications for specific projects.

Additionally, Island County receives some non-grant federal transportation funding through two federal entitlements that are part of the Moving Ahead for Progress in the 21st Century (Map-21) Program. The MAP-21 program is a federal program that has funded surface transportation programs at over $105 billion in its two first fiscal years (FY 2013 and 2014). MAP-21 is intended to support transportation investment in highways through a performance-based program, which supports the federal Department of Transportation's safety agenda and streamlines federal highway transportation programs. The two funding sources within it that Island County receives funding from are: (1) the Surface Transportation Program (STP) and (2) the Transportation Alternatives Program (TAP). These funding sources are described below:

1. **Surface Transportation Program.** STP provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on roads classified as arterials and major collectors. A small portion may also be used on rural minor collectors. Island County, Oak Harbor, Coupeville and Langley use these funds for resurfacing / restoration projects, intersection realignments, new signals, and trail projects. Island Transit also uses these funds to preserve their fleet.
2. **Transportation Alternatives Program.** TAP funds a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. The TAP replaces the funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, and Safe Routes to School, wrapping them into a single funding source. Island County and Oak Harbor have used these funds for trail construction, trail repairs, and signed bicycle routes.

State Funding Sources

State Motor Vehicle Fuel Tax (MVFT/Gas Tax)

Although historical per capita fuel tax dollars have been increasing in nominal numbers, when adjusted for inflation it is clear that per capita revenues have been declining over time. This trend is becoming more pronounced in very recent history due to large increases in the price of gasoline and a significant shift toward more fuel efficient vehicles. On average, Island County

has received 14% of its revenues from their share of overall county distributions of the State Motor Vehicle Fuel Tax. This category has been the County's third largest source of revenue for Transportation.

It is worth noting that there is significant statewide concern regarding the long-term viability of this source of funds as the fleet mix continues to shift toward ever more fuel efficient vehicles and automakers focus on meeting the new Corporate Average Fuel Economy (CAFE) standards. The state legislature has conducted a number of recent studies to explore options to replace the gas tax, but no new funding packages have yet been approved. In looking forward, there will continue to be uncertainty around revenues from this tax source.

Capron Funds

Island County receives a sizable Capron refund distribution of State Motor Vehicle Fuel Tax and vehicle license fees. The Capron refund is authorized by the Capron Act, which was originally made law in 1919 (and is now codified as RCW 46.68.080) as a means to ensure equitable distribution of the State portion of MVFT revenues by refunding State MVFT proceeds collected within counties comprised entirely of Islands. At the time, San Juan and Island Counties were the only counties wholly-comprised of islands and without any state highways. When State Route 20 was extended to Whidbey Island, the Capron refund was adjusted by reducing the refund to 50% of MVFT collected in the county.

Currently, the Capron Act distributes one-half of the vehicle license fees collected under RCW 46.17.350 and 46.17.355 and one-half of the fuel taxes collected under RCW 82.36.025 (1) and 82.38.030 (1) to those counties composed entirely of islands and which have either a fixed physical connection with the mainland or state highways on any of the islands of which they are composed, to fund their transportation programs.

Historically, about 23% of Island County's transportation revenues have come from Capron Refund distributions. This category is the County's second largest source of revenue for Transportation. This is a unique funding source that is extremely beneficial to Island County in funding its transportation program, including both M&O and capital improvements.

Over the past several decades there have been many attempts in the state legislature to repeal the Capron Act. So far all attempts have failed. It is likely that in the future the act will be subject to attempted repeal again. In addition, this source suffers from the same overall uncertainty surrounding the continued viability of Motor Fuel Tax, so there is particular risk for Island County in terms of maintaining historical levels of transportation funding.

Other State Funds

This category is primarily state grants, like those from the Department of Ecology, County Road Administration Board, Department of Commerce, and the Washington State Department of Transportation. Beyond State grants, state shared revenues, entitlements, impact payments, and in-lieu taxes might be included in this revenue category.

Local Funding Sources

Property Taxes (Road Levy)

Property Taxes are used by the County and Cities to partially fund transportation projects. The local Cities and Towns use property tax receipts for a range of programs, including transportation. Island County's property tax includes a dedicated Road Levy, a property tax collected by the County specifically for transportation funding. This income accounts for a large portion of the County's transportation funds.

Since the passage of Initiative 747, Property Tax increases are restricted to 1.0 percent of the previous year's revenues. In inflation-adjusted terms, revenues from Property Tax are actually declining, because the 1.0 percent allowed increase does not keep pace with inflation (which hovers around 3.0 percent) or population growth. Because this tax is projected on a per capita basis, population projections directly impact the revenue estimates: as assessed values increase, the mileage rate is actually declining. This is particularly difficult for counties like Island County that do not anticipate a lot of new development. Future incorporations or annexations would reduce unincorporated County population, leaving a proportionally smaller unincorporated County population to cover the 1.0 percent increase in Property Tax. Exhibit 5-1 shows an example of how I-747 has impacted growth of property taxes from the road levy as a funding source, compared to what they would have been without the limit. In most counties, the Road Levy makes up a consistently large share of overall funding.

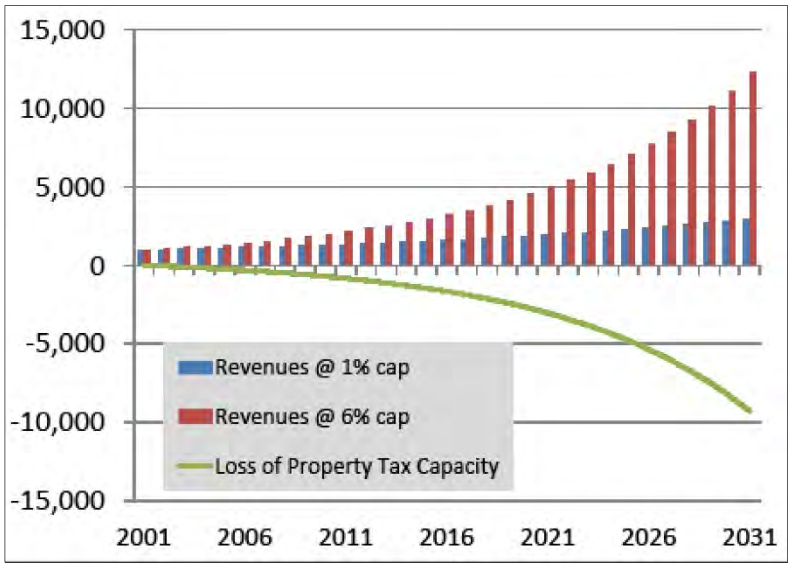


Exhibit 5-1 Example of Projected Property Tax Revenues with I-747

General Fund Transfers

Because general fund revenues have few restrictions on how they are spent and the fact that the County has a dedicated Road Levy for transportation, it is relatively unusual for these funds to be used for transportation purposes. Historically the County's General Fund contributions to

transportation have been sporadic. The last transfer was in 2010, and prior to that the last transfer was in 1995. Only five transfers have been made since 1988 and the amount for each transfer averages $288,857 (in 2014 dollars).

Other Local Funding

These dollars typically include some combination of Real Estate Excise Tax (REET) funds, Leasehold Excise Taxes, Road Permits, payments in lieu of taxes, and other miscellaneous capital and transportation funds. This has been a relatively steady source of funding, though overall contributing a relatively small share of total revenues for transportation investments.

Historical Funding and Revenues

Exhibit 5-2 shows the total transportation revenues by source for years 1989 to 2013, in five-year increments. These revenues are displayed in inflation-adjusted 2014 dollars to show the relative purchasing power of transportation revenues through time. Exhibit 5-2 shows that there was a meaningful overall increase in funds available for transportation in Island County between 1989 and 2003, but more recently funds have more or less kept steady over the past decade in inflation adjusted dollars.

Exhibit 5-2 Historical Transportation Revenues by Source, 1989 to 2013 (2014 dollars)

Source	Total 1989-1993	Total 1994-1998	Total 1999-2003	Total 2004-2008	Total 2009-2013	Average CAGR[1]	Last 10 Year CAGR
Federal Funds	$0.83 M	$1.37 M	$2.83 M	$2.36 M	$5.64 M	-	-
State Fuel Tax	$14.74 M	$15.09 M	$14.63 M	$14.26 M	$13.42 M	0.12%	-0.39%
Capron Funds	$16.03 M	$18.11 M	$20.54 M	$21.47 M	$21.52 M	0.96%	-0.68%
Other State Funds	$3.91 M	$5.13 M	$13.19 M	$14.18 M	$7.80 M	0.62%	-15.89%
County General Fund Transfers	$0.78 M	$1.09 M	$0.00 M	$0.00 M	$0.09 M	-	-
Property Tax	$23.76 M	$31.75 M	$36.61 M	$39.50 M	$42.91 M	2.57%	0.89%
Other Local Taxes and Funds	$2.30 M	$1.60 M	$3.34 M	$3.59 M	$1.60 M	2.39%	-7.73%
Total Transportation Revenues	**$62.35 M**	**$74.14 M**	**$91.14 M**	**$95.36 M**	**$92.97 M**	**-**	**-**

[1] CAGR – Compound Annual Growth Rate
Source: WSDOT City Roads and County Streets Dataset, 2014; BERK, 2014

Per capita revenues generally increased over time until 2004, when they leveled off and started to drop.

Forecasted Current Policy Funding and Revenues

Reviewing historical funding and revenue trends can be helpful in anticipating future funding and revenue. To streamline this, we have forecasted funding and revenues based on the County's historical data. Forecasts are based on historical per capita revenues, which were then extrapolated based on population, or, in the case of property tax revenues, assessed value.

Exhibit 5-3 shows the total transportation revenues forecasted by source for years 2017 to 2036, in five-year increments. Additionally, we have included the expected revenues from 2013-2015. These revenues are displayed in inflation-adjusted 2014 dollars to show the relative purchasing power of transportation revenues through time.

Exhibit 5-3 Forecasted Transportation Revenues by Source, 2017 to 2036 (2014 dollars)

Source	Total 2013-2016	Total 2017-2021	Total 2022-2026	Total 2027-2031	Total 2032-2036	Total 2017-2036
Federal Funds	$2.61 M	$2.30 M	$2.03 M	$1.79 M	$1.58 M	$7.69 M
State Fuel Tax	$10.25 M	$10.77 M	$8.91 M	$7.39 M	$6.14 M	$33.20 M
Capron Funds	$15.26 M	$16.46 M	$13.99 M	$11.88 M	$10.09 M	$52.42 M
Other State Funds	$4.90 M	$6.34 M	$5.60 M	$4.94 M	$4.34 M	$21.21 M
County General Fund Transfers	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
Property Tax	$33.77 M	$41.15 M	$39.95 M	$38.79 M	$37.67 M	$157.56 M
Other Local Taxes and Funds	$1.98 M	$2.53 M	$2.59 M	$2.65 M	$2.70 M	$10.47 M
Total Transportation Revenues	**$68.78 M**	**$79.54 M**	**$73.06 M**	**$67.44 M**	**$62.52 M**	**$282.55 M**

Exhibit 5-3 shows that Island County's overall funding, in terms of purchasing power, for transportation is expected to decrease over the next 20 years.

Financial Capacity Position

Identification of forecasted revenues and expenditures, as well as anticipated capital needs allows us to identify the potential transportation funding shortfall that the County may face over the Comprehensive Plan period. The County's position to fund its anticipated expenditures and capital needs is shown in Exhibit 5-4.

Exhibit 5-4 Estimated Capital and M&O Budget Shortfall

	Total (2015–2035)
Total Forecasted Transportation Revenues	$282.55 M
Total Forecasted Transportation M&O Expenditures	$274.34 M
Total Forecasted Transportation Capital Needs	$22.97 M
Total Estimated Shortfall	**$14.76 M**

1. All revenues in 2014 dollars

Note: Does not include other agency improvements

Exhibit 5-4 shows that if Island County were to maintain current revenue policies, and maintain current level of spending for M&O and transportation capital improvements, it would face a $14.75 M deficit.

Transportation Funding Shortfall

Island County is committed to funding the existing maintenance and operations programs needed to preserve the integrity, safety, and efficiency of its existing transportation system. Thus, the $14.76 M funding shortfall would primarily affect the ability of the County to fund capital improvements.

Under that scheme, the County would have only $8.21 M in capital funding for transportation improvements over the next 20 years. This would allow the county to meet only 36 percent of its transportation capital improvement goals. Exhibit 5-5 shows the funds that would be available for each program if they were distributed based on the existing distribution in the 2015-2020 TIP.

Exhibit 5-5 Illustrative Allocation Available Funding for TIP Programs Based on Anticipated Transportation Revenue Shortfall Under Current Policy Transportation Funding, 2017-2036 (2014)

TIP Program	Available Funding Based on Shortfall (2017-2036)
Miscellaneous Guardrail Projects	$0.79 M
Miscellaneous HMA Structural Overlays	$2.45 M
Intersection Alignment Improvement Projects	$0.72 M
Miscellaneous Right-of-Way and Minor Safety Improvements	$1.39 M
Shoulder Widening Program	$2.86 M
Total	**$8.21 M**

5.3. Methods to Meet Transportation Funding Needs

As noted above, projected existing revenue sources would allow the County to fund only 36 percent of the identified transportation improvement projects and program costs. The County could address this shortfall in two ways:

1. **Prioritizing Capital Projects.** The County can continue to prioritize its capital projects, such that top-ranked projects are funded on an as-funds-are-available basis. This would result in a delay in implementation of some projects, especially lower priority improvements.
2. **Adopting New Policies to Generate Additional Revenue.** The County could increase funding for capital transportation projects through several policy changes that would generate additional transportation revenues. These include partnering with other agencies or additional grants.

Prioritizing Capital Projects

Island County has a scoring process for prioritizing its transportation capital projects to evaluate six areas of benefits. Each of the following areas is assigned a point total and scored for individual projects:

- Congestion Mobility
- Environmental Impacts
- Community Issues
- Sustainability
- Safety
- Constructability

The County may update the weighting of each category or the entire process over time. Future iterations of this process might be necessary to help match limited funds to meet County needs within the capital program.

Community input was gathered through the development of this Transportation Element which may be useful in identifying and weighing benefit areas. Generally, participants at three open houses identified high (green), medium (yellow), and low (red) priorities across a range of facilities, services and factors, indicating: high support for transit and non-motorized modes as well as environmental protection; moderate support for maintenance and safety; and low support for proposals addressing congestion or movement of freight and goods.

Methods to Generate Additional Revenues

There are several new policies that Island County could consider to generate additional revenues for transportation:

- Property Tax Levy Lid Lifts
- Transportation Benefit Districts
- Voter Approved Bond/Tax Package
- Other Developer Mitigation and Requirements
- Local Improvement Districts

It is possible that some of these policies may be less feasible than others based on Island County's unique position and limited anticipated growth. That should be considered when considering any of these new policies. Each of these policies is discussed below.

Property Tax Levy Lid Lifts

As discussed previously, the Road Levy is a property tax collected by the County specifically for transportation funding and accounts for a large portion of the County's transportation funds. Since the passage of I-747, the revenues from this levy have been declining because the 1.0 percent allowed increase does not keep pace with inflation (which hovers around 3.0 percent), or population growth.

One tool that counties can, and increasingly are, using to combat this is a levy lid lift. To do this, a county asks its voters to "lift" the 1 percent levy limit on annual levy increases so the district can collect a higher levy amount, up to the maximum rate limit amount for that jurisdiction[16].

Essentially, a levy lid lift lets a jurisdiction increase rates above the 1% limit, up to the statutory maximum rate. This is a powerful funding tool, but does pose the challenge of requiring voter authorization. There is prevailing sentiment, though, that barring the legislature redesigning the current levy caps, jurisdictions will be forced to employ levy lid lifts to collect revenues lost from the 1 percent levy cap.

Transportation Benefit Districts

Transportation Benefit Districts (TBDs) (Chapter 36.73 RCW) are independent taxing districts that can impose fees and/or taxes to fund transportation improvements. TBDs can be established via ordinance in jurisdictions ranging from a city to a multi-county area. TBDs are intended to finance the construction of, and operate, improvements to roadways, high capacity transportation systems, public transit systems, and other transportation management programs.

- **Sales and Use Tax (RCW 82.14.0455).** Jurisdictions can authorize local TBDs that provide up to a 0.2% local sales and use tax with voter approval. This tax must be authorized by voters, and may not be in effect longer than 10 years unless reauthorized by voters.
- **Motor Vehicle Excise Tax (MVET) (RCWs 81.100 and 81.104).** TBDs can levy up to a $100 fee for each new vehicle weighing less than 6,000 pounds registered in its jurisdiction. $20 of this fee can be leveraged without a public vote.

At this time, Island County has not established a TBD, and, therefore, does not collect any revenue via this mechanism. To generate transportation revenues via a TBD, Island County would first need to pass a County ordinance establishing the TBD, and then impose a fee or tax (from the options above) on that TBD. Depending on the fee or tax levied in the TBD, Island County might have to hold a public election to levy the tax.

Voter Approved Bond/Tax Package

Municipal Bonds could be issued by the County in order to raise funds for transportation projects. A bond is typically sold to investors in exchange for the funds needed to construct a project, then repaid with interest by the County in the future. The money needed to pay off the bonds usually requires a revenue generating mechanism, such as a voter approved tax.

[16] "For counties [in Washington State], the maximum regular property tax levy rate that may be imposed on real and personal property is $1.80 per thousand dollars AV [assessed valuation] for its current expense or general fund, and $2.25 per thousand dollars AV for its road fund. However, a county can raise its general fund levy rate up to $2.475 per thousand dollars AV, provided the total of the levy rates for the general fund and road fund do not exceed $4.05 per thousand dollars AV and the increase in the general fund levy does not result in a reduction in the levy of any other taxing district." *Levy Lid Lifts*, Judith Cox, October 2010. Available at: Municipal Research and Services Center (mrsc.org).

Other Developer Mitigation and Requirements

The County could adopt specific development related requirements which would help fund identified improvements such as shoulder widening. These include frontage improvements and mitigation under the State Environmental Policy Act (SEPA) and concurrency requirements. The County requires developments to fund and construct certain roadway improvements as part of their projects. These typically include reconstructing abutting streets to meet the County's current design standards. These improvements can include widening of pavement, drainage improvements, and construction of curb, gutter, and sidewalks.

The County has the authority to evaluate impacts of development projects under SEPA. The SEPA review may identify adverse transportation impacts. These could include impacts related to safety, traffic operations, non-motorized travel, or other transportation issues. The needed improvements may or may not be identified as specific projects in the Plan.

The County could also require an evaluation of transportation concurrency for development projects. The concurrency evaluation may identify impacts to facilities that operate below the County's level of service standard. To resolve that deficiency, the applicant can propose to fund and/or construct improvements to provide an adequate level of service. Alternatively, the applicant can wait for the County, or another agency or developer to fund improvements to resolve the deficiency. Again, this funding source, while common in Washington State, may not be viable for Island County since growth projections do not appear to require capacity increases in the system.

Local Improvement Districts

A local improvement district (LID) (*RCW 35.43 to 35.56)* is a special assessment area established by a jurisdiction to fund specific public improvements, including transportation improvements, through mechanisms that assess those costs to benefitted property owners. LIDs could be formed to construct sidewalks, upgrade streets, improve drainage, or other similar types of projects. A LID may be in residential, commercial, or industrial areas or combinations depending on the needs and benefits. LIDs can be proposed either by the County or by residents or business/property owners. LIDs are formed by first identifying the specific improvement and the cost to construct it, then reassessing the value of each property benefiting from the improvement. The 'extra value' is then added to the property tax which helps to spread the costs over time. The amount of money you can generate through an LID has to be equal to or less than the benefit generated by the project for the properties being assessed. Due to that funding limiter, this tool works only in certain situations and for certain projects, but if the right opportunity presents itself it could be a useful tool. Many of these situations hinge on development, so it is unlikely that it will be a large funding source for Island County moving forward.

5.4. Reassessment Strategy

Although the financing summary identifies the potential for a total, conservative revenue shortfall of approximately $14.75 M (in 2014 dollars) over the life of the plan, the County is committed to reassessing their transportation needs and funding sources each year as part of its 6-year Transportation Improvement Program (TIP). This allows the County to match the financing program with the short term improvement projects and funding. In order to implement the Transportation Element, the County will consider the following principals in its transportation funding program:

Methods to Generate Additional Revenues

There are several ways that Island County could consider to generate additional revenues for transportation:

- Balance capital improvement with available revenues, by prioritizing transportation capital improvement projects as part of the annual 6-year Transportation Improvement Program (TIP);
- Consider new policies to generate additional revenues; these may include:
    - Property Tax Levy Lid Lifts
    - Transportation Benefit Districts
    - Voter Approved Bond/Tax Package
    - Other Developer Mitigation and Requirements
    - Local Improvement Districts;
- Review project design standards to determine whether costs could be reduced through reasonable changes in scope or deviations from design standards; and
- Continue to vigorously pursue grant funds from state and federal sources, understanding that grant funds are anticipated to decline.

The County will use the annual update of the 6-year Transportation Improvement Program (TIP) to re-evaluate priorities and timing of projects and need for alternative funding programs. Throughout the planning period, projects will be completed and priorities revised. The development of the TIP will be an ongoing process over the life of the Plan and will be reviewed and amended annually.

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