

---

# TRANSPORTATION ELEMENT

---

**PURPOSE:** The purpose of the Transportation Element is to provide a framework of goals, policies, and strategies necessary to develop the transportation facilities that will serve Jefferson County in the future. The element describes the service standards desired for the County's transportation system, projects the impact that the land use pattern recommended in this comprehensive plan will have on the transportation system, and identifies the improvements necessary to meet future demand.

The Growth Management Act (GMA) provides for a systematic approach for estimating and planning for future transportation needs based on an analysis of existing conditions and a projection of future conditions. This Transportation Element meets the requirements of the GMA.

## **Element Amendment**

~~This element is part of the 2002 Amendments to the 1998 Comprehensive Plan. One purpose of the Amendment is to address the addition of the Tri Area as a Urban Growth Area (UGA). The addition of a UGA was contemplated in the 1998 Plan following completion of a "Special Study." This Special Study was initiated in 1998 but not completed until 2001. As part of the process, capital needs were addressed and the impacts fully explored in a Supplemental Environmental Impact Statement (SEIS 1999).~~

~~The Final SEIS provides estimates of transportation needs based on a full build-out of the Tri Area which, based on population trends, is not expected within the 20 year planning period. Therefore, these estimated needs are not included in this update but can be found in the Final SEIS.~~

~~Importantly, within the next 6 years (see the Capital Facilities Element), there are no changes anticipated in infrastructure needs because of the addition of the Tri Area as a UGA. This is due to the fact that the 2002 Amendments to this plan will not allow significant increases in growth density from those in the 1998 Plan until sewer facilities are developed for the area (see Land Use Element). While necessary planning and preliminary engineering is scheduled for these facilities, they will not be in place within the next 6 years (see Capital Facilities Element).~~

## **Relationship with Other Comprehensive Plan Elements**

Land use and transportation are inextricably connected -- it is the use of the land that determines the demand for travel to, from, and through various locations. The future land use identified in the Comprehensive Plan is, in turn, shaped by the values and goals expressed in the other elements of the Plan. The Plan addresses such issues as the protection and use of natural resources, the amount and type of open space and recreational opportunities available in the County, the locations and types of housing to be made available, the types and locations of various economic activities, and the funding priorities of the County. This Transportation Element has been developed in accordance with the other Comprehensive Plan elements, and has been integrated with the other elements to ensure consistency throughout the Plan.

While the main focus of the goals and policies in the Transportation Element are transportation system-related and addressed solely in this element, this element reflects the policy intent of the other elements as well. Policies relating to design of pedestrian environments, recreation and pedestrian trails, support for urban densities through appropriate transportation facility design, protection of the characteristics of the rural environment, protection of sensitive areas, and encouraging conservation of energy are reinforced in

a transportation context. Goals and policies that relate more directly to these areas are found in the following elements: Land Use, Rural, Housing, Economic Development, Natural Resources Conservation Environment, and Capital Facilities.

## **TRANSPORTATION ELEMENT STRATEGY**

Jefferson County's strategy for managing its transportation network is to encourage efficient multimodal transportation through implementation of the policies of the transportation element which address: the County's highways and arterials; public transportation needs and services; nonmotorized transportation facilities; land development standards associated with the County's transportation network; state, regional, and local intergovernmental coordination; promotion of transportation demand management programs; protection of the environment and conservation of energy in transportation activities; and development of a transportation improvement program that will identify and rank projects for funding.

## **INTRODUCTION**

This Transportation Element describes all relevant modes of travel contained in the overall county transportation system, including automobile, transit, freight, air, ferry, bicycle and pedestrian. The Element presents travel forecasts; level of service standards and analysis; and transportation goals and policies developed by the Jefferson County Transportation Planning Advisory Board in conjunction with the Planning Commission. Recommendations for transportation improvements are contained in the Capital Facilities Element.

The Transportation Element was developed over a period of several years, during which time, five Technical Memorandums were prepared and reviewed by the Transportation Planning Advisory Board, Planning Commission, and coordinated with the goals, policies, and plans of other appropriate state, regional, and local jurisdictions. These Technical Memorandums and discussion papers (listed below) provide the background data and initial analysis that are the foundation for the Transportation Element as it has evolved:

<b><u>Technical Memorandum/Title</u></b>	<b><u>Date</u></b>
1. Public Participation Program	11/6/92 (final)
2. Transportation Data Inventory	9/29/92 (initial draft; data updated in subsequent versions)
3. Goals and Policies	6/23/93 (final, as accepted by Transportation Planning Advisory Board)
4. Outline and Format of the Transportation Plan	1/8/93 (format revised since this report)
5. Transportation Facility Adequacy: Existing and Forecast	7/15/93 (updated in subsequent drafts)

<b><u>Discussion Papers</u></b>	<b><u>Date</u></b>
Transportation Mitigation and Policy Review	4/25/95
Transportation Alternatives Analysis	5/5/95
Transportation Concurrency: Requirements and Potential Solutions	5/10/95

All background data and reports relating to the development of the Transportation Element, including the Technical Memorandums, are available in the County's Public Works Department.

~~More recently, the Port Hadlock has been selected for designation as a UGA. This decision followed completion (2001) of a "Special Study" assessing the impacts of creation of a Tri-Area UGA. As part of that process, a detailed transportation analysis was completed and included in the Final Environmental Impact Statement (FSEIS—August 1999).~~

### **Intergovernmental Coordination**

The Growth Management Act requires that comprehensive plans, including the Transportation Element, be prepared through a process which includes not only public participation but also intergovernmental coordination. In the case of the development of the Jefferson County Transportation Element, this has included coordination with the Washington State Department of Transportation (WSDOT), Peninsula Regional Transportation Planning Organization (PRTPO), City of Port Townsend, Port of Port Townsend, Jefferson Transit, and Community Planning Groups.

### ***Transportation Planning Advisory Board***

A Transportation Planning Advisory Board (TPAB) was formed at the onset of the development of the Transportation Element. The make-up of the TPAB included six citizens (two from each of the County Commissioner's Districts) as appointed by the Board of County Commissioners; and five agency representatives, one each from Jefferson County Public Works, City of Port Townsend Planning, Jefferson County Planning, Jefferson Transit, and the Washington State Department of Transportation. The primary function of the TPAB was to assist in the development of the Element, review the technical work that was prepared by staff, offer input commensurate with the members' knowledge of the geographic area and local regulatory systems, and make recommendations to the Jefferson County Planning Commission and Board of County Commissioners. The meetings of the Transportation Planning Advisory Board were announced in the local newspaper and were open to the general public and representatives of other agencies/jurisdictions which might have input or be impacted by the process and/or decisions.

### ***Washington State Department of Transportation***

The development of the Transportation Element included coordination with Washington State Department of Transportation through a dialogue of input and response regarding existing conditions, forecasting methods and future recommendations. Copies of the technical memorandums and planning reports which were prepared as part of the process were transmitted to WSDOT - Olympic Region officials for their review and comment. The work included in the Transportation Element was coordinated with the data and recommendations included in the State Highway System Plan Element of the Statewide Multimodal Transportation Plan. As stated above, the TPAB membership included a representative of WSDOT. One of the responsibilities of this representative was to provide input and insight with regard to the planning efforts of the Department and how the two plans might be coordinated on issues important to both agencies.

The County Transportation Element does not include specific recommendations for Washington State Ferry service needs or improvements.

### ***Peninsula Regional Transportation Planning Organization***

The Jefferson County Transportation Element was developed in conjunction with the Peninsula Regional Transportation Planning Organization (PRTPO) which coordinates transportation planning activities of

the Olympic and Kitsap Peninsulas. The PRTPO provides for cooperative decision making by the agencies within the region in order to bring about a continuous and cooperative planning process. Jefferson County has been a regular and active participant of the PRTPO and has developed a Transportation Element that is well coordinated with the requirements, goals, and implementation of the PRTPO.

The PRTPO membership consists of representatives from all four counties, cities, tribal nations, public transportation providers, ports, National Park Service, major employers and private citizens on the northern Olympic and Kitsap Peninsulas. Jefferson County's representation in this regional organization included staff members also responsible for the preparation of the Transportation Element. This dual role by staff allowed for continuous coordination of work between the development of the County Transportation Element and the Regional Plan. The analysis performed was similar, used much of the same background data and was reviewed by staff for both regional and local impacts. The recommendations of both plans were reviewed for possible contradictions and coordinated to address the needs of both organizations.

### ***City of Port Townsend***

A representative of the City of Port Townsend participated on the Transportation Planning Advisory Board. Like the Washington State Department of Transportation representative, the City's designee was responsible for providing input specific to the needs and overlapping issues with the City's planning efforts. In addition, one of the citizen representatives on the TPAB also served on the City of Port Townsend's Transportation Advisory Committee.

### ***Port of Port Townsend***

Information was obtained from the Port and reviewed with regard to the local airport and marine facilities. The review of these documents included identification of future Port projects which might impact the overall County transportation network and the impacts that County transportation decisions might have on the Port's operations. Road improvement projects, specifically, will be coordinated with the Port's future plans. The County Transportation Element does not include specific recommendations for air and Port-related marine needs or improvements. That responsibility has been left to the Port of Port Townsend.

### ***Jefferson Transit***

Jefferson Transit was represented on the Transportation Planning Advisory Board. Their representative played a very active role in the review of the various segments of the Transportation Element. In particular, the goals and policies regarding transit facilities, usage and level of service were developed with the active participation of the Transit representative. This ensured that they would be consistent with the Transit Agency's comprehensive plan and the objectives the Transit Agency was establishing inside the Port Townsend city limits. The Jefferson Transit representative on the TPAB also served on both the City's Advisory Committee and on the PRTPO's Technical Advisory Committee providing input and an avenue of consistency between the three organizations.

### ***Community Planning Groups***

The County's comprehensive planning efforts have included the formation of community planning groups in various sections throughout the County. These groups have developed goals and policies, as well as recommendations for what they wish to see in their own local communities. The goals and policies of

these groups have been reviewed as part of this countywide process. In addition, the documents prepared as part of this effort, and reviewed by the Transportation Planning Advisory Board have been distributed to the community planning groups for review and input. The documents have also been discussed at public meetings held in each of the communities.

### ***Summary***

The process initiated at the beginning of the preparation of the Transportation Element and utilized throughout the development of the plan provided for continuous coordination between the overlapping and concurrent planning efforts in the region. An additional system of checks and balances was provided by virtue of the fact that many of the Transportation Planning Advisory Board members were involved in one or more of the related planning efforts. One of the goals of the process used to develop the Transportation Element was to ensure its consistency with other related documents. This was accomplished through the representatives on the advisory board, review of other agencies' plans, distribution of this plan (and supporting technical work) to other agencies and planning groups, and presentation of facts and findings at community meetings and Planning Commission meetings.

Implementation of the Transportation Element of the Jefferson County Comprehensive Plan will require a cooperative effort between the various jurisdictions mentioned in the preceding intergovernmental section, as well as the private sector.

### **Concurrency**

Concurrency occurs when the transportation facilities or services needed to accommodate growth or change are provided as the development occurs. A key to achieving concurrency is analysis and proper distribution of available funds. Transportation improvements that cannot be funded cannot be built and mitigation measures or reassessment of the land use development are necessary in order to maintain the established level of service.

The concurrency funding analysis is an essential part of the Transportation Element and provides important information in evaluating the Plan's transportation recommendations relative to the various transportation and land use alternatives considered in the Plan's development. The concurrency funding analysis of the Transportation Element is contained in the Capital Facilities Element of the Comprehensive Plan.

### ***Background***

Providing public facilities concurrent with land development is one of the requirements of Washington's Growth Management Act. The main intent of the transportation concurrency requirement is to provide transportation facilities that can absorb the expected traffic increases resulting from land development.

Potential transportation improvements can range from physical improvements (e.g., the addition of travel lanes or new traffic signals) to implementation of various travel demand management techniques (e.g., improved transit service or rideshare programs).

### ***Issues***

Jefferson County is in an unusual situation because all of the roadways included in the Transportation Element's analysis requiring capacity improvements are state routes and are, therefore, outside of the

County's jurisdiction. At the same time, these state routes form the bulk of the County's arterial system and are thus integral components of the transportation system within the County.

The development impact most commonly thought of when considering formation of a concurrency program is a decline in the level of service. While Jefferson County does have needs associated with transportation facility safety, road preservation, and maintenance, the County is currently focusing primarily on resolving concurrency issues for the state routes within the County that are forecast to exceed capacity in this plan, the Peninsula Regional Transportation Plan, and the Washington State System Plan. To address these concurrency matters, Jefferson County has been an active and regular participant in the development of the Peninsula Regional Transportation Plan and has met with the Washington State Department of Transportation. These questions are, as yet, not fully resolved and the County will continue discussions with the Washington State Department of Transportation.

Part of the capacity-related concurrency discussion has focused on equity and has identified two main issues. The first issue concerns state routes and the regional traffic carried by those routes through local jurisdictions, while the second concerns the scale of that responsibility. Increases in regional traffic flow, appropriately, cannot be assigned to local development. Jefferson County has regarded the need to share the burden of concurrency between locally- and regionally-generated traffic as an important point of discussion because state routes provide both local and regional access through travel routes. As regional travel routes, state routes within Jefferson County provide access to the Olympic Peninsula and the Pacific Ocean and, therefore, are important links in supporting the regional economy.

Distinctions can also be made between roads that are similar in functional classification, but serve a community or area differently. For example, SR 104 and SR 19 are both state routes, but SR 104 does not serve adjacent needs to the extent that SR 19 does. Maintaining through travel capacity on SR 104 could be a higher priority than on SR 19, which already provides access to several local businesses.

A second equity issue surrounding concurrency is the scale of responsibility -- is a small developer as responsible for mitigation of impacts as a large developer? The resolution of this question centers around the interpretation of the concurrency wording in the GMA. No single interpretation has been entirely agreed upon. These issues will be discussed further between the Washington State Department of Transportation and Jefferson County.

A strict translation of the law would place developers of all sizes equally responsible for impacts exceeding the LOS threshold. That is, a small developer whose project generated enough trips to exceed the threshold would be held equally responsible as a large developer, but only for the impacts he/she generates.

This potential inequity could be avoided by developing a concurrency management system that focuses on the proportion of impact. Implementing a proportionally-based concurrency management system requires a more flexible interpretation of the GMA. This approach has been used in other communities. The more flexible approach can be implemented in coordination with the State Environmental Protection Act.

## **Conclusions**

Jefferson County is coordinating with the State to develop an equitable concurrency management system, although a system has not been resolved as of this Element's completion date. A flexible concurrency management system based on proportional impacts has been considered because it would be easier to implement and could be more equitable. This concurrency management system would be based on a

review process similar to SEPA which would allow the system to be managed on the basis of significant concurrency impacts rather than a more strict "impact/no impact" approach. This plan projects that no concurrency issues on County roads related to excess traffic volumes will occur during the planning period. Other issues of concurrency relating to safety along roadways and at intersections are likely to arise, however.

The flexible approach to concurrency focuses on developing policies that identify when a concurrency management system should be implemented. The flexible approach can also be implemented through evaluation. Regulations would be required under either the strict or the flexible approach to concurrency. However, under the flexible approach, the regulations are guided by policies and can be written to focus on the main impacts requiring mitigation. This is in contrast to a strict "impact/no impact" approach.

The policies would also identify the criteria to be used to determine when concurrency should be implemented. For example, a policy could say that concurrency mitigation should occur when a development contributes a certain percent or more of the existing traffic volume to the roadways. Or, the policy could say that access mitigation is required for all developments that contribute more than X percent additional traffic to the roadway system. Developments that generate less than X percent of the current traffic volumes would be small businesses and would have little to no mitigation responsibility.

At the policy level, distinctions between the uses of the roadways can also be made, such as between the uses of state routes and local roads. Distinctions can also be made between roads that have the same functional classification but serve the communities differently. For example, SR 104 and SR 19 are both state routes, but SR 104 does not serve adjacent needs as much as SR 19 serves local needs. Policies might suggest that maintaining the through travel capacity is a higher priority on SR 104 than on SR 19, which already provides access to several local businesses.

Safety, maintenance, and preservation policies can also be established and used as thresholds for action. For example, a policy could be worded as follows:

Unacceptable increases in hazards or reduction in safety will be mitigated. The definition of "unacceptable" will be based on analysis of the common roadway, intersection, driveway and nonmotorized design standards in the WSDOT Design Manual, AASHTO, or other commonly used references, such as publications by the Institute of Traffic Engineers.

## **EXISTING CONDITIONS**

The existing conditions portion of the Transportation Element describes Jefferson County's current transportation system, which is divided into two main categories: motorized and nonmotorized. The motorized transportation system includes all automobile and transit travel (vehicular), as well as some motorized transportation modes that travel on off-road routes (e.g., air, waterborne, rail). The nonmotorized transportation system includes both on-road and off-road modes for pedestrian, bicycle, travel. The non-motorized transportation system is described in detail in the Non-motorized Transportation and Recreational Trails Plan. In addition, a brief discussion of weather-related traffic hazard areas identified by the County Public Works Department and the public is provided.

This section also provides a discussion of the level of service (LOS) standards for the County's transportation system adopted by the Transportation Planning Advisory Board. These LOS standards are recommended for adoption in this Transportation Element.

### **Motorized Transportation System - Vehicular**

A description of the motorized transportation system in Jefferson County begins with an overview of the area's roadway functional classification system. The functional classification system is a hierarchy of roadway types. Each type is described by standards that guide the road's design, use, and travel volumes. Following the description of the functional classification system is a summary of the current traffic on the County's roadways and on surrounding roads.

Included in this overview of the roadways' designated function and actual use is a review of accident data. The accident data indicates areas where further investigation of the transportation system may be necessary. The reported data summary does not reveal the cause of the accidents -- rather, they only indicate where the accidents are occurring. Further investigation at accident locations helps define the problem and appropriate solutions.

The emergency service routes and facilities within the County are also presented. During emergencies or disasters, the highway system is critical to providing emergency fire and medical services, as well as being the route for evacuation or delivery of supplies.

As a part of the motorized transportation system, transit service, air and waterborne traffic, and freight traffic are also discussed.

### ***Roadway Functional Classification***

Roadways are categorized according to their role and use in carrying vehicles. The categorization is a hierarchy of roadways ranging from principal arterials, such as state routes, to local streets in residential neighborhoods. The different categories vary in their ability to carry traffic for long distances, and in their ability to provide access to land uses.

*State routes* are roads owned and operated by the Washington State Department of Transportation. These highways provide for regional and interregional travel. In the Jefferson County Transportation Element these routes are classified according to how they function within the County (for example, as principal or minor arterials, or major collectors). State routes within the County include US 101, and State Routes 19, 20, 104, and 116.

*Principal arterials* provide the most mobility. They provide for regional and inter-regional travel, typically carrying large volumes of through traffic, with limited direct access to abutting properties.

*Minor arterials* provide more access to adjacent land uses, but still function primarily to link destination points. Minor arterials tend to link intra-city destinations instead of inter-regional.

*Collectors* provide more access to adjacent land uses than any arterial, but they do not provide the full access that local streets provide. These roads collect and distribute traffic between neighborhoods and business areas, and the rest of the arterial system. They provide for easy and direct access to abutting properties and carry low to moderate volumes of traffic. Major collectors are those collectors that carry higher volumes of traffic directly to the arterial system. Minor collectors typically carry lower traffic volumes directly from local access roads, or from less densely populated areas, and distribute the traffic to major collectors or directly to the arterial system.

*Local access* roads provide direct access to abutting land uses and carry traffic to the collector/arterial system. Local roads typically carry low volumes of traffic, travelling at low speeds. Because of the generalized level of analysis provided in a comprehensive plan, the inventory for the transportation element does not present traffic data on all local roads, only those carrying higher volumes or linking significant collectors.

The existing roadway transportation facilities serving urban and rural areas of Jefferson County consist of principal and minor arterials, major and minor collectors, and local neighborhood streets. The County's existing roadway network and functional classification is depicted in the map sheets in **Figure 10-1**.

At present, 35 percent of the County's road system is classified as major or minor collectors. Functional classifications of individual roadways within Jefferson County are presented in **Table 10-1**. US 101, and State Routes 20 and 104 are classified as principal arterials and SR 19 as a minor arterial. SR 116 is classified as a major collector.

US 101, SR 20, and SR 104 in Jefferson County are designated as tourist corridors by the Peninsula Regional Transportation Planning Organization. Tourist corridors were identified by the Peninsula Regional Transportation Planning Organization using a set of criteria. These criteria require that PRTPO Technical Advisory committee members agree that such corridors serve as a primary conduit providing access to and from tourist attractions. In addition, full WSDOT design standards apply to these identified "tourist corridors" which should include a minimum of 8 foot shoulders. However, a modified design level may apply based on a corridor or project specific basis. Road segments along tourist corridors not meeting these design standards were listed as deficient and improvement projects were recommended.

Most of the County's roadways have minimal gravel shoulders except in locations bordering suburban development, shopping centers, and various other public facilities. In these more developed areas, roadways tend to include paved shoulders and/or sidewalks in addition to an upgraded roadway cross section. The County will develop a plan to upgrade roadways to meet current standards.

The County maintains 390 miles of roads and 24 bridges. Approximately 30 to 40 miles of road are resurfaced annually. All roadways and bridges maintained by the County are evaluated and ranked for inclusion in the Capital Improvement Program, as funding becomes available.

**Figure 10-1            1**

**Figure 10-1**            **2**

**Figure 10-1**            **3**

**Figure 10-1**            **4**

**Figure 10-1**            **5**

**Figure 10-1**            **6**

**Figure 10-1**            **7**

**Table 10-1  
Functional Classification of Roads  
Jefferson County**

Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local Access
Hwy 101 SR 20 SR 104	SR 19 (Airport Cut-off/Rhody Dr/Beaver Valley Rd)	Center Rd Chimacum Rd Irondale Rd Quinalt-S. Shore Rd SR 116 (Ness' Corner Rd/Oak Bay Rd/Flagler Rd) Upper Hoh Rd	Anderson Lake Rd Bee Mill Rd Cape George Rd Clearwater Rd Cook Ave Extension Coyle Rd Dabob P.O. Rd Dabob Rd Dosewallips Rd Duckabush Rd E. Quilcene Rd Eaglemount Rd Four Corners Rd Hastings Ave W Hazel Point Rd Larson Lake Rd Oak Bay Rd Paradise Bay Rd Penny Creek Rd Point Whitney Rd S. Discovery Rd South Point Rd Thorndyke Rd	Carrol Ave Cedar Ave E. Marrowstone Rd E. Maude St Egg and I Rd Gardiner Beach Rd Glen Cove Rd Hoh Village Rd Kala Pt. Dr Leland Valley Rd W Lindsey Hill Rd Linger Longer Rd Lords Lake Loop Lower Hadlock Rd Mason St Mill Rd Oil City Rd North Otto St Osprey Ridge Dr Patison St Pioneer Dr Prospect Ave Queets River Rd Robbins Rd S. Jacob Miller Rd Sandy Shore Rd Seamount Dr Shine Rd Snow Creek Rd Swansonville Rd Teal Lake Rd Thomas Dr Thomas St Walker Way W Uncas Rd W Valley Rd Zelatched Point Rd 5th Ave 7th Ave S 8th St S 7th Ave

Source: Berryman & Henigar.

**Accident Data**

**Table 10-2** provides a listing of the corridors within Jefferson County (including State and County roadways) which have experienced a high rate of accidents. The table is organized by corridor and details the number of accidents along that corridor, by year.

**Table 10-2**  
**Jefferson County Transportation Network**  
**Traffic Accidents by Location**

Roadway	Owner	From - To	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
SR 20	State	Milepost 00.00-12.56	N/A	34	47	43	N/A	N/A	55	53	68	53
SR 104	State	Milepost 00.00-14.67	N/A	43	65	47	N/A	N/A	61	44	64	39
SR 101	State	Milepost 143.98-184.62	N/A	32	41	35	N/A	N/A	36	32	33	30
SR 101	State	Milepost 274.65-314.01	N/A	88	101	97	N/A	N/A	87	80	68	81
Airport Cut-off (SR 19)	State	Milepost 11.88-14.20	7	3	13	5	5	2	N/A	N/A	6	15
Beaver Valley Rd (SR 19)	State	Milepost 0.00-9.10	18	22	18	16	18	2	20	18	18	30
Cape George Rd	County	Milepost 0.00-7.52	3	4	8	4	8	6	5	7	12	5
Center Rd	County	Milepost 0.00-14.98	13	9	10	8	15	7	13	12	16	16
Chimacum Rd	County	Milepost 0.00-1.57	0	3	1	4	0	6	0	0	1	0
Coyle Rd	County	Milepost 0.00-14.17	5	6	5	3	3	5	5	3	1	4
Flagler Rd (SR 116)	State	Milepost 1.98-9.83	3	8	8	8	4	3	10	5	6	4
Four Corners Rd	County	Milepost 0.00-1.33	3	0	3	6	2	3	2	1	2	3
Irondale Rd	County	Milepost 0.00-1.93	7	3	4	7	6	5	2	2	6	5
Ness' Corner Rd (SR 116)	State	Milepost 0.00-1.12	5	2	2	6	6	N/A	3	6	4	10
Oak Bay Rd	County	Milepost 0.00-10.80	17	16	18	17	12	7	13	13	21	15
Paradise Bay Rd	County	Milepost 0.00-6.00	4	9	7	16	11	1	10	7	8	4
Rhody Dr (SR 19)	State	Milepost 9.10-11.88	3	11	8	11	8	3	N/A	N/A	10	15
S Jacob Miller Rd	County	Milepost 0.00-2.00	1	1	3	3	3	2	1	1	3	2
Swansonville Rd	County	Milepost 0.00-3.21	0	2	1	1	4	1	0	3	0	1
S Discovery Rd	County	Milepost 0.00-4.81	5	11	6	6	8	6	9	2	2	5
Thorndyke Rd	County	Milepost 0.00-8.52	3	2	2	3	2	3	6	0	5	3

N/A = Not Available

Source: Berryman &amp; Henigar.

### ***Weather-Related Traffic Hazards***

Inclement weather affects driving conditions, contributes to accidents, and can damage the roadways. High elevation roads, such as Dosewallips and Duckabush Roads, are subject to frost conditions. During periods of thawing, the Public Works Department installs signs informing travelers of load-limit restrictions due to freeze/thaw conditions. Some roadway segments require sanding during winter conditions, including Irondale Road (dip); Flagler Road/Oak Bay Road intersection; SR 19 Beaver Valley Road/Center Road/Chimacum intersection; Walker Mountain above 700 feet elevation; Dosewallips and Duckabush River Roads; and several roads in the Brinnon area. In addition, some roads are subject to flooding and washout during storm events, such as the Oil City Road, Quinault-South Shore Road, and Upper Hoh Road. In the last twelve or so years, the Upper Hoh Road has experienced severe flooding washout damage and has been totally closed on several occasions due to the impacts of severe weather.

### ***Emergency Service Routes and Facilities***

During emergencies or disasters, the highway system is crucial to evacuation and to the delivery of supplies. The County has developed an Emergency Management Plan (September 1996) that addresses transportation issues and needs.

The Emergency Management Plan provides for actions to be taken in the event that certain transportation systems become disabled, and requires the cooperation of various County departments, police and sheriff's departments, the City of Port Townsend, Jefferson Transit, school districts, and the State of Washington. Major routes of travel in the County include northbound on SR 101; westbound on SR 104; northbound on Center Road, SR 19 Beaver Valley Road/Rhody Drive/Airport Cutoff Road), and eastbound on SR 116 (Ness's Corner Road, portion of Oak Bay Road/Flagler Road).

Fire trucks, sheriff's vehicles and ambulances must also be considered as part of the evaluation of emergency service routes. These vehicles must be able to respond to emergencies as quickly as possible. Access to roadways by emergency vehicles as they leave the station, as well as the road conditions on the way to the emergency, are both safety concerns. Potential safety hazard locations include the Chimacum Fire District access to SR 19 (Rhody Drive) and Fire District 6 access to SR 19 (Airport Cutoff Road). Chimacum Fire District has requested a fire signal from the Washington State Department of Transportation.

### ***Public Transit***

Jefferson Transit was created in 1981 to provide transportation services primarily to transit-dependent persons. Jefferson Transit Service serves Port Townsend and Jefferson County with additional service to Sequim and Poulsbo. Transfers are available between the City and County bus routes. Adjoining transit systems include Island Transit, Kitsap Transit (from Route 7), Clallam Transit (from Route 8), Mason Transit (from Route 1) and Grays Harbor Transit (West Jefferson Transit service connecting Forks and Amanda Park along the Pacific Coast). Bicycle racks are available on all Jefferson Transit routes. **Table 10-3** describes the destinations, passenger trips, and ridership per service hour for August 1996. Major transit routes are depicted in **Figure 10-2**.

**Table 10-3  
Jefferson Transit Routes: Ridership – January 1998**

<b>Route</b>	<b>Route Number</b>	<b>Passenger Trips</b>	<b>Riders/Service Hour (January 1998)</b>
Brinnon	1	1,809	10.19
Shuttle (serving Port Townsend: Water St at Quincy/Sheridan at Hastings, etc.)	3	5,445	32.49
Shuttle (serving Port Townsend: Water St at Quincy/Sheridan at Hastings, etc.) (Saturday)	3S	1,033	31.98
Shuttle (serving Port Townsend: Water St at Quincy/Sheridan at Hastings, etc.) (Sunday)	3U	544	23.86
North Beach	4	774	8.19
North Beach (Saturday)	4S	162	9.00
North Beach (Sunday)	4U	126	8.75
Fort Worden	5	605	6.21
Fort Worden (Saturday)	5S	141	8.39
Fort Worden (Sunday)	5U	103	7.66
Landfill Shuttle	6	397	9.46
Kitsap/Seattle	7	1,921	8.78
Kitsap/Silverdale (Saturday)	7S	258	10.42
Kitsap/Silverdale (Sunday)	7U	95	9.65
Sequim	8	2,018	10.02
Sequim (Saturday)	8S	184	9.53
Tri-Area	9	1,825	12.80
Transit (fixed route)		17,440	13.28
West Jefferson (fixed route - transit service between Forks and Amanda Park)		902	3.71
Dial-A-Ride		1,927	2.90
Other ( Specials, Vanpool, Community Van)		1,734	N/A
<b>TOTAL RIDERS</b>		<b>22,003</b>	

N/A - Not applicable.  
Source: Jefferson Transit, 1998.

## *Air, Waterborne, & Freight Travel*

### *Airports*

The Jefferson County International Airport covers approximately 240 acres, of which 40 acres are reserved for runway and 22 acres for aviation-related industry. **Figure 10-3** depicts airport and port locations.

In 1992, the airport recorded 43,000 take-offs and landings. In 1994, the Port completed a master plan for the airport that was accepted by the Federal Aviation Administration (FAA). The Port of Port Townsend recently received a \$1 million grant from the Federal Aviation Administration (FAA) to rehabilitate existing taxiways; construct additional taxiways, taxi lanes, and hangar pads; and to extend the runway apron. In order to coordinate their planning with the mandates of the Growth Management Act, the Port is currently working on a subarea plan for the immediate airport area. The plan is intended to minimize future conflicts between airport activities and other land uses.

### *Ferry Service*

Ferry service is provided by the Washington State Ferry System (WSF) to Whidbey Island via the Port Townsend/ Keystone ferry route, and to the greater Puget Sound through Kitsap County via the Kingston/Edmonds, Bainbridge Island/Seattle, Bremerton/Seattle, and Southworth/Vashon/ Fauntleroy routes. The ferry service can accommodate automobiles, pedestrians, bicyclists, kayaks, and canoes. A private carrier, Puget Sound Express, provides passenger-only service between Port Townsend and the San Juan Islands.

WSF service at Port Townsend is provided by two Steel Electric Class ferries. Schedules vary according to the season, with fewer crossings during the winter months. Service between Port Townsend and Keystone, in general, begins at 7:00 a.m., with the last ferry leaving Keystone at 9:30 p.m. Special fares are available for authorized vanpools containing seven or more regular passengers. Special fares are also available to disabled passengers; however, not all terminals and vessels are wheelchair accessible. The ferry system supports a tourism loop that runs through the North Cascades Highway. The system brings visitors to the City of Port Townsend and experiences overloads, particularly on weekends and holidays during summer months.

Development of additional passenger-only runs from Port Townsend to areas within greater Puget Sound is an option. Expanded ferry service would potentially increase commerce within the city, but may also result in higher seasonal or permanent populations.

### *Freight Travel*

There are three basic forms of freight travel in Jefferson County: truck, waterborne (shipping and ferry) and air. Trucking is the predominant mode of freight transportation. Most of the total westbound truck freight is carried over the Hood Canal Bridge, towards Port Townsend, or up US 101 through Shelton.

**Figure 10-2 - Transit Routes**

**Figure 10-3**  
**Airports and Ports**

Washington State Ferries are also a part of the freight transport system in the County, carrying commercial trucks from East Puget Sound via Keystone to Port Townsend. Port Townsend Paper Corporation also owns a 600-foot dock that can accommodate large ocean-going vessels. Due to shallow waters, ships cannot leave fully loaded. The Port Townsend Paper Corporation generates more than 40 in-bound trucks per day. In-bound freight consists primarily of raw materials such as wood chips, and outbound trucking freight is paper goods. Most air freight is handled at Fairchild International Airport in Port Angeles. Regularly scheduled commercial air service is provided by Horizon Airlines, Federal Express, United Parcel Service, and Pony Express Air Service. Port locations are depicted in **Figure 10-3**, along with airport locations.

Freight travel can have impacts on County roadways and roadway needs. The heavy weight of trucks breaks down pavement structure and is a significant factor in the need for maintenance of roadways. Road characteristics such as width, alignment, and sight distance on some roads may be inappropriate for trucks.

### **Nonmotorized Transportation System**

(This section was revised in conjunction with the adoption of the Non-motorized Transportation and Recreational Trails Plan in 2002.)

#### ***Pedestrian Circulation and Bicycle Facilities***

Given the rural nature of Jefferson County, travel occurs predominantly by motorized vehicle. However, bicycle and pedestrian circulation are important transportation modes that are used by County residents. More residents would likely use non-motorized transportation modes if adequate and more extensive facilities were available. Many County roads lack adequate shoulders that would make bicycling and walking safer and more enjoyable. Pedestrian facilities including sidewalks and walking paths would improve conditions for walking to school and in densely developed areas such as Port Hadlock. Off-road trails would provide alternative routes for non-motorized travel.

In order to fulfill policies and action items of the Transportation Element and develop a systematic approach for providing additional non-motorized transportation facilities, the Public Works Department conducted a non-motorized transportation and trails planning process during 2001 and 2002. A Non-motorized Transportation and Recreational Trails Plan was developed in conjunction with an update of the Parks, Recreation, and Open Space Plan.

The planning process began with a series of public workshops that were held in communities throughout Jefferson County. An inventory of existing non-motorized transportation and trails facilities was compiled, as well as a vision of the facilities that County residents would like to have. This vision included providing a system of on-road and off-road bicycle and pedestrian facilities linking communities, commercial and employment centers, schools, and recreational areas and developing the Olympic Discovery Trail from the end of the Larry Scott Trail at Four Corners to Clallam County.

The Public Works Department convened a Non-motorized Transportation Task Force to assist in developing goals and policies and facility design standards and prioritizing non-motorized transportation projects. A survey of County voters was conducted to determine opinions regarding project priorities and alternative funding sources. A Six-Year Capital Facilities Plan was developed. The Non-motorized Transportation and Recreational Trails Plan was adopted as a stand-alone document during the 2002 Comprehensive Plan amendment cycle. The Non-motorized Transportation and Recreational Trails Plan has a detailed inventory of non-motorized

transportation and recreational trail facilities, goals and policies, design standards, a list of potential projects, discussion of alternative funding strategies, and alternative capital facilities plans.

**Figure 10-4** depicts existing and proposed on-road bicycle routes identified in the Plan.

**Figure 10-4**  
**Multi-purpose Trails Trails**

The Plan noted the lack of a public trail system in the County and the need for a comprehensive trail system to meet the growing demand. The Parks Plan includes policies containing standards for development of new trails, including the need for trails to perform a transportation function and connect and serve schools, shopping areas, entertainment and recreation facilities, churches and places of employment. The Plan's action plan includes development of a master plan/inventory of existing and potential trails as part of a comprehensive trails plan. Plans also include an agreement with the Interagency Committee for Outdoor Recreation to begin acquisition of trail properties to create the Larry Scott Memorial Park Trail and coordination between the Parks Department and Public Works Road Design Section to create safe conditions for bicycle pathways along County roads.

## **EXISTING ROADWAY DEFICIENCIES**

Jefferson County has developed three systems for use in evaluating deficiencies of transportation facilities (roadway segments, intersections, and bridges) and ranking them for improvement according to need. Two systems, Road Project Priority Programming System and Intersection Rating System, are used to determine what structural, design, or other characteristics may need revision to improve the functioning of the facility. The third system used by the County to evaluate facilities is the State of Washington Inventory of Bridges and Structures (SWIBS).

### **Road Project Priority Programming System**

The Road Project Priority Programming System was developed in order to equitably balance the various needs of the transportation system: general capital and operational needs; safety needs; nonmotorized needs; transportation planning needs; and others. The model contains three main steps. The first, needs identification and screening, identifies a list of potential improvements from a large number of sources. Projects identified are then screened for 1) feasibility, 2) whether they are maintenance projects rather than capital projects, or 3) inappropriateness because they conflict with existing County policy or they are not the best solution to the problem. Remaining projects are grouped according to the category of project (e.g., general transportation, nonmotorized needs, safety needs, planning project, or other). The second step evaluates prospective projects using a technical evaluation and ranking. Eighteen criteria have been developed (e.g., accident history, nonmotorized needs, public request or complaints, Average Daily Traffic). A point system ranging from 1 to 10 has been developed to reflect the degree of need, deficiency, or demand. The third step is to include the policy direction of the Board of County Commissioners who determine the weight to be applied to the 18 criteria and how the transportation revenue is to be split between categories. The end result is a ranking of the roads within the transportation system. This ranking provides direction for the allocation of funding available for improvement projects. These projects are then listed on the County's annual Six-year Transportation Improvement Program update, and are listed in the Capital Facilities Element of this Plan.

While the planning analysis is more "broad brush", this ranking system would be used in conjunction with more detailed analysis of specific segments and/or intersections.

### **Intersection Rating Procedure**

The procedure used by the County to identify and rank needed intersection improvements is similar to the program used to identify and rank road improvements. The methodology for this process combines factors such as the number of accidents at the site, annual accident rate, accident severity, sight distance, speed, and accident severity in order to develop a hazard ratio. Intersections are then ranked according to their respective hazard ratios, and their improvements are funded accordingly.

### **State of Washington Inventory of Bridges and Structures (SWIBS)**

The State of Washington Inventory of Bridges and Structures (SWIBS) utilized by the County enables all bridges in the State to be inventoried and rated for structural and operational deficiencies. The bridges can then be ranked much like roadway segments and intersections (as discussed in the preceding text). SWIBS also meets the Federally mandated inventory of bridges required by the Federal Aid Highway Act (now the Intermodal Surface Transportation Efficiency Act - ISTEA).

The methodology used to rate bridges by SWIBS consists of at least bi-annual inspections that includes a rating of individual members of the bridge for conditions; a structural rating based on the bridge design; and, for bridges over water, a scour evaluation. Functional operation is also considered in the evaluation.

### **Observed and Perceived Deficiencies**

In addition, a list of observed and perceived transportation facility deficiencies has been developed through a cooperative process with members of the Transportation Planning Advisory Board (TPAB), County staff, and attendees at a public workshop held in November 1992. Roadway deficiencies identified through this process were categorized as roadway preservation issues (e.g., lane striping and ditch cleaning), roadway structural issues (e.g., shoulder widening, intersection reconfiguration), and safety issues (e.g., blind corners and signalization needs). Roadway capacity issues addressed at this public workshop included the potential need for a bypass in the Tri-Area from Four Corners to Chimacum. In addition, development of an additional park and ride facility on SR 20 at the Port Townsend city limits was recommended. The transportation facility deficiency information provided at that meeting was used in the development of Technical Memorandum No. 2, Transportation Data Inventory, and is available, as updated, in that document. This list of projects continues to serve as a reference and is considered in the ranking of roadway improvement projects.

Overall, roadway deficiencies and issues relating to capacity are addressed in the Traffic Forecasts section of this Element.

## **CRITERIA USED IN TRANSPORTATION DECISIONS**

The County evaluates several factors in deciding what transportation improvements should be undertaken. Factors to consider include the level of service (LOS) standard for each roadway adopted by the County in this plan, and the County's transportation goals and policies.

### **Level of Service Standards**

Level of service (LOS) is a multi-dimensional measurement of the quality of service provided by the existing transportation system. The concept of LOS has traditionally been used in transportation planning and engineering to describe an actual or expected operating condition for a road. A lower LOS implies worsening conditions, either as perceived by the traveler, or as a measure of efficient movement. LOS is the desired minimal operational condition for a facility, something against which actual conditions can be assessed. By applying LOS standards and then monitoring the actual LOS, a jurisdiction can implement a system for establishing traffic flow objectives, prioritizing transportation projects and funding, and directing growth of the transportation network.

LOS can be described by one or more factors, such as travel times, levels of congestion, volume of use compared to system capacity, frequency of service, comfort and convenience, or safety. LOS measurements can address other modes of transportation including transit or bicycles.

The Growth Management Act requires the establishment of a level of service standard as a gauge for evaluating the performance of the existing transportation network, including roads and transit. LOS is also used to determine whether transportation improvements or transportation services will be made available to serve proposed development.

### **Vehicular Traffic - Level of Service**

For roadways, LOS is typically described in terms of congestion, which may be measured by average travel speed or vehicular density. **Table 10-4** provides general definitions of LOS categories typically used by traffic engineers for roadways. Six levels of service are defined from A to F with LOS A representing the best operating conditions and LOS F the worst.

The Jefferson County Transportation Planning Advisory Board adopted level of service standards for State and County roadways within Jefferson County; these level of service standards are recommended for adoption by the County in this Plan. The recommended LOS standards are consistent with those set by the Peninsula Regional Transportation Planning Organization and the Washington State Department of Transportation. These standards are as follows:

Rural Roads (roads outside an urban boundary line)	= LOS C
Urban Roads (roads within an urban boundary line)	= LOS D
Urban/Tourist Corridors (rural corridors carrying an urban level of traffic)	= LOS D

The standards recommended in this plan are depicted in **Table 10-6**, which also presents the existing Average Annual Daily Trips (AADT) on each roadway segment and identifies the maximum AADT allowable at the level of service standard established. **Table 10-7** consolidates the information in Table 10-6 and identifies existing and forecast traffic volumes and levels of service for roadway segments. Currently, all roadways are operating at, or above, established LOS standards. **Figure 10-5** depicts these existing traffic volumes and LOS standards on map sheets showing the County road network.

### **Transit - Level of Service**

For transit level of service, Jefferson County worked with Jefferson Transit to establish a level of service standard. This standard, detailed in Transportation Policy TRN 2.5, establishes a minimum level of service based on Annual Transit Revenue 1993-94 Service Hours (ATRSH) for fixed routes in unincorporated Jefferson County. The actual standard as described in Transportation Policy TRN 2.5 calls for providing a minimum of 8,400 ATRSH.

ATRSH is defined as the total number of hours the transit service is used on fare-producing fixed routes for one year. For example, a fixed fare route takes 3 hours per round trip and makes the trip 3 times a day for 5 days a week. The ATRSH for this route would be calculated as follows: 3 hours x 3 trips x 5 days x 52 weeks = 2,340 ATRSH. All routes added together provide the system total.

**Table 10-4  
Level of Service Definitions - Roadways**

<b>Level of Service Category</b>	<b>Definition</b>
Level of Service A	Describes a condition of free flow with low volumes and high speeds. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. Stopped delay at intersections is minimal.
Level of Service B	Represents reasonably unimpeded traffic flow operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tensions.
Level of Service C	In the range of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. The selection of speed is now significantly affected by interactions with others in the traffic stream, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.
Level of Service D	Represents high-density, but stable flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.
Level of Service E	Represents operating conditions at or near the maximum capacity level. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor disturbances within the traffic stream will cause breakdowns.
Level of Service F	Describes forced or breakdown flow, where volumes are above theoretical capacity. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations, and operations within the queue are characterized by stop-and-go waves which are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion.

Source: Transportation Research Board, Highway Capacity Manual: Special Report 209, Washington, D.C. 1985.

Jefferson County has also estimated a conversion between ATRSH and population. This conversion is provided only as a planning guideline and is not intended to be a fixed measurement of service. By linking population to ATRSH, a guideline of ATRSH per person can be determined. Using recent population estimates, 0.472 ATRSH per capita (472 ATRSH per 1,000 population) can be applied as a current service provision guide.

In contrast, the PRTPO transit level of service is based on the type and frequency of service between activity centers. To coordinate the Jefferson Transit service transit standard with the regional service standard, Policy TRN 2.5 also establishes a planning guideline for Jefferson Transit to seek to provide service to meet the PRTPO origin-destination goals.

The PRTPO origin-destination level of service distinguishes between Rural Routes, Commuter-Regional Routes, and High Capacity Feeder Routes (to ferry terminals). **Table 10-5** depicts the adopted PRTPO transit level of service. Because many of the routes are inter-county, the table includes Rural and Commuter routes for all counties participating in the PRTPO. High Capacity Feeder routes are not designated in Jefferson County because the Port Townsend ferry route is predominately a tourist route.

**Table 10-5  
Peninsula Regional Transportation Planning Organization LOS Summary Analysis**

- ☉ = Satisfies recommended LOS standard
- ☉+ = Exceeds recommended LOS standard
- (-) = Does not satisfy recommended LOS standard

Transit Service Link		Adopted Level of Service (LOS)	
<b>Rural Routes</b>			
LOS Standards	Route No.	1 Trip Per Day	7 Days Per Week
Port Townsend - Brinnon	1	☉+	(-)
Brinnon - Port Townsend			
Port Townsend - Port Ludlow	7	☉+	☉
Port Ludlow - Port Townsend			
Port Townsend - Cape George	No Service	(-)	(-)
Cape George - Port Townsend			
Port Townsend - Marrowstone Island	No Service	(-)	(-)
Marrowstone Island - Port Townsend			
Amanda Park - Forks	N/A	☉+	(-)
Forks - Amanda Park			
<b>Commuter - Regional Routes</b>			
Route	Route No.	5 Trips Per Day	5 Days Per Week
Sequim - Port Townsend	8	☉	☉+
Port Townsend - Sequim			
Port Townsend - Poulsbo	7	(-)	☉+
Poulsbo - Port Townsend			
Chimacum/Port Hadlock - Port Townsend	9	☉+	☉+
Port Townsend - Chimacum/Port Hadlock			
Port Townsend - Kingston	No direct service	(-)	(-)

Source: Berryman & Henigar, 1996.

As is evident in the following table, Jefferson Transit meets the PRTPO transit level of service for the number of trips per day where there is service, but not for the number of days a week. The PRTPO has

set a goal of seven days a week while Jefferson Transit primarily provides regular service five days a week.

## LAND USE AND TRANSPORTATION PLANNING METHOD

### Analysis Of Alternatives

The County considered several land use alternatives in developing the Comprehensive Plan. To meet the requirements of the Growth Management Act and to allow the community the opportunity to analyze the various land use alternatives, travel forecasts were developed for the alternatives and the baseline condition. The analysis of these land use scenarios and their impacts on transportation in the County is available in the Environmental Impact Statement prepared for the Comprehensive Plan and the Supplemental Environmental Impact Statement prepared for the Comprehensive Plan 1999 Amendments.

### *Jefferson County Comprehensive Plan*

~~The alternative chosen for the Jefferson County Comprehensive Plan adopted in August, 1998 designated one Urban Growth Area, Port Townsend. However, the Plan does recommended studies to analyze whether the Port Hadlock/Irondale (Tri Area) and Glen Cove should become Urban Growth Areas. Based on the results of the Tri Area / Glen Cove Special Study, an Urban Growth Area has been designated in Port Hadlock and Irondale. There are two Urban Growth Areas within Jefferson County, the City of Port Townsend and Irondale/Hadlock.~~ This designation will permit commercial, industrial, and residential development at an urban scale and density. Transportation studies that were conducted for the Tri-Area / Glen Cove Special Study provide useful information regarding the transportation facilities necessary to support urban development in the Port Hadlock UGA.

Port Ludlow ~~be~~ has been designated as a Master Planned Resort. This designation permits urban-style development that is consistent with the MPR designation.

Commercial areas in Quilcene and Brinnon are designated as Rural Village Centers. These established historic rural business centers will continue to serve as commercial and service centers serving their respective surrounding communities and rural neighborhoods, and are not to be regarded as future urban growth areas.

The type and intensity of future commercial growth within the Rural Village Centers will be regulated so as to allow for only development that serves the needs of the surrounding rural area, including the expected needs of the projected future residential population.

The Land Use Element of the Comprehensive Plan requires that any future subdivision of rural residential land not exceed 1:5, 1:10, or 1:20 acre densities. The overall land use pattern intended for unincorporated Jefferson County outside of the Port Hadlock UGA is rural in nature, with rural commercial activities focused in the Rural Village Centers.

It is recognized that the County has an excess of buildable lots needed for the growth projected for the County. A large number of these lots are located within the Port Hadlock UGA. Many of these lots are at densities greater than the 1:5 rural density specified in the Land Use Element. Since these lots are recognized as existing lots of record, they can be developed provided that they meet Health Department requirements. As these lots are developed in the future and additional traffic is generated, transportation system improvements, including non-motorized transportation facilities, may be necessary.

It is important to note, however, that transportation growth and needs anticipated in the 1998 Plan will remain unchanged with the addition of the Port Hadlock area as a UGA for the near-term. This is due to the continuing constraint placed on development in the Port Hadlock through lack of sewer facilities. Therefore, past analysis of population and transportation and the analysis contained in the 1998 plan are still applicable until such time as sewer planning is complete (within the next Plan update). With the designation of the UGA, sewer planning will begin, but facilities will not be in place over the next six years. An analysis of the build-out impacts (beyond the 20 year planning horizon) due to the Port Hadlock area UGA addition, are contained in the FSEIS for the proposed Comprehensive Plan 1999 Amendments.

### *Linking Land Use and Transportation*

The link between the future land use alternatives and the transportation system is the traffic forecasting process. The demand for transportation is considered to be a derived demand. That is, people do not travel specifically for the sake of traveling, but travel to perform other tasks that are in different locations. Travel is secondary and derived from the need to perform other tasks.

Land use designations determine the locations of these other activities. These variations in potential land use influence the travel demand. The travel forecasts conducted for this transportation analysis were based on the varying land use alternatives. This forecasting procedure is described below.

### **Traffic Forecasts**

To analyze the impacts of the growth pattern designated by the Jefferson County Land Use Element on the roadway system, traffic forecasts were developed. Traffic forecasts, shown in **Table 10-6**, were developed for the horizon year 2016. The traffic forecasts did not, at this time, indicate that bypasses of the Tri-Area or Paradise Bay were feasible.

The methodology established to estimate future traffic growth for the proposed land use plan links the historic growth rate in housing units to traffic growth rates. A ratio of future countywide housing growth to historic growth in housing units was determined. This ratio was composed of both land use factors characteristic of this plan and planning area factors. The historical housing growth rate, based on the years 1986-1990, was determined for each of the community planning areas. A ratio of future growth to historical growth was then calculated for each planning area.

This housing growth ratio was then applied to the historic traffic growth rate to develop a future traffic growth rate and served to link land use growth to traffic growth. The land use plan characteristics and planning area variations in the ratio served to properly weight the future traffic growth rate.

Historic traffic growth rates were calculated by road segments within each planning area. For most of the routes, base data was available for the years 1986 to 1990; thus, most of the roadway historical traffic growth rates are based on that time period.

**US 101 and SR 104.** Traffic growth on US 101 and SR 104 is influenced primarily by regional or through traffic and was not considered to be influenced as significantly by local development variable. The forecast traffic growth rates for these roadways were based strictly on the historical traffic growth rates calculated for the road segments within each of the planning areas. Since the greatest influence on US 101 and SR 104 traffic is through traffic, the traffic growth rates for these routes are not weighted by planning area.

**SR 19 and SR 20.** The forecast traffic growth rates for these roadways were determined from a weighted historical growth calculation. The "weight" applied to the historical traffic growth figure was a ratio of projected housing growth rate to historical housing unit growth rate for the combination of the Port Townsend, Quimper Peninsula, Marrowstone Island, and Tri-Area Planning Areas. A "composite growth ratio" was used because of the inter-relationship of traffic patterns in the SR 20/SR 19 area (i.e., the number and type of short trips between adjacent planning areas).

**County Roads.** The forecast traffic growth rates for local (County) roads were calculated from historical traffic growth on those roads and weighted by the housing growth "ratios" for each of the planning areas and the land use plan. Roads that experienced unusually high or unexplained growth rates which would skew the analysis were assigned a forecast traffic growth rate equivalent to that being used for US 101 or SR 104 segments within the same planning area.

Precise modal shifts from the automobile to other modes were not calculated into the traffic forecasts. Estimating modal shifts is difficult under the best of situations, and travel forecasters often rely on national estimates applied to local data. Jefferson County travel behavior may not comply with national trends and applying a nationwide estimate in the calculations was not considered appropriate.

### **Transportation Element Recommendations**

Based on this Transportation Element and the Capital Facilities Element, Jefferson County requires concurrency for only County-owned facilities within the County transportation system. Analysis of other transportation facilities is provided in this discussion and in the Capital Facilities Element background data document, Capital Facilities Element Requirements; however, the County has not identified all of these projects in the Capital Facilities Element itself.

Based on the level of service standards set forth in this Element and the projected impact of the land use plan on the transportation system, this Transportation Element provides the following findings and recommendations:

#### ***Capacity Analysis***

##### *Motorized Transportation System - Vehicular*

The capacity analysis and traffic forecasts indicate that at the planning horizon year of 2018, no County facilities are expected to exceed the adopted level of service standard. However, if any proposed development were to cause the level of service to fall below adopted levels, the proponents of the development would be required to mitigate the deficiency prior to development approval. However, a number of state route highway segments will exceed their estimated capacity based on the levels of service standards established in this Element. All Jefferson County roads are expected to operate within the LOS standards. Based on the methodology used for this plan (i.e., using ADT to identify if traffic volume is projected to exceed capacity), state roads which are forecast to exceed capacity within the planning period for the LOS standards include:

- US 101 (Jefferson/Clallam County Line to SR 20)
- SR 104 (US 101 to Center Road)
- SR 104 (SR 19/Beaver Valley Road to Jefferson/Kitsap County Line)
- SR 19 (Oak Bay Road to SR 20)
- SR 20 (Four Corners Road to Mill/Discovery Road)

The analysis performed was a "broad-brush", general planning analysis which involved road segments. Individual intersections were not analyzed in this study. Specific studies of intersections and congested road segments should be performed as necessary.

The Peninsula Regional Transportation Planning Organization utilized a composite growth rate developed from the individual growth rates established by the four counties (Clallam, Jefferson, Kitsap, and Mason) within the region. This regional growth rate factor identified the same State Route segments as exceeding capacity within the planning horizon. The Washington State Highway System Plan provides a statewide analysis. Under the "financially constrained" alternative, the state system plan also identifies the same segments of US 101, SR 104, and SR 20 as exceeding capacity as identified in this plan.

#### *Motorized Transportation System - Transit, Airports, Ferry Service, and Freight Travel*

The Capital Facilities Element Requirements presents proposed capacity-related improvements for Capital Improvements for Jefferson Transit service. Capacity-related projects for airports and ferry service are also presented in the Capital Facilities Element Requirements. Freight service is partially addressed by the County in its evaluation of roadway and airport facilities; rail service and other port-related freight services are addressed by those entities.

#### **Capacity Analysis**

##### *Non-motorized Transportation System*

Capacity-related needs for non-motorized transportation and recreational trails are presented in Table 12-PR-2d of the Capital Facilities Element of this Plan. This table shows Jefferson County's adopted level of service of 0.52 miles of trails per 1,000 population and an inventory of 15 miles in 1998. The table shows there would be a deficiency of 0.59 miles in 2003, if additional facilities are not provided. Since 1998 Jefferson County has developed 4.8 miles of the Larry Scott Trail, 5 miles of walking and mountain bike trails at Gibbs Lake Park, and 1.5 miles of trails at HJ Carroll Park. Based on these facility additions, Jefferson County exceeds its adopted level of service. More detailed information regarding existing facilities is available in the Non-motorized Transportation and Recreational Trails Plan.

##### *Non-Capacity Analysis...*

##### *Non-motorized Transportation System*

Detailed information regarding non-capacity-related non-motorized transportation and recreational trail projects can be found in the Non-Motorized Transportation and Recreational Trails Plan.

## GOALS AND POLICIES

The purpose of the Jefferson County Transportation Element is to establish goals and policies in support of the desired and projected transportation system pursuant to the Washington State Growth Management Act. Accordingly, the overall goal of the transportation element is to "encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans" (RCW 36.70A.020(3)).

The transportation goals and policies are an integral part of the adopted plan and set forth the adopted Level of Service (LOS) standards and other policy commitments for Jefferson County. Individual goals are established for specific targeted issues relating to transportation planning. The overall set of goals relate to the following targeted issues:

Highways and Arterials	Goal 1
Public Transportation	Goal 2
Nonmotorized Transportation	Goal 3
Land Development Standards	Goal 4, Goal 5, and Goal 6
Intergovernmental Coordination	Goal 7 and Goal 8
Demand Management	Goal 9
Environment and Energy	Goal 10
Transportation Improvement Program	Goal 11

Each goal statement is followed by policies that provide direction and mechanisms for reaching the stated Goals. Also, the Capital Facilities Element provides a list of specific transportation projects determined to be necessary to address deficiencies identified in roadway sections and at intersections. These projects are also listed in the County's Six-year Transportation Improvement Plan.

### HIGHWAYS AND ARTERIALS

#### GOAL

**TRG 1.0** Provide a safe, convenient, efficient and integrated highway and arterial system for the movement of people and goods, one that is functionally well maintained, reflects local environment, and meets the demands of the future.

#### POLICIES

**TRP 1.1** Provide for a Level of Service C, or better, for rural road facilities based upon Average Annual Daily Trips.

**TRP1.2** Provide for a Level of Service D, or better, on all road facilities within Urban Growth Area's (UGAs), and Designated Tourist Corridors as established by the Peninsula Regional Transportation Planning Organization, based upon Average Annual Daily Trips.

**TRP 1.3** Preserve and maintain the existing highway and arterial system to avoid costly reconstruction.

- TRP 1.4** Maintain the efficiency of traffic flow by monitoring traffic, upgrading traffic control devices, and developing traffic management techniques as appropriate.
- TRP 1.5** Require that streets are designed and constructed to County standards to efficiently and effectively meet the needs of the community and promote overall transportation safety.
- TRP 1.6** Require use of access management techniques to regulate driveway access.
- TRP 1.7** Through application of standards, reflect the rural aesthetic of the county, minimize impervious surfaces, and minimize cost to taxpayers and developers.
- TRP 1.8** Prevent glare and minimize pollution to the night sky through the use of appropriate roadway lighting and fixtures without compromising public safety.
- TRP 1.9** Encourage the retention or use of roadway features that enhance rural qualities by applying appropriate rural standards.

## **PUBLIC TRANSPORTATION**

### GOAL

- TRG 2.0** **Promote a coordinated and integrated public transportation system available to all residents, guests, and those without personal transportation options in Jefferson County.**

### POLICIES

- TRP 2.1** Support existing public transportation programs and coordinate with the Peninsula Regional Transportation Planning Organization to improve the system as needed.
- TRP 2.2** Encourage cooperation between private transportation providers and public transportation providers.
- TRP 2.3** Provide for a minimum Level of Service of 8,400 Annual Transit Revenue Service Hours (ATRSH) for fixed routes in unincorporated Jefferson County. Additionally, as planning guidelines, seek to provide for the Level of Service for Transit Service Links adopted by the Peninsula Regional Transportation Planning Organization's Plan that have an origin or destination in Jefferson County, and maintain a 472 ATRSH per 1,000 population for fixed routes in unincorporated Jefferson County.
- TRP 2.4** Provide convenient automobile and bicycle access to park and ride facilities on arterial/collector routes where warranted and cost effective.
- TRP 2.5** Require that retail shopping facilities, offices, industrial and residential developments and similar uses be designed to accommodate public transit plans and goals.
- TRP 2.6** Identify and invest in road and pedestrian improvements that support transit reliability and safety, and encourage use of the public transportation system.

- TRP 2.7** Promote and enhance passenger and freight travel opportunities, including development of air and water transportation alternatives.

## **NONMOTORIZED TRANSPORTATION**

### GOAL

- TRG 3.0** **Provide safe, accessible and convenient routes, trails and parking facilities, trail heads, and other amenities that promote the use of nonmotorized travel in a manner that is integrated with other forms of transportation.**

### POLICIES

- TRP 3.1** Using established standards and in accordance with the Non-motorized Transportation and Recreational Trails Plan, provide facilities for safe bicycle and pedestrian travel when conducting roadway improvements projects and constructing new roadways.
- TRP 3.2** Encourage development of a non-motorized transportation network between all major activity centers in Jefferson County in accordance with the Non-motorized Transportation and Recreational Trails Plan.
- TRP 3.3** In coordination with the County Parks and Recreation Division, federal, state and regional agencies, utilities and other agencies, and citizen groups, promote the development of new trails and linkages between trails in accordance with the Non-motorized Transportation and Recreational Trails Plan.
- TRP 3.4** Promote development of an integrated trail system in the County in accordance with the Non-motorized Transportation and Recreational Trails Plan by seeking opportunities to provide links between existing trails during planning for improvements to the County transportation system and in review of land development proposals.
- TRP 3.5** Promote coordinated bicycle, equestrian, and pedestrian way improvements in accordance with the Non-motorized Transportation and Recreational Trails Plan, emphasizing access to schools, parks, employment and service centers, and mass transit facilities (ferry, bus, etc.).
- TRP 3.6** Require that roadway improvements and new subdivisions within the defined school pedestrian walking zone meet established standards intended to ensure the safety of pedestrians.
- TRP 3.7** Support educational opportunities for children and adults that will encourage safe use of roadways, trails, and sidewalks for all transportation modes.
- TRP 3.8** Promote safe, convenient, and protected bicycle parking at activity centers such as schools, parks, commercial centers, employment and service centers, and mass transit facilities (ferry, bus, etc.) in accordance with the Non-motorized Transportation and Recreational Trails Plan.

- TRP 3.9** In coordination with the Parks, Recreation, and Open Space Plan and the Non-motorized Transportation and Recreational Trails Plan, provide signage for on-street segments of bicycle, pedestrian, and equestrian routes in accordance with the Federal Manual on Uniform Traffic Control Devices (MUTCD).
- TRP 3.10** Promote development of adequate pedestrian walkways and crossings, where appropriate, including facilities separated from the roadway, in accordance with the Non-motorized Transportation and Recreational Trails Plan. Evaluate safety issues associated with pedestrian and bicycle travel near school sites and identify potential improvements.

## LAND DEVELOPMENT STANDARDS

### GOAL

- TRG 4.0** **Encourage land use types, mixes, and densities that promote efficient multimodal transportation systems.**

### POLICIES

- TRP 4.1** Reinforce the link between land use and public transportation by promoting urban residential densities within urban growth areas.
- TRP 4.2** Encourage land development proposals that are consistent with the County Comprehensive Plan Land Use Element and Rural Element and utilize the capacity of the existing transportation system, including the capacity of transit and nonmotorized modes, and avoid costly expansion of the system.
- TRP 4.3** Consider the use of impact fees as a means to ensure that adequate facilities (including, but not limited to transit, pedestrian facilities, bikeways or roadways) are available to serve new growth and development, and to maintain adopted level of service standards for those facilities.
- TRP 4.4** Enhance transportation system safety by requiring appropriate facility design, including providing landscaping and setbacks adjacent to transportation facilities.
- TRP 4.5** Protect outstanding scenic vistas accessible from transportation facilities through site design, and provide visual, and where possible and appropriate, physical, access to these resources.
- TRP 4.6** Require that subdivision and commercial project designs address the following issues:
- a. Cost effective transit and delivery of emergency service;
  - b. Provisions for all transportation modes;
  - c. Dedication of rights of way for existing and future transportation needs;
  - d. Motorized and nonmotorized access;
  - e. Sidewalks and bicycle pathways;
  - f. Compatibility between motorized vehicles, pedestrians, bicyclists, and transit users;
  - g. Inclusion of transit friendly design elements; and
  - h. Adequate parking for non-peak periods.

**TRP 4.7** Provide adequate right-of-way for future transportation needs, through implementation of a systematic right-of-way acquisition program, by limiting encroachment of structures or ancillary uses into the right-of-way (e.g., setbacks), and through the use of other methods of preserving existing rights-of-way.

**TRP 4.8** Ensure that unacceptable safety hazards will be mitigated. The definition of unacceptable will be based on analysis of the existing facility(s) and the current standards for that facility(s) contained in commonly used and adopted transportation publications.

**TRP 4.9** Ensure that the Level of Service for County roads are met for existing and proposed development concurrent with proposed development prior to issuing development approvals.

#### GOAL

**TRG 5.0** **Provide additional roadway aesthetic features that are consistent with surrounding land use.**

#### POLICIES

**TRP 5.1** Develop additional features that enhance accessibility to and visibility of commercial establishments, and apply the features to the appropriate locations.

**TRP 5.2** Protect arterials and highways from encroachment and congestion by access, utilizing appropriate traffic mitigation techniques for commercial development and other impediments to flow.

**TRP 5.3** Ensure that local access roads provide through passage at appropriate speeds that minimize impacts to the surrounding area, and discharge to an appropriate facility.

#### GOAL

**TRG 6.0** **Ensure that the transportation system in Jefferson County encourages the efficient movement of goods, services and passengers and is integrated with the statewide system.**

#### POLICIES

**TRP 6.1** Coordinate with the PRTPO and other jurisdictions to ensure that adequate Washington State Ferry System service is provided to the community.

**TRP 6.2** Allow the use of public funds that ensure that appropriate transportation facilities are in place at the time of development in designated commercial and industrial zones.

**TRP 6.3** Ensure that access to the major air and water transportation facilities via county arterials and state highways is safe, efficient, and coordinated with other transportation modes.

- TRP 6.4** Recognize the existence and current use of private small airfields, landing strips, and private helistops in land use decisions, and ensure proposed expansions of these private facilities meet all required development criteria.

## **INTERGOVERNMENTAL COORDINATION**

### GOAL

- TRG 7.0** **Ensure that the Jefferson County Transportation Plan reflects public desire and is coordinated and consistent with the plans of state, regional, and local governments.**

### POLICIES

- TRP 7.1** Ensure efficient management of all transportation resources through cooperation in planning and project development with Federal, State, regional, and local jurisdictions.
- TRP 7.2** Coordinate with relevant agencies in the development of federal, state, and county regulations and guidelines for transportation of hazardous materials through the County.
- TRP 7.3** Reduce duplication of services, program costs, and increase the quality of service.
- TRP 7.4** Coordinate planning for transportation improvements and projects with the facilities/utility planning activities of other agencies and utilities in order to ensure that per-project costs are reduced, environmental impacts minimized, and community inconvenience and disruption lessened.
- TRP 7.5** Comply with the "Americans with Disabilities Act of 1990 (ADA)" in all transportation projects.

### GOAL

- TRG 8.0** **Ensure that transportation planning includes extensive opportunities for public involvement.**

### POLICIES

- TRP 8.1** Maintain a transportation advisory committee to assist the County with transportation planning and implementation issues.
- TRP 8.2** Continue to work with the public to review and revise application of established criteria and standards. Such criteria and standards may include, but are not limited to, arterials, collectors, local access, commercial standards, maintenance standards and residential standards.

## **DEMAND MANAGEMENT**

### GOAL

**TRG 9.0**      **Promote demand management programs as a means of reducing traffic, minimizing environmental impacts, and optimizing existing transportation investments.**

POLICIES

**TRP 9.1**      Encourage employers to offer flexible work schedules that reduce peak period travel and lessen the need for roadway capacity.

**TRP 9.2**      Encourage employers to provide on-site facilities that encourage use of alternative transportation modes, such as transit shelters and covered bike racks, lockers, and showers at work sites

**TRP 9.3**      Facilitate transportation demand management by coordinating and assisting in the development of transit amenities in County road or highway improvements, including bus pullouts, passenger shelters, bypass lanes, and park-and-ride facilities, where appropriate.

**TRP 9.4**      Participate with state government and transit agencies in developing, promoting, and facilitating regional ridesharing through such programs as parking management, and ride match services and preferential parking for carpools and vanpools.

**ENVIRONMENT AND ENERGY**

GOAL

**TRG 10.0**      **Provide transportation facilities and services which are energy efficient, protect and enhance the environment, and preserve the existing residential quality of life.**

POLICIES

**TRP 10.1**      Continue the County’s twenty-year commitment to use only mechanical and manual methods to control roadside vegetation.

**TRP 10.2**      Ensure that all transportation projects comply with the Jefferson County Critical Areas Ordinance in order to protect critical areas, preserve open space, and maintain wildlife habitat in transportation projects and planning. Include the mitigation of adverse impacts on water resources, drainage patterns, and soils in the design of transportation facilities.

**TRP 10.3**      Protect air quality by improving the operating efficiency of the overall transportation system, through the effective use of different modes.

**TRP 10.4**      Promote the conservation of energy through transportation demand management policies and techniques.

**TRP 10.5**      Address environmental retrofitting of transportation facilities, including the implementation of storm water facility best management practices and the replacement of culverts that impede fish passage, as opportunities and funding allows.

- TRP 10.6** Transportation facilities and services shall be sited, designed, or buffered to fit in harmoniously with their surroundings, as appropriate. When sited within or adjacent to residential areas, special attention should be given to noise, light, and glare impacts.
- TRP 10.7** Encourage buffering between motorized travel and nonmotorized transportation modes, where appropriate and economically feasible.

## **TRANSPORTATION IMPROVEMENT PROGRAM**

### GOAL

- TRG 11.0** **Develop a transportation improvement program that is consistent with the comprehensive plan.**

### POLICIES

- TRP 11.1** Roadway improvement projects included in the County's six-year transportation improvement program shall be consistent with the goals and policies of the Transportation Element, other elements of the County's Comprehensive Plan, and the Non-motorized Transportation and Recreational Trails Plan.
- TRP 11.2** Projects included in the transportation improvement program shall be evaluated and ranked using the County's adopted Road Project Priority Programming System and Intersection Rating Procedure and the criteria included therein.

## STRATEGIES

---

### Action Items

1. Monitor traffic volumes on all arterial and major collector facilities. (Corresponding Goal: TRG 1)
2. Develop access management techniques to regulate driveway access, including use of shared driveway access. (Corresponding Goal: TRG 1)
3. Discourage direct access from individual lots to present and planned future arterials wherever possible; access from these sites should be provided through local or collector roadways that connect to arterials. (Corresponding Goal: TRG 1)
4. Develop a method to assess the need for rural area parking facilities on County routes using appropriate service standards. (Corresponding Goal: TRG 2)
5. Develop site design standards for public transit facilities to be incorporated into County land use codes and regulations. (Corresponding Goal: TRG 2)
6. As appropriate, require that construction of new roadways and improvements to existing roadways to address the safety needs of bicyclists and pedestrians in conformance with the Non-motorized Transportation and Recreational Trails Plan. (Corresponding Goal: TRG 3)
7. Address the needs of nonmotorized users of the transportation network by developing a non-motorized comprehensive plan. The plan will include strategies that; develops a Non-motorized Project Priority Programming System that identifies and ranks projects necessary to provide safe bicycle and pedestrian travel; develops operation standards and a maintenance program that addresses the safety needs of non-motorized travelers, and; develops a proposal to the Board of County Commissioners for inclusion in the six year transportation improvement plan a strategy potentially allocating a percentage of transportation funds to be used to support non-motorized projects. (Corresponding Goal: TRG 3) (This action item has been addressed through the development of the Non-motorized Transportation and Recreational Trails Plan)
8. Encourage opportunities to develop abandoned railroad rights-of-way or utility corridors as future transportation corridors such as bikeways, pedestrian/equestrian trails, and roadways. (Corresponding Goal: TRG 3) (This action item will be addressed through the implementation of the Non-motorized Transportation and Recreational Trails Plan)
9. Develop incentives for developers to dedicate land for expansion of the County's trail network and adopt into land development regulations. (Corresponding Goal: TRG 3)
10. Develop and adopt bicycle/pedestrian facilities standards compatible with County road standards and those applicable standards of adjacent jurisdictions and require compliance with these standards in the permitting and review process. (Corresponding Goals: TRG 3 and TRG 4) (This action item has been addressed through the development of the Non-motorized Transportation and Recreational Trails Plan)
11. In cooperation with school districts, identify the boundaries of school pedestrian walking zones, develop standards and criteria for roadways within these areas, and define the types of improvement

- projects that would need to comply with these standards. (This portion of the action item has been addressed through the development of the Non-motorized Transportation and Recreational Trails Plan.) Adopt the standards into the county subdivision code. (Corresponding Goal: TRG 3)
12. Encourage area school districts to discourage unsafe pedestrian and bicycle activities by students. (Corresponding Goal: TRG 3)
  13. Identify existing deficiencies related to pedestrian walkways and crossings, and incorporate improvements into the six-year Transportation Improvement Program. (Corresponding Goal: TRG 3)
  14. Consider acquisition of out-of-use railroad rights-of-way to preserve these resources as future transportation corridors such as bikeways, pedestrian or equestrian trails, and roadways. (Corresponding Goal: TRG 3) (This action item has been addressed through the development of the Non-motorized Transportation and Recreational Trails Plan)
  15. Develop criteria to be met to justify expansion of transportation system, and a list of alternatives to be considered before system expansion will be permitted. (Corresponding Goal: TRG 4)
  16. Develop and adopt standards that enhance safety for inclusion into implementing ordinances. (Corresponding Goal: TRG 4)
  17. Consider use of street design and traffic management alternatives to discourage unsafe travel speeds and inappropriate through traffic in neighborhoods, such as traffic calming devices, intersection configuration, or the use of curvilinear streets. (Corresponding Goal: TRG 4)
  18. Develop and adopt site design standards and guidelines that encourage the preservation of outstanding vistas. (Corresponding Goal: TRG 5)
  19. Design residential transportation facilities to discourage high speed through traffic, by utilizing appropriate design criteria, such as traffic calming facilities when supported by the surrounding area. (Corresponding Goal: TRG 5)
  20. Develop a plan and criteria for the use and financial support for traffic calming facilities. (Corresponding Goal: TRG 5)
  21. Review and revise, as necessary, performance standards for the review of proposed developments that ensure the proper functioning of transportation facilities. (Corresponding Goal: TRG 4 and TRG 5)
  22. As necessary, review and revise minimum requirements for setbacks and rights-of-way (including pedestrian and nonmotorized facilities) for new and existing roadways, based on the roadway functional classification. (Corresponding Goal: TRG 4 and TRG 5)
  23. Develop and adopt criteria for the establishment of public roadways based on function, capacity, health and safety, access, public need, adopted County Road Standards, and the financial capability for maintenance and preservation. (Corresponding Goal: TRG 4 and TRG 5)
  24. As needed, develop and adopt standards that require and promote efficient access, mobility and compatibility for motorized vehicles, pedestrians, bicyclists, and transit users. (Corresponding Goal:

- TRG 4, TRG 5, and TRG 6) (This action item has been in part addressed through the development of the Non-motorized Transportation and Recreational Trails Plan)
25. As necessary, develop and adopt land development standards that provide guidance in how to include transit-friendly design elements in developments, and require all developments to adhere to these standards. (Corresponding Goal: TRG 4 and TRG 5)
  26. Develop and adopt parking standards and provide a range of alternatives for meeting the need for parking while not generating an oversupply of parking. (Corresponding Goal: TRG 4 and TRG 5)
  27. Explore opportunities for development of private or public passenger-only ferry service to Jefferson County. (corresponding Goal: TRG 6)
  28. Continue participation in intergovernmental planning efforts, and develop additional mechanisms to achieve this cooperation and coordination as needed. (Corresponding Goal: TRG 6, TRG 7, and TRG 8)
  29. During the annual review of capital projects, identify services that may be duplicated, opportunities to reduce program costs, and ways to increase the quality of service. (Corresponding Goal: TRG 7 and TRG 8)
  30. Develop coordinated planning and construction of capital and transportation projects with relevant parties (County, City, and State department and agencies, utility companies, etc.) through periodic communications regarding future projects. Use the Regional Transportation Improvement Program and local Transportation Improvement Programs to identify these potentially collaborative projects. (Corresponding Goal: TRG 7 and TRG 8)
  31. Develop a mechanism in the project review process that requires interjurisdictional coordination, where projects involve various jurisdictions, to enable shared compliance with current ADA requirements. (Corresponding Goal: TRG 7)
  32. Develop, as needed, a Transportation Demand Management (TDM) program that provides a range of TDM techniques appropriate to Jefferson County. (Corresponding Goal: TRG 9)
  33. Require the use of storm water best management practices (BMPs) as found in the Storm water Management Manual for the Puget Sound Basin, or equivalent, in the development of transportation projects. (Corresponding Goal: TRG 10)
  34. As needed, review and revise maintenance standards and requirements that include the maintenance of storm water management facilities. (Corresponding Goal: TRG 10)
  35. Identify culverts that impede fish passage and develop a schedule for replacement of these passageways as funding permits. (Corresponding Goal: TRG 10)
  36. As needed, review the County's adopted Road Project Priority Programming System and Intersection Rating Procedure and use the established project criteria in the updating of the County's transportation improvement program. (Corresponding Goal: TRG 10)

37. Include in ordinances a transportation concurrency management system that requires development proponents to mitigate the LOS deficiencies for Category A Public Facilities: Rural Road and Designated Tourist Road Facilities. (Corresponding Goal: TRG 4.0).

**FIGURE 10-5**  
**JEFFERSON COUNTY TRANSPORTATION ELEMENT**  
**EXISTING VOLUMES AND LOS**