

# TRANSPORTATION APPENDIX

## I. TRANSPORTATION INVENTORY

This section of the transportation element summarizes the existing transportation facilities and services currently in use in the unincorporated portions of Kitsap County. The inventory includes a variety of multimodal facilities and describes all travel modes used in the County for mobility.

### A. Public Highways, Arterials, and Roadways

The Kitsap County peninsula is surrounded by water on three sides, and is connected to the mainland at the southern end of the county. The two main routes into Kitsap County from the south are SR 16, from Pierce County, and SR 3 from Mason County. SR 16 connects Kitsap County to Pierce County, including the City of Tacoma, via the Tacoma Narrows Bridge. The Tacoma Narrows Bridge also provides access to all points east of Puget Sound. In contrast, SR 3 leads to rural Mason County and to the Olympic Peninsula. **Figure TR-1**, in Part III, Fold Out Figures, of the Comprehensive Plan, indicates the major travel corridors in Kitsap County including both state routes and county/city routes. There are three main bridges serving Kitsap County: Tacoma Narrows (SR 16), Agate Pass (SR 305), and Hood Canal (SR 104). Access to the Olympic Peninsula from the northern half of the county is near Port Gamble via the Hood Canal Bridge, which crosses the Hood Canal into Jefferson County. All other access points to Kitsap County are by ferry on the eastern side of the County. These points include Bremerton and Bainbridge in central Kitsap; Southworth in south Kitsap; and Kingston in the north.

Just south of the community of Gorst, SR 16 meets with SR 3. SR 3 continues north through Kitsap County to the Hood Canal Bridge. Just north of the bridge, this route becomes SR 104, which travels through the community of Port Gamble and then heads south along the Port Gamble waterway to the juncture of SR 104 and Bond Road (SR 307). At this point SR 104 heads east to Kingston.

SR 307 (Bond Road) is an important connection between Kingston (SR 104) and SR 305. SR 305 is the only land-based access to the City of Bainbridge Island and the Bainbridge Island ferry terminal. SR 305 connects with Bond Road, an important connection to Kingston (SR 104) and with SR 3 near Poulsbo, and runs south along Liberty Bay to Agate Passage. Here, the Agate Pass Bridge links Bainbridge Island to the remainder of Kitsap County. SR 305 then continues south to the Bainbridge Island ferry terminal.

The County's road system inventory in unincorporated areas, consists of 921 roadway miles and 24 County-owned bridges. Roadway miles by functional class and jurisdiction include:

*Kitsap County:*

Major arterials; 11 miles,  
 Minor arterials; 95 miles,  
 Major collectors; 161 miles,  
 Minor collectors; 64 miles, and  
 Local access; 590 miles.

*State:*

Principal arterials; 44.7 miles,

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Minor arterials; 53.5 miles,  
Major collectors; 3.4 miles, and  
State-owned bridges; 0.5 miles.

A list of each road in unincorporated areas of Kitsap County as well as existing daily roadway capacity, volume-to-capacity (V/C) ratio (level of service measure), and general location denoted by subarea (North, Central, or South) is included in the Kitsap County Comprehensive Plan Part II. Refer to KCCP Part III for Figures CF-TP-1, 2, & 3 which show geographic location of each roadway.

### 1. Classifying the Roads by Their Function

Classifying roadways by their function helps in system planning, maintenance and operations. The classification system is used in day-to-day decisions and long-range planning for land use and transportation purposes. All roadways exist to serve two functions: mobility and land access. "Mobility" refers to the movement of vehicles or people at a reasonable speed. "Access" refers to ability to get on the roadway, which includes driveways and parking and loading areas on the street. At times, these functions conflict with each other.

To minimize these conflicts, a system of classifying arterials, collectors and local streets have been established. Functional classifications are based on the following elements:

- # Average trip lengths;
- # Traffic characteristics such as volumes, design and posted speeds;
- # Roadway design characteristics such as right-of-way requirements, number of travel lanes, lane widths, shoulder widths, medians, sidewalks, turn lanes;
- # System continuity;
- # Degree of access control;
- # Operations, including parking and signal systems;
- # Ability to serve other travel modes, including buses, bicycles, pedestrians, and equestrians;
- # Reasonable spacing, depending upon population density;
- # Directness of travel and distance between points of economic importance; and
- # Connection of population centers.

Kitsap County has functional classification categories for principal arterials, minor arterials, collectors, minor collectors, and local streets. The balance of mobility to access is the major

difference between the classifications, which are described in detail in **Table TR-1.**

**Figure A-TR-2**, in Part III, Fold Out Figures, shows the County's existing functional classification

system.

## 2. How Roadway Functional Classification is Used

The county's functional classification system is used for transportation systems planning, financial planning and administrations, and to develop design criteria and standards for County and private-sector roadway improvements.

### a. *Transportation Systems Planning*

Functional classification is a tool for building a transportation system that serves all types of travel needs. It helps in setting priorities and making evaluations for improvement projects. It helps jurisdictions coordinate their approaches to the transportation system, and it affects land use planning and zoning decisions.

### b. *Financial Planning and Administration*

The classification system also helps in the allocation of funds for transportation system improvements and maintenance. Some funding sources, like ISTEA, STP(U), STP(R), and the Washington State Urban Arterial Board (UAB) fund, are reserved for specific types of facilities. The Washington State Department of Transportation distributes Federal Aid highway funds to cities and counties in the State. The classification system is used to determine which roads are eligible for certain state and federal funds.

### c. *Design Issues*

The County has developed an extensive set of road design standards by functional classification. These standards guide the design of improvements for individual County roads. They also are used in the review of land development proposals to determine infrastructure requirements (e.g., right-of-way, pavement and sidewalk requirements) for both on-site and off-site roads. The standards, used with the functional classification system, are especially useful for longer range planning, helping to make sure that enough land is set aside for roadways in developing areas.

**Table TR-1: Kitsap County Roadway Functional Classifications**

<p><b>Principal Arterial.</b> Provides either full or semi-controlled access and includes the freeway system and all State routes. Principal arterials form the backbone of the highway system and should be designed to provide as high a level of service as is practical. Principal arterials provide for movement between urban and rural intra-County population centers. As such, this roadway facility classification predominantly serves "through" traffic with minimum direct service to abutting land uses. In Kitsap County, the Washington State Ferry system routes act as principal arterials connecting one urban area within the Region to another.</p>
<p><b>Minor Arterial.</b> Minor arterials provide access to the principal arterial and freeway systems. They provide a lower level of travel mobility than principal arterials to major communities within the County. They provide primary access to or through communities of high density residential, commercial or retail, or industrial land areas. They provide access to abutting properties at pre-determined locations. Trip lengths on minor arterials generally exceed five miles. Minor arterials provide routes for public transit systems between major communities within the County.</p>
<p><b>Collector.</b> A collector provides the primary access to a minor arterial for one or more neighborhoods or non-residential areas. Collectors distribute trips to and from the arterial system. They provide a limited amount of travel through neighborhoods and non-residential areas which originates and terminates externally. Collectors provide direct connections to local roads and minor collectors. They provide collection and distribution routes for public transit systems. The basic trip length is generally between 2 and 10 miles.</p>
<p><b>Minor Collector.</b> Minor collectors provide direct access to local roads and driveway access points to abutting properties. They provide for internal distribution of trips within a neighborhood or non-residential area, or part of a neighborhood or non-residential area. Minor collectors contain a limited amount of through traffic; traffic is primarily local in nature.</p>
<p><b>Local.</b> A local access street provides access immediately to adjacent properties. Characteristics of local streets include: low traffic volumes, maximum of two travel lanes, no medians, no shoulders, no access control and no preference at signals. Sidewalks and parking may be permitted. Local streets should connect local properties to minor collector streets and in-turn, to higher class facilities. Fixed-bus routes along local streets should generally be discouraged.</p>

**B. Public Transportation**

Kitsap Transit is the public transportation provider in Kitsap County. Formally known as the Kitsap Public Transportation Authority, it was established by the voters in the fall of 1982. Its mission initially, was to provide public transportation services in the greater Bremerton and Port Orchard areas. Since then, Kitsap Transit has expanded three separate times through benefit area annexations, and now covers much of South, Central and North Kitsap as well. The Authority's boundaries now include approximately 189,000 of Kitsap County's 218,000 residents. Additionally, the Authority also provides paratransit service for the elderly and disabled as well as rideshare services for the general public within the county but outside the Authority's boundaries.

Kitsap Transit is a multi-program system which provides:

- # Traditional fixed-route transit services - regular full-day service as well as custom rush-hour service in the ferry terminal areas of the county,
- # Paratransit services for elderly and disabled people throughout the county, as well as for the general public in some parts of the district,
- # A very large rideshare program composed of worker/driver buses (subscription or bus pool service), vanpools, and a ride-matching service, and
- # A contract passenger ferry operation between Port Orchard and Bremerton.

Kitsap Transit also works actively with local governments and state agencies to promote its services and other alternatives to single-occupant vehicles (SOVs) including pedestrian/bicycle access, and the facilities and land-use patterns that support alternative modes. The transit system also advocates for TSM/TDM [*Transportation System Management/ Transportation Demand Management*] programs and overall land-use programs that will benefit the array of alternatives described above throughout the County. Finally, the Authority is the lead agency responsible for the implementation of Washington State's Commute Trip Reduction (CTR) Act requirements for major Kitsap employers.

Through the introduction of innovative public transportation options, Kitsap Transit has helped achieve the highest overall mode share in the Puget Sound region, with the rideshare segment especially strong due to a mixture of shortage of endpoint parking (terminal and employment center) and aggressive TDM and rideshare programs.

1. Rolling Stock and Supporting Capital Facilities

The type and number of passenger service vehicles in Kitsap Transit's 1997 fleet is presented in **Table TR-2**. Kitsap Transit recently received a federal grant to equip the remainder of its fixed-route fleet with bicycle racks.

**Table TR-2: Kitsap Transit Passenger Service Vehicles**

Equipment Type	Number	Vehicle Characteristics
Fixed-Route Transit Vehicles	91	All are bicycle and wheelchair lift equipped, 1983-1995 models, (40 '79's, 81's & 83's remanufactured in last 2-3 years).
Demand Response	46	34 are Wheelchair Lift-Equipped, year of purchase ranging from 1991 to 1995.
Vanpool	111	1 Wheelchair Lift-Equipped, year of purchase ranging from 1991 to 1995.
Worker/Driver Vehicles	32	16 of which are bicycle equipped, 1971 and 1974 models.

Kitsap Transit currently operates 39 fixed routes focusing on the more densely populated areas of the County. These routes connect populated areas to all four State ferry terminals in Kitsap county: Bremerton, Bainbridge Island, Kingston, and Southworth. Kitsap Transit also provides service to downtown Port Orchard and the contract passenger-only ferry service operating by a private carrier between Port Orchard and downtown Bremerton. Fixed-route transit service is most extensive in Bremerton, both in the central business district and in the more residential areas of west and east Bremerton.

For fixed-route transit services, passenger service hours have increased between 1993 and 1997, from approximately 115,000 hours to 137,000 hours. Passenger trips on the fixed route system grew from about 2.9 million riders in 1993 to 4.0 million riders in 1997. For demand-responsive service, service hours have increased slightly from about 56,000 hours in 1993 to 65,050 hours in 1997. Finally, vanpools and ridematching service passenger trips increased from 119,259 in 1993 to 282,898 in 1997.

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There are currently seven transit centers in the Kitsap Transit system. At least one transit center is located in each major city, with three in Bremerton. The newest transit center is located at Kitsap Mall in Silverdale.

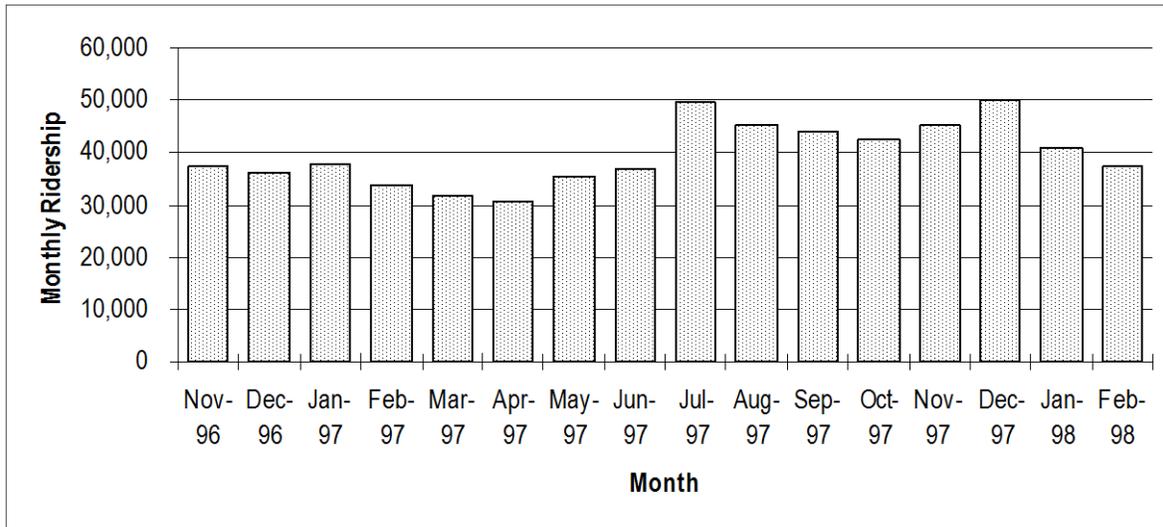
**Table TR-3** summarizes the existing park-and-ride-spaces within Kitsap County. As shown, there are 21 lots that are either in use or are under design or construction. The 21 lots are scattered throughout the County and total about 1,950 spaces.

**Table TR-3: Existing Park-and-Ride-Lots**

<b>Location</b>	<b>Capacity (Number of Spaces)</b>
(1) Agate Pass, SR 305 & Agate Passage	67
(2) Bainbridge Alliance Church	75
(3) Bainbridge Island Ferry Terminal	165
(4) Bayside Church	30
(5) Bethany Lutheran, High School Road and Finch Road	50
(6) Bremerton Ferry Terminal	138
(7) Christ Memorial Church, 8th & Hostmark	99
(8) Full Gospel Assembly Church, SR 3 & Division	96
(9) Grace Bible Church, Bethel Burley SE	21
(10) Harper Evangelical, Sedgwick & Wilson Creek.	122
(11) Keyport Junction, SR 308 & Viking Way	30
(12) Kingston, SR 104 and Hansville Road	150
(13) Kingston Ferry Terminal, First (SR 104) and Ohio	73
(14) McWilliams, SR 303 & McWilliams	92
(15) Mullenix, SR 16 & Mullenix Road	90
(16) Port Orchard Armory, Mile High Drive & Karcher	72
(17) Poulsbo Church, of Nazarene, SR 3.	100
(18) Poulsbo Junction, Viking Ave. and Lindvig Way	31
(19) Rolling Bay Presbyterian, Sunrise and Valley	40
(20) Southworth Ferry Terminal, SR 160 and Southworth Dr.	345
(21) Suquamish, Geneva Street & Division Avenue	60
<b>Total</b>	<b>1,946</b>

**Figure TR-3** summarizes monthly ridership statistics of the Horluck private ferry system operating between Port Orchard and Bremerton. Beginning in March of 1994, Kitsap Transit began a "fee for service" program that exempts patrons from paying an additional fare when they transfer from a transit coach to the private ferry. Currently Kitsap Transit reimburses Horluck \$0.90 per passenger trip for transit-private ferry patrons.

Figure TR-3: Monthly Ridership on Horluck Private Ferry



### C. Washington State Ferry System

The Washington State Ferry System is an extremely important transportation provider in Kitsap County's transportation system. Ferry service between Kitsap County and the Seattle metropolitan area is provided by four state ferry routes. A description of each route follows. **Table TR-4** illustrates the specifications of the vessel which operate on each route.

**Seattle/Bremerton.** The Seattle-Bremerton route is 13.5 nautical miles, the longest of the central cross-sound routes. It has a running time of 60 minutes for the auto ferry and 50 minutes for the passenger-only ferry. Since Seattle and Bremerton are both major employment centers, commute patterns go both ways during the a.m. and p.m. peak periods, with lower ridership at midday. The *Kitsap* and the *Sealth* are used on the run. The *Kitsap* has an auto capacity of 130 vehicles, while the *Sealth* has a 100-vehicle capacity. Both carry 1,200 passengers. For passenger-only service, the 250-passenger *Tyee* is used.

**Seattle/Bainbridge Island.** This route is 7.5 nautical miles and requires a 35 minute ferry crossing. It connects downtown Seattle and areas east of the Puget Sound with north and central Kitsap County via the Agate Passage Bridge. The system's newest and largest vessel, the *Tacoma*, began service on the route in November 1997. This Jumbo Mark II vessel has an auto capacity of 218 vehicles and a passenger capacity of 2,500 persons. The second vessel serving the route is the *Spokane*, a Jumbo ferry that has an auto capacity of 206 vehicles and can accommodate 2,000 passengers.

**Fauntleroy/Vashon/Southworth.** This 4.1 nautical mile route connects South Kitsap County at Southworth to West Seattle via Vashon Island. The vessels used on this route are as follows: (1) *Issaquah* (an Issaquah-130 class) with a vehicle capacity of 130, and a passenger capacity of 1,200; (2) *Klahowya* (an Evergreen State class) with a vehicle capacity of 100, and a passenger capacity of 1,000; and (3) the *Quinault* (a Steel Electric class) with a vehicle capacity of 75 and a passenger capacity of 665.

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**Table TR-4: Washington State Ferry Vessel Specifications for Kitsap County Routes**

Route	Vessel Assignment	Class	Year Built	Year Refurbished	Length (feet)	Beam (feet)	Speed (knots)	Auto Capacity	Passenger Capacity	Crew Size
Seattle/Bremerton										
	Kitsap	Issaquah	1981		328	78	16	130	1,200	10
	Sealth	Issaquah	1982		328	78	16	100	1,200	10
Seattle/Bainbridge Island										
	MV Tacoma	Jumbo Mark	1997		460	90	18	218	2,500	
	Spokane	Jumbo	1972		440	87	18	206	2,000	14
Edmonds/Kingston										
	Hyak	Super	1967		382	73	17	160	2,500	13
	Yakima	Super	1967		382	73	17	160	2,500	13
Fauntleroy/Vashon/Southworth										
	Issaquah	Issaquah	1979		328	78	16	130	1,200	10
	Klahowya	Evergreen	1954	1988	310	73	13	100	1,000	11
	Quinault	Steel	1927	1958/1987	256	73	12	75	665	8
Seattle/Bremerton Passenger Only										
	Tyee	Tyee	1985		86	31	25	N/A	250	4
Seattle/Vashon Passenger Only										
	Skagit	Skagit/Kala	1989		112	25	25	N/A	250	3
	Kalama	Skagit/Kala	1989		112	25	25	N/A	250	3

Source: WSDOT Marine Division.

**Edmonds/Kingston:** The Edmonds to Kingston route connects south Snohomish County and north King County with the northern Kitsap Peninsula and points west of the Olympic Peninsula via the Hood Canal Bridge. This route is 4.5 nautical miles with a 30 minute crossing time. Two Super-class vessels are used on this route: the *Hyak* and the *Yakima*. Each vessel can carry 160 vehicles and 2,500 passengers. The Jumbo class *Walla Walla* is expected to enter service on this run later in 1998, replacing one of the Super-class vessels.

1. Historical Ferry Utilization

**Table TR-5** summarizes the historical average daily ferry ridership for vehicles and passengers in Kitsap County between 1980 and 1996. As shown, the Bainbridge Island ferry route is consistently the most popular service, with daily averages of approximately 6,200 vehicles and just over 12,600 passengers in 1996. The route has experienced increases in vehicle and passenger ridership each year between 1980 and 1996. In contrast, Bremerton saw ridership levels drop during the same time period, with approximately 500 fewer vehicles daily in 1996 than 1980. Daily passenger ridership on the Bremerton route has also dropped consistently since 1980, although 1996 did see a significant increase. Since 1985, however, frequency of service has remained relatively unchanged, and Bremerton vehicle ridership has remained relatively constant, at approximately 1,800 to 2,000 vehicles per day.

While the Bainbridge Island ferry run has the highest volumes, the ferry route from Kingston to Edmonds has had the highest percentage increase in ridership since 1990. Vehicle and passenger ridership has increased by almost 31 percent and 27 percent, respectively. Vehicle ridership for the Fauntleroy/Vashon/Southworth ferry route has increased by almost 43 percent since 1980; however, passenger ridership has decreased by 3 percent during this time period.

**Table TR-5: Historical Ferry Traffic in Kitsap County (Average Daily)**

Route		1980	1985	1990	1991	1992	1993	1994	1995	1996
Seattle/Bremerton										
	Vehicles	2,588	1,773	1,801	1,770	1,831	1,852	1,662	2,058	2,073
	Passengers	6,174	4,426	4,661	4,882	4,618	3,834	4,706	4,234	5,608
Seattle/Bainbridge Island										
	Vehicles	4,270	4,475	5,401	5,607	5,927	5,918	6,023	6,178	6,233
	Passengers	3,331	8,689	10,200	10,676	11,08	11,16	11,69	11,98	12,61
Fauntleroy/Vashon/Southworth										
	Vehicles	3,645	3,433	4,303	4,485	4,727	4,722	4,923	4,982	5,200
	Passengers	3,948	3,326	3,881	3,661	3,788	3,661	3,640	3,812	3,849
Edmonds/Kingston										
	Vehicles	1,945	3,046	4,416	4,579	5,108	5,246	5,528	5,162	5,810
	Passengers	2,317	3,461	4,654	4,768	5,214	5,187	5,380	5,244	5,890

Source: WSDOT Marine Division

**D. Air Service**

Kitsap County is served by Bremerton National Airport which can handle air carrier operations with more than 30 passenger seats. It is the County's major public airport, but Apex Airport in Silverdale is periodically used by local law enforcement and emergency aircraft. The Port Orchard Airport and several other small privately owned air strips, located throughout the county, serve small private planes.

The Bremerton National Airport is seven miles southwest of the City of Bremerton, and is owned and operated by the Port of Bremerton. Charter, rental, flight instruction, maintenance and avionics services are available at the airport. The airport has two runways, only one of which is now in use. This runway has the capacity of more than twice the current number of take-offs and landings. In addition, the runway is sufficiently long to handle planes that are larger than the current aircraft size using this facility; the Navy has expressed an interest in upgraded facilities to support even larger aircraft.

Seattle-Tacoma International Airport, located in King county, is the principal passenger air terminal serving Kitsap county residents and businesses. Access to the airport from Kitsap county is available via SR 16 and the Tacoma Narrows Bridge to Interstate 5, as well as via ferry service to Edmonds, Seattle and Fauntleroy and then ground transportation to the airport via SR 99 or Interstate 5. Travel time from Bremerton to Sea-Tac via Tacoma is just over one hour during non-peak travel times. An airport shuttle service operates from Bremerton and other points in Kitsap county to the airport every one to two hours.

## **E. Rail Service**

Rail service in Kitsap County is provided by Burlington Northern-Santa Fe Railroad (BNSF), but its use is restricted to the U.S. Military. The Navy owns the rail lines from Shelton to the Puget Sound Naval Shipyard (PSNS) and from Gorst north to the Bangor Submarine Base. Under an agreement with the US Navy, BNSF operates and maintains the lines, with major improvements funded by the Navy.

The railroad in Kitsap County is maintained at Federal Railway Administration Class 3. There are six classes of track conditions with 6 being the highest. Currently, one train per day serves Kitsap County five days a week. Freight movement to non-military businesses and institutions is provided by trucks.

Passenger rail service in the region is operated by Amtrak. The nearest station locations are in Edmonds, Seattle and Tacoma. The Edmonds station is located immediately adjacent to the Edmonds Ferry terminal and has four trains per day -- one to Spokane and Chicago, one to Vancouver B.C. and two to Seattle. King Street Station in Seattle is located less than one mile from Colman Dock and has daily service to Vancouver, Chicago, Portland (3 times daily) and a through train to Los Angeles. The Tacoma station is located near the Tacoma Dome about 45 minutes from Bremerton. Service from Tacoma includes three daily trains to Seattle and Portland, with one through train to Los Angeles.

## **F. Nonmotorized Facilities**

Nonmotorized modes include all transportation with a power source other than a motor. In Kitsap County, the main nonmotorized modes are walking and bicycling. In addition, equestrian transportation is included in nonmotorized modes.

For more than 20 years, the County has had planning programs for nonmotorized modes, including several trails plans. Currently, nonmotorized facilities remain for the most part undeveloped in Kitsap County. Sidewalks are found in the urbanized areas of Kingston and Silverdale on most major arterials. However, none of the rural roadways in the County have sidewalks. Separate facilities for pedestrians include approximately 25 various hiking trails throughout the County, and are classified as regional facilities.

Several years ago, a system of designated bike routes was developed by the Kitsap County DCD. This system identified roadways on which bicycle travel would be encouraged, but no attempt was made to improve roadways to standards that would safely permit vehicles and bicycles to travel. Due to potential legal action, this route system was never formally adopted, and therefore, there are currently no existing designated county bike paths or lanes.

Existing equestrian trails are owned and maintained by the Department of Natural Resources (DNR) on Green Mountain and Gold Mountain in the Tahuya State Forest west of Bremerton.

All nonmotorized modes of transportation are currently being documented and evaluated in the context of the Kitsap County Greenways Plan. This plan will provide Kitsap County with a comprehensive review and recommendation list for all types of nonmotorized travel, including; separated walking and hiking facilities, multipurpose trails, separated bike facilities, and equestrian

trails. The plan will integrate nonmotorized facilities into the existing and future roadway network.

**G. Goods Movement**

Freight and goods movement within Kitsap County and the Puget Sound region is an integral part of the transportation system and local economy. It provides for the flow of products and materials from suppliers and manufacturers, to a host of wholesalers, retailers, and customers. The maintenance of high mobility in the transportation system of Kitsap County will reduce the cost of manufacturing and distributing goods, and contribute to the economic growth and creation of jobs. Key transportation components in Kitsap County related to goods movement include the state highway and arterial roadway system, and the ferry system which provides a critical link to the Seattle metropolitan area. Kitsap County and WSF are working together to enhance freight mobility on the Bremerton and Kingston routes and are open to exploring privately operated freight ferries.

The metropolitan freight transportation system operates simultaneously at the local, regional, state, national and international level. A high proportion of goods movement in the region occurs on the eastern side of Puget Sound where deep water sea ports, intermodal train stations, and airport systems have been built to support the region. A vast majority of goods movement within Kitsap County, however, is limited to local or Peninsula origins and destinations. National and international goods movement in Kitsap County is mainly limited to Federal Government operations to/from the numerous military bases and installations.

**Table TR-6** shows the inbound and outbound truckload equivalents (TLEs) per day in Kitsap County for the Puget Sound Region. The total number of truckload equivalents inbound and outbound include freight movements by all modes and from all points.

**Table TR-6: Kitsap County Inbound/Outbound TLEs per day for the Puget Sound Region**

	Mining	Construct.	Manufact.	Wholesale	Retail	Person Consump	Gross Investment	Govt. Expend	Total per day
Inbound	-	21	98	29	780	40	26	11	175
Outbound	44	72	64	-	67	-	-	-	108

*Source: Analysis of Freight Movements in the Puget Sound Region by the Puget Sound Regional Council (PSRC).  
 Note: Inbound and outbound totals do not sum in every column because this would double count some movement.*

Commercial vehicle movement is measured by the following:

- # Choice of suppliers;
- # Minimize delivered costs of goods;
- # Provide for the safety of all drivers; and
- # Reliable shipment of goods.

## **II. LAND USE AND TRANSPORTATION**

There are today a variety of issues surrounding new and existing development, and how public facilities are planned, designed, and built to support the cities and communities we live in. Transportation planning for Kitsap County is an integral part of its overall long range planning efforts. As such, long range land use and transportation planning have evolved into an integrated forecasting approach to satisfy the requirements of the Washington State GMA and ensure mobility for the people who live, work, and visit Kitsap County.

Since growing traffic congestion in the Puget Sound Region was a major impetus for more land use regulation under GMA, the Act mandated a strong linkage between development approvals and a community's ability to provide "adequate" transportation infrastructure to serve that development. As such, "concurrency" monitoring and enforcement systems become an important component of the transportation element of any GMA plan and of the permitting processes.

Transportation concurrency from a policy standpoint is logical in its approach to ensure that adequate public facilities within the transportation system are built concurrently with planned growth. To test and measure transportation concurrency and to establish the "link" between land use and transportation needs, Kitsap County, as part of their long range comprehensive planning efforts, has developed and implemented a travel demand forecasting model using EMME/2. This county-wide model is based on a regional database and forecasting process in coordination with the PSRC, King, Pierce, and Snohomish Counties, and Kitsap Transit. In addition, due to the geographical location of Kitsap County, its reliance on the WSF system for transportation mobility is significant. The coordination of transportation improvements in Kitsap County has also been an integral part of the planning process with Jefferson and Clallam counties, the Peninsula Regional Transportation Planning Organization (PRTPO), and WSF. As such, the Kitsap County Travel Demand Model incorporates a sophisticated mode-choice capability to address such multimodal components as auto ferry, passenger-only ferry, and park-and-ride needs.

This report section describes the land use-transportation modeling process and includes a discussion of existing land uses in Kitsap and future growth scenarios for the year 2012, and summarizes the resulting travel patterns and demand for transportation facilities by travel mode.

### **A. Existing and Future Land Use in Kitsap County**

Kitsap County's population has been growing in spurts since World War II. The heavy Navy employment base for the war helped to nearly double population from 44,387 in 1940 to 75,724 in 1950. After the war ended the County population continued to grow although at a slower rate. Growth remained fairly constant until the 1970's, when population increased from 101,732 in 1970 to 147,152 in 1980, a 45 percent increase. Most of this population increase is attributed to the establishment of the Trident submarine base at the Bangor Naval Base.

**1. Existing Land Uses**

**Table TR-7** gives details on the population growth from 1980 through 1997. Kitsap County's resident population increased from 101,732 in 1970 to 189,731 by 1990, an increase of almost 87 percent. By comparison, the State population grew 42.6 percent over the same period. Kitsap County population increased by 42,579 (or 29 percent) between 1980 and 1990, slightly less than the 45,520 person increase during the decade of the 1970's.

During the period between 1990 and 1994, Kitsap County population increased by 25,404 persons (or 13.3 percent). From 1994 to 1997, the County grew by an additional 14,265 persons, which represents an average annual population increase of 6.6 percent.

While the Land Use element of the Kitsap County Comprehensive Plan uses 1997 as its base year for documenting existing conditions, the transportation element was developed based upon the year 1994. As such, the Kitsap County Travel Demand Model estimates travel demand in 1994 and the year 2012 to remain consistent with the Land Use element of this comprehensive plan. Year 2012 population and employment forecasts used in the Kitsap County Travel Demand Model are consistent with the Land Use, Population, and Economic Development elements found within this document.

Updates to the Kitsap County Travel Demand Model began in early 1995 to refine and calibrate this regional analysis tool to 1994 traffic and land use conditions. Major adjustments were made in the network and zone structure to better reflect localized conditions in the Silverdale and Port Orchard areas. Land use data (population and employment) used in the assessment of travel demand was obtained by Kitsap County from the Washington State Office of Financial Management (OFM).

**Table TR-7: Historical Population Trends in Kitsap County**

<b>Year</b>	<b>Total Population</b>	<b>% Annual Growth Rate</b>
1940	44,387	n/a
1950	75,724	7.1
1960	84,176	1.1
1970	101,732	2.1
1980	147,152	4.5
1990	189,731	2.9
1991	196,500	3.6
1992	205,600	4.6
1993	210,000	2.1
1994	215,135	2.4
1995	220,600	2.5
1996	224,700	1.9
1997	229,400	2.1

*Source: Kitsap County DCD, Puget Sound Regional Council.*

**2. Future Land Uses**

Population and employment forecasts for the year 2012 have been developed by Kitsap County and the Puget Sound Regional Council. The demographic and land use forecasts are the primary inputs into future travel forecasts. The forecasts are needed to identify future transportation needs, and evaluate potential transportation solutions. While the forecasts are not exact predictions they do reveal important insight into the way the County will grow.

**Table TR-8** provides 1994 and 2012 forecasts for population and employment in Kitsap County. Due to the inconsistent boundary definitions of urban areas, incorporated cities, and KTAZ's, there is not a direct correlation between KTAZ values and urban or rural areas.

By the year 2012, an estimated 292,224 persons will reside in Kitsap County. This results in an increase of 77,000 persons (a 36 percent increase) between 1994 and 2012. North and Central county subareas are expected to increase by 54 and 36 percent over 1994 levels. Existing and future population distribution within and outside of urban growth boundaries is also found in the Population Appendix of this document.

County employment is forecast to increase by about 37,000 between 1994 and 2012, a 40 percent increase. The largest employment growth is forecast for the Central subarea which is expected to gain roughly 18,000 new jobs. The North and South county areas will increase by 9,300 to 9,600 new jobs, nearly doubling the employment base in these subareas.

**Table TR-8: 1994 to 2012 Population and Employment Forecasts**

Area	Population		Employment	
	1994	2012	1994	2012
North	48,955	75,434	11,175	20,450
Central	110,811	150,306	71,267	89,379
South	55,097	66,484	9,646	19,275
County Total	214,863	292,224	92,089	129,104

**B. Travel Demand Forecasts**

**1. Existing Travel Demand**

**Table TR-9** shows the 1994 internal and external distribution of Kitsap County person trips estimated by the Kitsap County Travel Demand Model. As shown, approximately 908,700 daily person trips were generated by Kitsap County residents in 1994, and 92 percent (764,900 daily person trips) of all trips are considered "internal," with both origins and destinations in the County. In contrast, 8 percent (about 70,000) of all daily person trips are considered "external," which means that one end of the trip, either the origin or destination, is outside Kitsap County.

Table TR-9: 1994 Internal and External Travel Patterns

<b>Internal Travel</b>		
<i>Origin-Destination</i>	<i>1994 Trips</i>	<i>Percent of Total</i>
North-North	191,028	25.0%
North-Central/Central-North	117,694	15.4%
North-South/South-North	16,428	2.1%
Central-Central	199,401	26.1%
Central-South/South-Central	90,812	11.9%
South-South	<u>149,524</u>	<u>19.5%</u>
Total Internal County Trips	764,887	91.6%
<b>North County External Travel</b>		
<i>Origin-Destination</i>	<i>1994 Trips</i>	<i>Percent of Total</i>
North to Pierce County	1,731	7.5%
North to Seattle	11,899	51.4%
North to King County	1,246	5.4%
North to Mason County	638	2.8%
North to Jefferson County	6,433	27.8%
North to Snohomish County	1,167	5.0%
North to Other Locations	<u>35</u>	<u>0.0%</u>
Total North to All External Locations	23,150	33.1
<b>Central County External Travel</b>		
<i>Origin-Destination</i>	<i>1994 Trips</i>	<i>Percent of Total</i>
Central to Pierce County	7,862	52.9%
Central to Seattle	1,524	10.3%
Central to King County	960	6.5%
Central to Mason County	3,104	20.9%
Central to Jefferson County	1,247	8.4%
Central to Snohomish County	85	1.0%
Central to Other Locations	<u>73</u>	<u>0.0%</u>
Total Central to All External Locations	14,855	21.2%
<b>South County External Travel</b>		
<i>Origin-Destination</i>	<i>1994 Trips</i>	<i>Percent of Total</i>
South to Pierce County	20,996	65.8%
South to Seattle	3,298	10.3%
South to King County	2,630	8.2%
South to Mason County	4,519	14.2%
South to Jefferson County	188	0.6%
South to Snohomish County	70	0.0%
South to Other Locations	<u>224</u>	<u>1.0%</u>
Total South to All External Locations	31,926	45.7%
<b>Total External Trips</b>	<b>69,930</b>	<b>8.4%</b>
<b>Total Trip Generation</b>	<b>908,681</b>	<b>100.0%</b>

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### a. Internal Travel

Internal travel occurs mostly within the central county at approximately 26 percent. The remaining internal travel within each subarea (north to north and south to south) is approximately 20 to 25 percent of all person trips. Very few internal trips are between the North and South County subareas.

### b. Internal to External Travel (by Subarea)

Approximately 57 percent of the external person trips originating in the north subarea had King County/Seattle destinations in 1994. About 3 of every 10 trips occur between the north subarea and Jefferson County. From the north subarea, less than 3 percent is headed to Mason County and only 5 percent is headed to Snohomish County.

Approximately 74 percent of the external person trips travel from the central subarea heads to Pierce and Mason counties. Trips to Seattle and King County make up about 17 percent of all external person trips from the central subarea. Approximately 1 of every 10 trips from the central subarea travels to Jefferson County, Snohomish County, and other locations.

The majority of external person trips from the south subarea are oriented towards Pierce County (approximately 66 percent of total external trips). Most of the remainder of the external person trips from the South subarea are headed to Seattle, King County and Mason County (8 to 14 percent each of total external trips).

### c. Mode Split

Mode split describes how the total trips break down into different modes such as transit, auto, ferry, or bicycle. Mode split is also tied to the kind of trip, or trip purpose, which would be commuting, recreation or shipping, among others. **Table TR-10** summarizes the mode split by trip purpose in 1994. As shown, three-quarters of the home-based work trips are made by auto drivers while approximately 20 percent are made by auto passengers. The 1994 transit/walk-on ferry market share for home-based work trips is 4.3 percent while transit's market share for all trip purposes is at 1.0 percent.

**Table TR-10: 1994 Mode Split by Purpose**

Trip Purpose	HBW	HBO	NHB	CMV	Total	% Total	% Total
Auto Drivers	126,721	276,738	182,184	80,873	666,516	73.7%	75.3%
Auto	34,337	139,115	55,561	-	229,013	25.3%	20.4%
Transit (2)	7,216	1,367	636	-	9,219	1.0%	4.3%
<b>Total</b>	<b>168,274</b>	<b>417,220</b>	<b>238,381</b>	<b>80,873</b>	<b>904,748</b>	<b>100%</b>	<b>100%</b>

Notes: (1) Includes Drive-on Ferry vehicles.

(2) Includes internal County transit trips and walk-on ferry trips.

**Table TR-11** further disaggregates the modal split in order that the number of ferry trips can be evaluated. As shown, approximately 69 percent (8,678 of 12,609) of the drive-on ferry trips are considered commuter or home-based work trips, while 76 percent (7,648 of 10,077) of the walk-on ferry trips have a commuter trip purpose. The goal for the Year 2012 mode split would be to reduce the proportion of drive-on ferry trips with a home-based work trip purpose. Pure intra-County transit trips account for a 4.3 percent market share for the home-based work trip purpose and a 1.0 percent market share for all trip purposes combined.

**Table TR-11: 1994 Mode Split**

<b>Trip Purpose</b>	<b>HBW</b>	<b>HBO</b>	<b>NHB</b>	<b>CMV</b>	<b>Total</b>	<b>% Total</b>	<b>% Total</b>
NFV (Auto	118,043	276,466	180,037	79,361	653,907	72.3%	70.1%
Auto Passengers	26,689	138,897	53,350	-	218,936	24.2%	15.9%
Non-Ferry	7,216	1,367	636	-	9,219	1.0%	4.3%
Drive-on Ferry	8,678	272	2,147	1,512	12,609	1.4%	5.2%
Walk-on Ferry	7,648	218	2,211	-	10,077	74.8%	4.5%
<b>Total</b>	<b>168,274</b>	<b>417,220</b>	<b>238,381</b>	<b>80,873</b>	<b>904,748</b>	<b>100%</b>	<b>100%</b>

**2. Future Travel Demand**

**Table TR-12** shows the 1994 to 2012 internal and external travel patterns. Approximately 1,290,000 daily person trips will be generated by Kitsap County residents in 2012; 91 percent (about 1,175,000 person trips) of all trips considered internal and 9 percent (about 112,000) of all daily person trips will be external. The 2012 internal trips would experience a decrease in trips by 1 percent, while external trips would increase by 1 percent from 1994. Cross-Sound travel (travel to Pierce and King Counties, including Seattle) would comprise 73 percent of all external trips in 2012. About 26 percent of external trips would be oriented to Jefferson County (12 percent), Mason County (12 percent), and Snohomish County (2 percent).

Table TR-12: 1994 to 2012 Internal and External Travel Patterns

<b>Internal Travel</b>				
<b>Origin-Destination</b>	<b>1994 Trips</b>	<b>Percent Of Total</b>	<b>2012 Trips</b>	<b>Percent Of Total</b>
North-North	191,028	25.0%	343,536	29%
North-Central/Central-North	117,694	15.4%	183,570	16%
North-South/South-North	16,428	2.1%	21,402	2%
Central-Central	199,401	26.1%	283,767	24%
Central-South/South-Central	90,812	11.9%	112,746	10%
South-South	149,524	19.5%	233,819	20%
<b>Total Internal County Trips</b>	<b>764,887</b>	<b>91.6%</b>	<b>1,178,839</b>	<b>91%</b>
<b>North County External Travel</b>				
<b>Origin-Destination</b>	<b>1994 Trips</b>	<b>Percent Of Total</b>	<b>2012 Trips</b>	<b>Percent Of Total</b>
North to Pierce County	1,731	7.5%	2,721	7%
North to Seattle	11,899	51.4%	18,864	49%
North to King County	1,246	5.4%	2,196	6%
North to Mason County	638	2.8%	1,013	3%
North to Jefferson County	6,433	27.8%	11,175	29%
North to Snohomish County	1,167	5.0%	2,072	5%
North to Other Locations	35	0.0%	73	0%
<b>Total North to All External Locations</b>	<b>23,150</b>	<b>33.1</b>	<b>38,115</b>	<b>34%</b>
<b>Central County External Travel</b>				
<b>Origin-Destination</b>	<b>1994 Trips</b>	<b>Percent Of Total</b>	<b>2012 Trips</b>	<b>Percent Of Total</b>
Central to Pierce County	7,862	52.9%	11,249	50%
Central to Seattle	1,524	10.3%	2,674	12%
Central to King County	960	6.5%	1,677	7%
Central to Mason County	3,104	20.9%	4,642	21%
Central to Jefferson County	1,247	8.4%	1,937	9%
Central to Snohomish County	85	1.0%	141	1%
Central to Other Locations	73	0.0%	172	1%
<b>Total Central to All External Locations</b>	<b>14,855</b>	<b>21.2%</b>	<b>22,491</b>	<b>20%</b>
<b>South County External Travel</b>				
<b>Origin-Destination</b>	<b>1994 Trips</b>	<b>Percent Of Total</b>	<b>2012 Trips</b>	<b>Percent Of Total</b>
South to Pierce County	20,996	65.8%	34,981	67%
South to Seattle	3,298	10.3%	3,915	7%
South to King County	2,630	8.2%	4,208	8%
South to Mason County	4,519	14.2%	8,342	16%
South to Jefferson County	188	0.6%	278	1%
South to Snohomish County	70	0.0%	103	0%
South to Other Locations	224	1.0%	394	1%
<b>Total South to All External Locations</b>	<b>31,926</b>	<b>45.7%</b>	<b>52,220</b>	<b>46%</b>
<b>Total External Trips</b>	<b>69,930</b>	<b>8.4</b>	<b>112,825</b>	<b>8.7%</b>
<b>Total Trip Generation</b>	<b>908,681</b>	<b>100.0%</b>	<b>1,291,664</b>	<b>100.0%</b>

a. Internal Travel

For 2012, internal trips (i.e., trips that begin and end within Kitsap County) account for 91 percent of all daily person trips. Trips that remain within each subarea varies from 20 to 29 percent of all trips and trips between adjacent subareas accounts for another 10 to 16 percent of the total; this means that most residents make relatively short trips each day. Very few internal trips are between the North and South County subareas.

b. Internal to External Travel

External trips, those trips with only one end in Kitsap County, account for only 9 percent of total daily person travel. About 55 percent of the external person trips originating in the north subarea would have King County/Seattle destinations in 2012. About 3 of every 10 trips occur between the north subarea and Jefferson County. From the north subarea, 14 percent of all trips are headed to Mason, Pierce, or Snohomish Counties.

Approximately 72 percent of the external person trips generated in the central subarea go to or from Pierce and Mason counties; this is largely the result of the large employment concentrations in the central county area. Trips to Seattle and King County make up about 19 percent of all external person trips from the central subarea. External trips in this subarea to Snohomish County account for only 1 percent.

The majority of external person trips to and from the south subarea are oriented towards Pierce County (approximately 67 percent of total trips). Most of the remainder of the external person trips from the South subarea are headed to Seattle, King County and Mason County (7 to 16 percent of all trips).

c. Mode Split

Table TR-13 summarizes the mode split by trip purpose in 2012 for the existing plus committed network. As shown, almost three-quarters of the home-based work trips are made by auto drivers while approximately 16 percent are made by auto passengers. The 2012 transit/walk-on ferry market share for home-based work trips is 8.7 percent while transit's market share for all trip purposes is at 1.0 percent.

**Table TR-13: 2012 E + C Mode Split by Purpose**

<u>Trip Purpose</u>	<u>HBW</u>	<u>HBO</u>	<u>NHB</u>	<u>CMV</u>	<u>Total</u>	<u>% Total</u>	<u>% Total</u>
						<u>All Trips</u>	<u>HBW</u>
<u>Auto Drivers</u>	<u>175,720</u>	<u>415,794</u>	<u>303,408</u>	<u>118,820</u>	<u>1,013,741</u>	<u>72.2%</u>	<u>69.3%</u>
<u>Auto Passengers</u>	<u>39,581</u>	<u>210,064</u>			<u>249,645</u>	<u>17.8%</u>	<u>15.6%</u>
<u>Transit</u>	<u>10,730</u>	<u>2,277</u>			<u>13,007</u>	<u>0.9%</u>	<u>4.2%</u>
<u>Drive-on Ferry</u>	<u>16,305</u>	<u>515</u>	<u>3,758</u>	<u>2,154</u>	<u>22,733</u>	<u>1.6%</u>	<u>6.4%</u>
<u>Walk-on Ferry</u>	<u>11,377</u>	<u>366</u>	<u>3,138</u>		<u>14,881</u>	<u>1.1%</u>	<u>4.5%</u>
<b><u>Total</u></b>	<b><u>253,713</u></b>	<b><u>629,015</u></b>	<b><u>400,787</u></b>	<b><u>120,974</u></b>	<b><u>1,404,489</u></b>	<b><u>100%</u></b>	<b><u>100%</u></b>

*Notes: (1) Includes Drive-on Ferry vehicles.*

*(2) Includes internal County transit trips and walk-on ferry trips.*

Table TR-14 summarizes the mode split by trip purpose for the 2012 recommended network. As

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hown, approximately 69 percent of the home-based work trips are made by auto drivers while 15 percent are made by auto passengers. Transit and walk-on ferry passengers account for 10 percent of home based work trips. An additional 6 percent of these trips are made by drive-on ferry passengers.

**Table TR-14: 2012 Recommended Mode Split**

<b>Trip Purpose</b>	<b>HBW</b>	<b>HBO</b>	<b>NHB</b>	<b>CMV</b>	<b>Total</b>	<b>% Total All</b>	<b>% Total HBW</b>
Auto Drivers	175,533	415,790	303,360	118,820	1,013,501	72.2%	69.2%
Auto Passengers	37,999	209,863	90,110		337,972	24.1%	15.0%
Transit	10,730	2,277			13,007	0.9%	4.2%
Drive-on Ferry	15,086	420	3,454	2,154	21,114	1.5%	5.9%
Walk-on Ferry	14,365	666	3,863		18,894	1.3%	5.7%
<b>Total</b>	<b>253,713</b>	<b>629,015</b>	<b>400,787</b>	<b>120,974</b>	<b>1,404,489</b>	<b>100%</b>	<b>100%</b>

*Notes: (1) Includes Drive-on Ferry vehicles.*

*(2) Includes internal County transit trips and walk-on ferry trips.*

### **III. Transportation Needs and Deficiencies**

This section summarizes the existing and future needs and deficiencies of the transportation system in Kitsap County. The needs and deficiencies include a variety of multimodal facilities and presents documentation for all travel modes in the County.

Washington's GMA requires service level standards for both highways and transit services. The WSDOT has extended this requirement to cover vehicle and passenger ferries, as well. The GMA requires that each jurisdiction's Level of Service (LOS) standards be coordinated within the region and be supported by local ordinance, but the standards and the methods used are up to the local jurisdictions. Under GMA, the focus is on the performance of the road system as a whole, not on individual intersections or roadways. The level of service standards are a tool to help keep the transportation system in balance with the needs of future population growth and development.

Kitsap County Transportation Plan's LOS standards for arterials, transit routes and ferries are discussed in the Capital Facilities Plan, Part II of the Comprehensive Plan. These standards will help determine the balance (i.e., concurrency) among the land use transportation and capital facilities elements of the county's Comprehensive Plan, as required by GMA. The needs analysis and recommended potential solutions discussed in the Transportation Element are only a first step toward actual project implementation. The county and other agencies will conduct corridor and service studies that will define the specific characteristics and location of a particular roadway improvement, transit/ferry route or facility, or travel demand management (TDM) strategy. At the project level, the State Environmental Policy Act (SEPA) process will continue to guide the more specific planning and analysis efforts.

Under GMA, the County has four choices if it finds the LOS standards cannot be met.

1. Modify the land use plan, placing tighter controls on the amount and type of development to minimize traffic.
2. Construct additional transportation facilities to support increased travel demand concurrent with growth.
3. TDM measures.
4. Relax the LOS standards. The County can accept lower levels of service in support of further growth and minimize the need for additional transportation facilities.

This chapter of the Appendix defines the long term transportation needs based on the recommended land use element of the comprehensive Plan, Chapter IV discusses a list of potential solutions to meet these needs in accord with the County's LOS standards, and Chapter V demonstrates the county's ability to fund these, or similar, solutions by the 2012 target year.

### **A. Use Of Level Of Service Standards**

As measures of transportation system effectiveness, level of service standards can help jurisdictions identify where and when transportation improvements are needed, and when development or growth will affect system operation. Level of service provides a standard below which a transportation facility or system is not considered adequate.

Level of service standards can be used to evaluate the impact of proposed developments on the surrounding road system. They can assure that all developments are served by a safe, efficient and cost-effective road system. They can also be used to identify problems, suggest remedial actions, and apportion costs between public and private sources. LOS standards are a cornerstone in the development of equitable traffic impact fee systems, which makes new growth pay some of the costs for improvements to the transportation infrastructure.

### **B. Roadway LOS Standards**

A complete discussion of level of service standards for the roadway transportation system is presented in the Kitsap County Comprehensive Plan Part II, "Transportation".

### **C. Los Standards For Other Transportation Modes**

**Nonmotorized Standards.** The Kitsap County Greenways Plan identifies several travel patterns and issues regarding nonmotorized use within the County. Most nonmotorized uses will be for recreational purposes while a portion of these uses will be made by commuters. Thus, the nonmotorized system is designed to primarily access popular recreational destinations from both the urban areas of the county and the ferry terminals. Through connections will provide access for residents to neighboring counties and encourage bicycle touring on a regional level. Popular destinations points in Kitsap County attract a wide variety of recreational nonmotorized users such as hikers, mountain bikers, kayakers and other water travelers.

Although bike touring does produce longer trips, the majority of nonmotorized users will be making shorter trips from their homes to local recreation destinations.

While no level of service standards were defined in the Greenways Plan, the plan did outline a set of criteria used to locate the three types of bicycle facilities included in the system. A discussion of the criteria is presented in the Kitsap County Greenways Plan.

**Transit Level of Service.** A discussion of level of service standards for transit is presented in the Kitsap County Comprehensive Plan Part II, "Transportation".

**Ferry Level of Service.** A discussion of level of service standards for ferries is presented in the Kitsap County Comprehensive Plan Part II, "Transportation".

## **D. Relationship To Concurrency Management**

The Growth Management Act requires that Kitsap County adopt and enforce ordinances “which prohibit development approval if the development causes the level of service on a transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development.” The purpose of concurrency management is to:

- # Provide adequate levels of service on transportation facilities for existing use as well as new development in unincorporated Kitsap County;
- # Provide adequate transportation facilities that achieve and maintain county standards for levels of service as provided in the comprehensive plan, as amended; and
- # Ensure that county level of service standards are achieved "concurrently" with development as required by the Growth Management Act.

The draft Concurrency Management Ordinance establishes a process for determining whether a development project will meet the purposes stated above. A concurrency test would be performed by the County for each new development proposal. Although the County's goal is to have no LOS deficiencies on any County road, the following performance allowance is proposed: 15 percent of the county road lane miles to temporarily exceed LOS/volume-to-capacity standards. Conversely, 85 percent of the lane miles in the transportation network must be at or better than the maximum LOS/volume-to-capacity standards. Although no LOS deficiencies on 100 percent of county road lane miles is the goal, an allowance of 85 percent temporarily is necessary to accommodate project development and project funding constraints. The 15 percent allowance shall be associated with individual development proposals and may not extend beyond 6 years from development approval.

If the level of service is equal to or better than the adopted standards, the concurrency test is passed, and the applicant would be issued a Capacity Reservation Certificate. In addition, the County would issue a draft transportation impact fee assessment for the development based on the list of improvements to the Committed Road Network that was used to determine concurrency. The list of improvements on the Capacity Reservation Certificate would be used to ensure that impact fees paid by the development shall be expended only on those improvements. Only improvements to County roads would be included in the list of improvements, unless interlocal agreements or Urban Growth Management Agreements are in place.

Upon action on the development proposal, a Certificate of Concurrency would be issued. For purposes of concurrency management, the County is divided into 264 analysis areas called Kitsap Traffic Analysis Zones (KTAZ). The KTAZ boundaries are shown on Figures A-TR-4 and A-TR-5 in Part II, Figure Book. For purposes of concurrency determination, the analysis of LOS adequacy would only be applied to County arterials and collectors in rural areas and urban areas under the County's jurisdiction.

A Certificate of Concurrency would not be issued to any proposed development if the standards in this section are not achieved and maintained within the six-year period allowed by GMA for transportation concurrency. The applicant would have the option of:

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- # Accepting a ninety-day reservation of transportation facilities that are available, and within the same ninety-day period amend the application to reduce the need for transportation facilities to the capacity that is available, or voluntarily arrange for the transportation facilities or strategies needed to achieve concurrency, or
- # Accepting the denial of an application for a Certificate of Concurrency; or
- # Appealing the denial of the application for a Certificate of Concurrency, pursuant to the provisions of the county. The county shall reserve any available development units during the appeal. Acceptance of the ninety-day period shall not impair the applicant's future right to a formal appeal at a later time.

If a proposed development that is consistent with the zoning provided in the Comprehensive Plan fails the concurrency test, there should be a feedback loop from concurrency testing to zoning that indicates the underlying zoning may not be appropriate in a given area or that the transportation systems plan should be revised to provide more capacity in a given area to support the approved zoning.

### **E. Existing Deficiencies**

This section describes the existing deficiencies (1994) on roadway, nonmotorized, transit and ferry systems.

#### **1. How Much Travel Meets the Service Standards?**

Table TR-15 shows how much of the vehicle miles of travel, by subarea, is made within the county's level of service standards. The amount and proportion of travel, or vehicle miles traveled (VMT), is given on state and non-state facilities in all areas. As shown, 17 percent of all roadway facilities, both State and non-State, in 1994 can be considered congested and are not in compliance with the County's LOS standards. State facilities have 24 percent congested VMT, and most non-State facilities have 8 percent.

The county subarea with *the least* congested VMT is the central subarea where 87 percent of all travel on both State and non-State facilities falls within the County's LOS standards. The north subarea has the most travel under congested conditions. Nineteen percent of all travel in that subarea is below standard. State roadways in the north subarea account for this congestion; 32 percent of the travel on state roadways is below standard while 0 percent of non-State roadways experience congested travel. In the south subarea, 82 percent of all facilities meet the County's LOS standards. Analysis of State and non-State facilities within the Central subarea indicates that 15 percent of State and 13 percent non-State facilities, fall below the adopted LOS standards.

**Table TR-15: 1994 Level of Service Performance by Miles Traveled**

By County Subarea	1994 VMT	% 1994 VMT at or Better than LOS Standard	% 1994 VMT Below LOS Standards
North	1,303,489	81%	19%
Urban Non-State Facilities	299,97	100%	0%
Rural Non-State Facilities	246.83	100%	0%
Subtotal Non-State	546.8	100%	0%
State Facilities	756.68	68%	32%
Central	1,046,3	87%	13%
Urban Non-State Facilities	463,87	86%	14%
Rural Non-State Facilities	91,949	100%	0%
Subtotal Non-State	561,8	87%	13%
State Facilities	490,47	85%	15%
South	1,395,4	82%	18%
Urban Non-State Facilities	339,05	80%	20%
Rural Non-State Facilities	244,38	100%	0%
Subtotal Non-State	583,4	88%	12%
State Facilities	811,98	78%	22%
Total State Facilities	2,059,1	76%	24%
Total Non-State Facilities	1,686,0	92%	8%
Total Urban Facilities	1,102,9	88%	12%
Total Rural Facilities	583,16	100%	0%
Total All Facilities	3,751,2	83%	17%

**2. How Many Miles of Congested Roads Are There?**

The number of miles congestion on the roads is a useful performance measure to evaluate: (1) the relative allocation of improvement costs between jurisdictions and/or agencies; and (2) the specific areas of the County where improvements may be required.

Table TR-16 shows the 1994 lane miles which meet or do not meet the County's LOS standards. The south subarea contains the lowest percentage of lane miles not meeting the County's LOS standards. About 5 percent of all roadway facilities in the south subarea do not meet the LOS standards while seven percent are below in both the north and central subareas.

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Congestion is found on 18 percent of all State facility lane miles, while non-State facilities have congestion on two percent of all lane miles. Most of the congestion occurs on State facilities in the north subarea, where 24 percent of the lane miles are considered "congested." Fifteen percent and 13 percent of the state facility lane miles are congested in the central and south subareas, respectively. Countywide, congestion on non-State facilities is 2 percent. This average congestion level for non-State facilities is relatively consistent between each of the three county subareas where congested facilities total 0 percent for the north, 5 percent for the central, and 3 percent for the south subarea.

**Table TR-16: 1994 Level of Service Performance by Lane Miles**

<b>By County Subarea</b>	<b>1994 Lane Miles</b>	<b>% 1994 Lane Miles at or Better than LOS Standard</b>	<b>% 1994 Lane Miles Below LOS Standards</b>
<b>North</b>	<b>465</b>	<b>93%</b>	<b>7%</b>
Urban Non-State Facilities	169	100%	0%
Rural Non-State Facilities	171	100%	0%
Subtotal Non-State	340	100%	0%
State Facilities	124	76%	24%
<b>Central</b>	<b>261</b>	<b>93%</b>	<b>7%</b>
Urban Non-State Facilities	147	93%	7%
Rural Non-State Facilities	54	100%	0%
Subtotal Non-State	201	95%	5%
State Facilities	60	85%	15%
<b>South</b>	<b>431</b>	<b>95%</b>	<b>5%</b>
Urban Non-State Facilities	116	91%	9%
Rural Non-State Facilities	214	100%	0%
Subtotal Non-State	330	97%	3%
State Facilities	101	87%	13%
<b>Total State Facilities</b>	<b>286</b>	<b>82%</b>	<b>18%</b>
<b>Total Non-State Facilities</b>	<b>871</b>	<b>98%</b>	<b>2%</b>
<b>Total Urban Facilities</b>	<b>432</b>	<b>95%</b>	<b>5%</b>
<b>Total Rural Facilities</b>	<b>439</b>	<b>100%</b>	<b>0%</b>
<b>Total All Facilities</b>	<b>1157</b>	<b>94%</b>	<b>6%</b>

**3. Nonmotorized Deficiencies**

**Nonmotorized Standards.** The Kitsap County Parks and Recreation Plan notes that the county's linear trails have standards less than those suggested by the National Recreation and Park Association (NRPA). It concluded that there were not enough walking trails located within local park trails, backpacking trails are not suitable for its specialized type of activity and bike routes need improvements. Equestrian trails were also found to be “isolated from the rest of the county and require trailering - at least until these trails are extended into the more urban areas.” Although these uses peak during the summer season, there are no existing congestion deficiencies regarding nonmotorized uses.

**4. Transit Service Performance Measures**

**Table TR-17** shows the 1997 usage of the Kitsap Transit System. As shown, the majority of ridership (8 out of every ten passengers ) is on fixed-route services. About 1 of 10 passengers used the specialized work-related transit programs. In comparison with other similar transit systems throughout the State of Washington (Seattle's METRO system excluded), Kitsap Transit's routed and subscription bus services lead the State in terms of passenger per hour efficiency and for costs per passenger (for the urban area systems).

**Table TR-17: 1997 Kitsap Transit Usage**

<b><u>Program Type</u></b>	<b><u>Number</u></b>	<b><u>Percent Total</u></b>	<b><u>Average Daily Riders*</u></b>
Fixed Route Service	4,003,582	79.8%	10,969
Access	284,182	5.7%	779
Worker/Driver	406,947	8.1%	1850
Vanpools	282,898	5.6%	1286
Special Service	38,464	0.8%	105
<b><u>TOTAL</u></b>	<b><u>5,016,073</u></b>	<b><u>100.0%</u></b>	

*\*For Routed Service, Access, and Special Service, 365 days are assumed in the average; for Worker/Driver and Vanpool programs, 220 work days are assumed.*

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**Table TR-18** summarizes the existing fixed route service levels provided by Kitsap Transit.

**Table TR-18: Kitsap Transit Existing Service Programs**

<u>Program</u>	<u>Existing Service Levels</u>	<u>Program</u>	<u>Existing Service Levels</u>
<i>Urban Area Services</i>		<i>Urban Area Services cont.</i>	
<u>Route 4 - Bransonwood</u>	60-min (7-days per week)	<u>Route 36 - Ridgetop Shuttle</u>	60-min (7-days per week)
<u>Route 5 - Cedar Heights</u>	60-min (7-days per week)	<u>Route 41 - Lincoln Drive</u>	60-min (7-days per week)
<u>Route 6 - Bethel</u>	60-min (7-days per week)	<u>Route 42 - Front Street</u>	60-min (7-days per week)
<u>Route 7 - South Park</u>	60-min (7-days per week)	<u>Route 63 - Point Jefferson</u>	60-min (peak periods on weekdays only)
<u>Route 11 - Crosstown Express</u>	60-min (7-days per week)	<u>Route 66 - Hansville</u>	Timed to peak ferry sailings at Bainbridge
<u>Route 12 - Silverdale West</u>	60-min (7-days per week)	<u>Route 81 - Annapolis Commuter</u>	Timed to peak ferry sailings at Port Orchard
<u>Route 13 - Silverdale East</u>	60-min (7-days per week)	<u>Route 85 - Mullenix Express</u>	45-min (peak periods on weekdays only)
<u>Route 15 - McWilliams Shuttle</u>	30-60 min (peak periods on weekdays only)	<u>Route 86 - Southworth Shuttle</u>	10-60 min (weekdays & Saturdays)
<u>Route 17 - Kitsap Mall</u>	60-min (7-days per week)	<u>Route 87 - Purdy Express</u>	30-60 min (weekdays)
<u>Route 20 - Navy Yard City</u>	60-min (7-days per week)	<u>Route 90 - Poulsbo/ Bainbridge</u>	Timed to ferry sailings at Bainbridge
<u>Route 21 - Perry Avenue</u>	60-min (7-days per week)	<u>Route 91 - Kingston/ Bainbridge</u>	Timed to peak ferry sailings at Kingston
<u>Route 23 - Kariotis/ Tracyton</u>	120 min (weekdays only)	<u>Route 92 - Poulsbo/ Kingston/ Suguamish</u>	40-120 min (weekdays & Saturdays)
<u>Route 24 - Olympic College</u>	60-min (7-days per week)	<u>Route 93 - Manzanita</u>	45-min (peak periods on weekdays only)
<u>Route 25 - East Park</u>	30-60 min (7-days per week)	<u>Route 94 - Agate Point</u>	Timed to peak ferry sailings at Bainbridge
<u>Route 26 - West Park</u>	60-min (7-days per week)	<u>Route 95 - Battle Point Manzanita</u>	Timed to peak ferry sailings at Bainbridge
<u>Route 29 - Trenton Avenue</u>	15-60 min (7-days per week)	<u>Route 96 - Sunrise</u>	Timed to peak ferry sailings at Bainbridge
<u>Route 32 - Poulsbo/ Silverdale</u>	60-min (7-days per week)	<u>Route 97 - Crystal Springs</u>	Timed to peak ferry sailings at Bainbridge
<u>Route 33 - Silverdale/ Bainbridge</u>	Timed to peak ferry sailings at Bainbridge	<u>Route 98 - Fort Ward</u>	Timed to peak ferry sailings at Bainbridge
<u>Route 34 - Bangor Commuter &amp; Shuttle</u>	60 min (weekdays & Saturday)	<u>Route 99 - Bill Point</u>	Timed to peak ferry sailings at Bainbridge
<u>Route 35 - Old Town Shuttle</u>	60-min (7-days per week)		

**5. Ferry System Levels of Service**

Table TR-19 summarizes the 1996 levels of service for WSF routes serving Kitsap County. Ferry level of service is expressed in terms of the average extra delay, if any, a patron experiences waiting to board a ferry. Levels of service are reported for weekday peak time periods. Below, is a summary of the ferry system LOS for each Kitsap route.

Seattle/Bremerton: There is a one-boat (one hour) delay during weekday peak time periods.

Seattle/Bainbridge Island: During weekday peak time periods, there is a one-boat delay (45 minutes).

Edmonds/Kingston: There is a one-boat delay (40 minute wait) during weekday peak time periods.

Fauntleroy/Vashon: There is a one-boat wait (45 minute delay) during weekday peak time periods.

Fauntleroy/Southworth: During weekday peak travel periods, there is a one-boat delay (45 minutes).

Vashon/Southworth: There is no delay for this route during weekday peak travel periods.

**Table TR-19: 1996 WSF Ferry System Levels of Service**

<b>Route</b>	<b>1996 Existing LOS (Boat Delay)</b>
Seattle/Bremerton	1
Seattle/Bainbridge	1
Edmonds/Kingston	1
Fauntleroy/Vashon	1
Fauntleroy/Southworth	1
Vashon/Southworth	0

**F. Planned Improvements (1995 to 2000)**

The basis for this Transportation Element was the Capital Facilities Element (CFP), Part II of the Comprehensive Plan. This element of the comprehensive plan outlines all capital improvements that would occur during the next 6 years, including transportation improvements. In addition, Kitsap County develops an annual Transportation Improvement Program (TIP) to address existing deficiencies and to plan for short-range transportation improvements.

**Transportation Capital Improvements.** Funded transportation improvements between 1995 and 2000 are summarized in the Capital Facilities Element of the Kitsap County Comprehensive Plan Part II. A total of 100 specific transportation improvements are identified throughout Kitsap County. The total estimated cost of the improvements is \$38,654,400.

**Nonmotorized Improvements.** The Kitsap County Greenways Plan was created to address the needs of nonmotorized users in regards to transportation and recreational uses and scenic and natural resources. These elements link together destinations such as parks, schools, places of employment,

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shopping areas and transit facilities as well as provide access to a variety of scenic, educational and interpretive resources, as depicted in Part III, Figure Book. Thus, the Plan was separated into four specific areas: Bicycle Facilities Plan, Off-Road Trails Plan, Roadside Scenic Resource Corridors and the Wildlife Corridors Plan to accommodate the different resources available to all users. The multi-modal diversification needed for the transportation facilities will incorporate the Bicycle Facilities Plan along the county road right of way.

**Table TR-20** summarizes the Bicycle Facilities Plan as identified in the 6 year Transportation Improvement Program (1995-2000). The 20-Year Priority Array for Bicycle Facilities Plan and the Off-Road Trails 20-Year Plan are identified in the Transportation System Improvements section of this report under Greenways (Nonmotorized Element). Table TR-20A summarizes the Bicycle Facilities Plan projects listed in the 2012 Proposed Roadway Solutions (Table TR-29).

**Table TR-20: Six-Year Bicycle Facilities Plan (1995-2000)**

<u>Project Identification</u>	<u>From / To</u>	<u>Project Location</u>
<u>1. Bucklin Hill Road (1)*</u>	<u>Silverdale Way E. to Tracyton Blvd. MP 0.25 to MP 1.06</u>	<u>Central</u>
<u>2. Holly Road West (2)*</u>	<u>Seabeck-Holly Rd. To Wildcat Lake MP 0.0 to MP 3.889</u>	<u>Central</u>
<u>3. Holly Road East (3)*</u>	<u>Wildcat Lake to Seabeck Hwy. MP 3.889 to 5.020</u>	<u>Central</u>
<u>4. Fairgrounds Road (4)*</u>	<u>Central Valley to Nelson</u>	<u>Central</u>
<u>5. West Kingston Road (11)*</u>	<u>Miller Bay to SR 104, MP 0.00 to MP 2.16</u>	<u>North</u>
<u>6. Gorst to Bremerton Ferry Study (12)*</u>	<u>2.5 miles, parallels State Routes 3 and 304</u>	<u>South</u>
<u>7. Suquamish Pedestrian Walkways (15)*</u>	<u>Suquamish Elementary School</u>	<u>North</u>
<u>8. Illahee Road NE (24)*</u>	<u>MP 1.237 to MP 1.587</u>	<u>Central</u>
<u>9. Indianola Road (34)*</u>	<u>MP 0.921 to MP 1.838</u>	<u>North</u>
<u>10. County Wide Safety Improvements (38)*</u>	<u>NA</u>	<u>NA</u>
<u>11. County Wide Greenways (40)*</u>	<u>NA</u>	<u>NA</u>
<u>12. SE Cedar Road East (44)*</u>	<u>Bethel to Converse, MP 0.25 to MP 0.60</u>	<u>South</u>
<u>13. Lakeway Blvd SE (45)*</u>	<u>Fairview to Triviere, MP 0.54 to MP 1.04</u>	<u>South</u>
<u>14. Hansville Road NE (46)*</u>	<u>SR 104 to Old Hansville, MP 0.00 to MP 2.60</u>	<u>North</u>
<u>15. Seabeck Hwy (49)*</u>	<u>Seabeck Rd. to Miami Beach Road</u>	<u>Central</u>
<u>16. Jackson Ave (50)*</u>	<u>Shoulder Improvements MP 0.197 to MP 0.897</u>	<u>South</u>
<u>17. Beach Drive Trail (51)*</u>	<u>P.O. City Limits to Hilldale</u>	<u>South</u>
<u>18. McWilliams Rd/SR 303 (55)*</u>	<u>Intersection</u>	<u>Central</u>
<u>19. Redwing Trail (56)*</u>	<u>Vicinity of school</u>	<u>Central</u>
<u>20. Barber Cut-Off Rd. (29)*</u>	<u>Vicinity of school</u>	<u>North</u>
<u>21. Gold Creek Rd. (65)*</u>	<u>NA</u>	<u>Central</u>
<u>22. Carney Lake Rd. (69)*</u>	<u>J.M. Dickenson Rd. to Co. Line MP 0.0 to MP 1.84</u>	<u>South</u>
<u>23. Mile Hill Dr. (74)*</u>	<u>Long Lake Rd. To Colchester</u>	<u>South</u>
<u>24. Jackson Ave SE (75)*</u>	<u>Lund Ave to Mile Hill Drive</u>	<u>South</u>
<u>25. Salmonberry Road (76)*</u>	<u>Phillips Rd. to Long Lake</u>	<u>South</u>
<u>26. Lund Ave SE (78)*</u>	<u>Bethel Rd. to Hoover</u>	<u>South</u>
<u>27. Tracyton Blvd. (81)*</u>	<u>Allens Corner to Holland</u>	<u>Central</u>
<u>28. Hood Canal Dr. (84)*</u>	<u>Cliffside Rd. To Hood Canal Place</u>	<u>North</u>
<u>29. Little Boston Rd. NE (85)*</u>	<u>Cliffside Rd. to Hansville Rd.</u>	<u>North</u>
<u>30. Widme Road (86)*</u>	<u>Totten Rd. to Lincoln Rd.</u>	<u>North</u>
<u>31. Bethel- Burley Rd. SE (89)*</u>	<u>Burley-Olalla Rd. to Holman Rd.</u>	<u>South</u>
<u>32. Glenwood Road (90)*</u>	<u>Lake Flora Rd.to Lider Rd.</u>	<u>South</u>
<u>33. Glenwood Road (91)*</u>	<u>JH Rd. to Lake Flora Rd.</u>	<u>South</u>
<u>34. Sidney Road (92)*</u>	<u>County Line to Lakeway Blvd.</u>	<u>South</u>
<u>35. Glenwood Rd. (96)*</u>	<u>Pine Rd. To Christmas Tree Ln.</u>	<u>South</u>
<u>36. Carney Lake Rd. (97)*</u>	<u>Alta Vista Dr to J.M. Dickenson Rd.</u>	<u>South</u>

*\*Numbers in parenthesis coincide with CFP Projects and Financing Plan Table TR-27*

**Table TR-20A: Bicycle Facilities Plan - Kitsap County 2012**  
 (Reference Table TR-29: 2012 Proposed Roadway Solutions)

<u>Project Identification</u>	<u>From / To</u>	<u>Project ID Code (Table TR-29)</u>
<u>Viking Way</u>	<u>SR-308 to SR-305</u>	<u>N1</u>
<u>Stottlemeyer Road</u>	<u>Lincoln Rd. to Gunderson Rd.</u>	<u>N12</u>
<u>Hansville Road</u>	<u>SR-104 to Eglon Rd.</u>	<u>N13</u>
<u>Silverdale Way</u>	<u>Schold Rd. to Mtn. View</u>	<u>N14</u>
<u>McWilliams Road</u>	<u>Old Military Rd. to Sunset Ave.</u>	<u>N15</u>
<u>Fairgrounds Road</u>	<u>Tracyton Blvd. to SR-303</u>	<u>C4</u>
<u>Tracyton Blvd.</u>	<u>Bucklin Hill Rd. to Fairgrounds Rd.</u>	<u>C12</u>
<u>Northlake Way</u>	<u>Seabeck Hwy. to Kitsap Way</u>	<u>C13</u>
<u>Ridgetop Blvd.</u>	<u>Silverdale Way to Waaga Way</u>	<u>C14</u>
<u>Bucklin Hill Road</u>	<u>Frontier Rd. to Silverdale Way</u>	<u>C15</u>
<u>Newberry Hill Road</u>	<u>SR-3 to Seabeck Hwy.</u>	<u>C16</u>
<u>Anderson Hill Road</u>	<u>SR-3 to Willamette Meridian Road</u>	<u>C17</u>
<u>Perry Avenue</u>	<u>Magnuson Way to Riddell Road</u>	<u>C18</u>
<u>Riddell Road</u>	<u>Pine Road to Perry Avenue</u>	<u>C19</u>
<u>Bethel Road</u>	<u>Mile Hill Dr. to Lund Ave.</u>	<u>S1</u>
<u>Mile Hill Drive</u>	<u>Long Lake Rd. to California Ave.</u>	<u>S6</u>
<u>Bay Street/Beach Drive</u>	<u>Ahlstrom to Retsil</u>	<u>S7</u>
<u>Lund Avenue</u>	<u>Bethel Rd. to Hoover St.</u>	<u>S8</u>
<u>Lund Avenue</u>	<u>Hoover St. to Jackson Ave.</u>	<u>S9</u>
<u>Glenwood Road</u>	<u>Lake Flora Dr. to SR-16</u>	<u>S11</u>

**Transit Service Improvements.** Some facility objectives outlined in Kitsap Transit’s 6-Year Capital Improvement Program (1997-2003) include maintaining existing facilities, securing additional parking spaces at certain park and ride lots, developing and/or expanding transit centers, and expanding the supply of bus shelter and bicycle lockers/racks. The total cost for these projects is estimated to be \$74,158,000.

**Ferry Service Improvements.** WSDOT has identified a number of ferry projects for Kitsap County in its Six-Year Capital Construction Program (1997-2003).

The Seattle to Bainbridge Island route will be obtaining an additional Jumbo Mark II Class vessel in 1998 to compliment the *Tacoma*, which began service in November of 1997. The Edmonds to Kingston route will be receiving two Jumbo Mark II Class Vessels in the following year, each with a vehicle capacity of 218 and passenger capacity of 2,500. This project is estimated to end in 1999 and cost \$78,087,000 (\$1997).

The new Passenger-Only Fast Ferry (POFF) *Chinook* will be begin service from Seattle to Bremerton in May of 1998. The boat has a passenger capacity of 350 and is expected to cut the Seattle/Bremerton commute down to approximately 30 minutes. With a price tag of \$9.6 million, the *Chinook* is the first of a series of Passenger-Only Fast Ferries that will serve the Central Sound. In addition to the Seattle-Bremerton run, the Passenger-Only Fast Ferries will serve the new Kingston-Seattle and Southworth-Seattle routes. The funded portion of the project runs through 1999, with a total cost of \$19,471,000 (\$1997).

## G. Future Deficiencies

This section summarizes the needs and deficiencies for the transportation system in Kitsap County in the long term. The needs and deficiencies include a variety of multimodal facilities and presents documentation for all travel modes in the County.

### 1. Roadway System Performance Measures

#### a. 2012 Vehicle Miles of Travel

Two future scenarios were analyzed: 2012 Existing and Committed (E + C) Network and 2012 Improved Network. The 2012 E + C Network includes the existing roadway network system and all of the transportation improvements during the next 6-years identified in the previous section of this Appendix for roadways, transit and ferries. The 2012 Improved Network includes the list of 20-year transportation improvements as identified in Section IV of this Transportation Appendix.

Tables TR-21 and TR-22 show vehicle miles traveled in Kitsap County for 2012 with the E + C and Improved Networks by subarea with a percentage breakdown of travel on roads that meet or do not meet the county's LOS standards. Table TR-23 compares the 1994 and 2012 percentage of vehicle miles traveled (VMT) on roads that are below standard.

The main conclusion from these tables is that Kitsap County's roadway would be significantly more congested by the year 2012 if the expected growth occurs as projected under the Comprehensive Plan and no new transportation improvements are made beyond those already committed in the 6-year Capital Facilities Plan. A second conclusion is that most of the congestion would occur on state facilities, rather than county roads or city streets.

Overall, the amount of travel on congested roads would increase from 17 percent in 1994 to 35 percent in 2012 with the E +C Network. However, if the recommended solutions in Chapter IV, or similar improvements, are implemented, the overall travel on congested roadways would drop to 23 percent of all VMT. Table TR-23 also demonstrates that the percentage of congested VMT on State facilities is greater than on non-State facilities.

Table TR-23 also shows that urban roadways would experience more of the county's traffic congestion than rural roads. This finding is important because one goal of GMA is to concentrate growth and growth effects in urban rather than rural areas. As noted in Table TR-23, very few of the county's rural roads would fail to meet the County's rural LOS standards if recommended or similar solutions are implemented by 2012. However, if improvements are not made, rural roadways would experience an enormous increase in congestion (0 percent of VMT in 1994 to 19 percent VMT in 2012 E + C Network). This is due to a combination of some growth in rural areas, potentially heavy congestion on state routes through rural areas, spill over of urban travel congestion into adjacent rural areas if the urban area roadways are not improved, and urban growth generating increased travel between centers, which occurs on rural collectors and arterials.

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**Table TR-21: Amount of Miles Traveled by Level of Service Standards (2012 E+C Network)**

<b>By County Subarea</b>	<b>2012 VMT</b>	<b>% 2012 VMT at or better than LOS standard</b>	<b>% 2012 VMT below LOS Standards</b>
<b>North</b>	<b>1,790,084</b>	<b>54%</b>	<b>46%</b>
<u>Urban Non-State Facilities</u>	<u>201,106</u>	<u>63%</u>	<u>37%</u>
<u>Rural Non-State Facilities</u>	<u>424,050</u>	<u>79%</u>	<u>21%</u>
<u>Subtotal Non-State Facilities</u>	<u>625,156</u>	<u>74%</u>	<u>26%</u>
<u>State Facilities</u>	<u>1,164,927</u>	<u>44%</u>	<u>56%</u>
<b>Central</b>	<b>1,347,297</b>	<b>74%</b>	<b>26%</b>
<u>Urban Non-State Facilities</u>	<u>408,128</u>	<u>61%</u>	<u>39%</u>
<u>Rural Non-State Facilities</u>	<u>222,952</u>	<u>59%</u>	<u>41%</u>
<u>Subtotal Non-State Facilities</u>	<u>631,080</u>	<u>60%</u>	<u>40%</u>
<u>State Facilities</u>	<u>716,217</u>	<u>87%</u>	<u>13%</u>
<b>South</b>	<b>1,980,044</b>	<b>69%</b>	<b>31%</b>
<u>Urban Non-State Facilities</u>	<u>313,149</u>	<u>53%</u>	<u>47%</u>
<u>Rural Non-State Facilities</u>	<u>521,685</u>	<u>92%</u>	<u>8%</u>
<u>Subtotal Non-State Facilities</u>	<u>834,835</u>	<u>78%</u>	<u>22%</u>
<u>State Facilities</u>	<u>1,145,210</u>	<u>63%</u>	<u>37%</u>
<u>Total State Facilities</u>	<u>3,026,354</u>	<u>61%</u>	<u>39%</u>
<u>Total Non-state Facilities</u>	<u>2,091,071</u>	<u>71%</u>	<u>29%</u>
<u>Total Urban Facilities</u>	<u>922,384</u>	<u>59%</u>	<u>41%</u>
<u>Total Rural Facilities</u>	<u>1,168,688</u>	<u>81%</u>	<u>19%</u>
<u>Total All Facilities</u>	<u>5,117,425</u>	<u>65%</u>	<u>35%</u>

**Table TR-22: Amount of Miles Traveled by Level of Service Standards (2012 Improved Network)**

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<b>By County Subarea</b>	<b>2012 VMT</b>	<b>% 2012 VMT at or better than LOS standard</b>	<b>%2012 VMT below LOS Standards</b>
<b>North</b>	<b>1,771,725</b>	<b>64%</b>	<b>36%</b>
Urban Non-State Facilities	211,955	81%	19%
Rural Non-State Facilities	446,654	95%	5%
Subtotal Non-State Facilities	658,609	91%	9%
State Facilities	1,113,116	49%	51%
Central	1,340,654	84%	16%
Urban Non-State Facilities	415,948	78%	22%
Rural Non-State Facilities	219,195	84%	16%
Subtotal Non-State Facilities	635,143	80%	20%
State Facilities	705,511	88%	12%
South	1,969,908	84%	16%
Urban Non-State Facilities	348,945	76%	24%
Rural Non-State Facilities	500,210	96%	4%
Subtotal Non-State Facilities	849,155	88%	12%
State Facilities	1,120,753	81%	19%
Total State Facilities	2,939,381	71%	29%
Total Non-state Facilities	2,142,907	86%	14%
Total Urban Facilities	976,848	78%	22%
Total Rural Facilities	1,166,060	93%	7%
Total All Facilities	5,082,288	77%	23%

**Table TR-23: Changes in Miles Traveled Below LOS Standards, 1994 to 2012**

<b>By County Subarea</b>	<b>1994 VMT NOT Meeting LOS Standards</b>	<b>% 1994 VMT NOT Meeting LOS Standards</b>	<b>2012 VMT (E+C) NOT Meeting LOS Standards</b>	<b>% 2012 VMT (E+C) NOT Meeting LOS Standards</b>	<b>2012 VMT (Improved) NOT Meeting LOS Stand.</b>	<b>% 2012 VMT (Improved) NOT Meeting LOS Stand.</b>
North	241,460	19%	815,507	46%	633,431	36%
Urban Non-State	1,142	0%	74,706	37%	40,679	19%
Rural Non-State	0	0%	87,023	21%	20,373	5%
Subtotal Non-State	1,142	0%	161,7	26%	61,05	9%
State Facilities	240,318	34%	653,778	56%	572,380	51%
Central	138,568	13%	345,545	26%	213,736	16%
Urban Non-State	63,369	14%	160,949	39%	92,210	22%
Rural Non-State	0	0%	90,314	41%	35,288	16%
Subtotal Non-State	63,36	14%	251,2	40%	127,4	20%
State Facilities	75,199	15%	94,281	13%	86,238	12%
South	246,146	18%	608,283	31%	311,443	16%
Urban Non-State	69,031	20%	146,194	47%	83,313	24%
Rural Non-State	0	0%	40,937	8%	20,746	4%
Subtotal Non-State	69,03	20%	187,1	22%	104,0	12%
State Facilities	177,115	34%	421,152	37%	207,383	19%
Total State Facilities	492,632	24%	1,169,2	39%	866,001	29%
Total Non-state Facilities	133,542	8%	600,123	29%	292,609	14%
Total Urban Facilities	133,542	17%	381,849	41%	216,202	22%
Total Rural Facilities	0	0%	218,274	19%	76,407	7%
Total All Facilities	626,174	17%	1,769,3	35%	1,158,6	23%

**2. 2012 Lane Miles of "Congested" Facilities**

**Tables TR-24 and TR-25** compare the Kitsap County lane miles that satisfy or fall below the County's LOS standards for both future year scenarios. The VMT summaries show how much actual travel is affected by congested roadways; the lane mile summaries indicate how much of the county's road system would be deficient under the various scenarios. Estimating lane miles of congestion allows the county to estimate the extent and costs of potential improvements required to meet the LOS standards on a countywide basis.

**Table TR-26** shows the change in congested lane miles conditions from 1994 to the 2012 E + C and Improved Networks.

**Table TR-24: Lane Miles of 2012 E + C Network by Level of Service Standard Performance**

<b>By County Subarea</b>	<b>2012 Lane Miles</b>	<b>2012 Lane Miles Meeting LOS Standards</b>	<b>2012 Lane Miles NOT Meeting LOS Standards</b>	<b>% 2012 Lane-Miles NOT Meeting LOS Standards</b>
<b>North</b>	<b>376</b>	<b>287</b>	<b>89</b>	<b>24%</b>
Urban Non-State Facilities	61	49	12	19%
Rural Non-State Facilities	172	158	14	8%
Subtotal Non-State Facilities	23	207	26	11%
State Facilities	143	80	63	44%
<b>Central</b>	<b>229</b>	<b>181</b>	<b>48</b>	<b>21%</b>
Urban Non-State Facilities	91	68	23	25%
Rural Non-State Facilities	72	56	16	22%
Subtotal Non-State Facilities	16	125	39	24%
State Facilities	66	57	9	14%
<b>South</b>	<b>412</b>	<b>348</b>	<b>64</b>	<b>16%</b>
Urban Non-State Facilities	60	40	19	32%
Rural Non-State Facilities	244	237	7	3%
Subtotal Non-State Facilities	30	277	27	9%
State Facilities	108	71	37	35%
Total State Facilities	317	207	109	35%
Total Non-state Facilities	700	609	91	13%
Total Urban Facilities	212	158	54	25%
Total Rural Facilities	488	451	37	8%
Total All Facilities	1016	816	200	20%

Significant conclusions are as follows:

- # Congestion would get worse without improvements. Overall, about 20 percent (E + C Network) or 12 percent (Improved Network) of the system would be considered deficient in 2012.
  
- # Under the E + C system, all three subareas have comparable amounts of lanes miles falling below the established LOS standards. With the improved system, the north subarea would have the most lane miles below the standards of the three county subareas: North - 68 lane miles, Central - 27 lane miles, South - 36 lane miles.
  
- # The majority of congested roads within Kitsap county occur on State facilities (88 congested lane miles on state facilities versus 44 congested lane miles on non-State facilities).

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**Table TR-25: Lane Miles of 2012 Improved Network by Level of Service Standard Performance**

<b>By County Subarea</b>	<b>2012 Lane Miles</b>	<b>2012 Lane Miles Meeting LOS Standards</b>	<b>2012 Lane Miles NOT Meeting LOS Standards</b>	<b>% 2012 Lane-Miles NOT Meeting LOS Standards</b>
<b>North</b>	<u>398</u>	<u>329</u>	<u>68</u>	<u>17%</u>
Urban Non-State Facilities	<u>69</u>	<u>63</u>	<u>6</u>	<u>9%</u>
Rural Non-State Facilities	<u>182</u>	<u>178</u>	<u>4</u>	<u>2%</u>
Subtotal Non-State Facilities	<u>25</u>	<u>241</u>	<u>10</u>	<u>4%</u>
State Facilities	<u>147</u>	<u>89</u>	<u>58</u>	<u>40%</u>
<b>Central</b>	<u>253</u>	<u>226</u>	<u>27</u>	<u>11%</u>
Urban Non-State Facilities	<u>104</u>	<u>92</u>	<u>12</u>	<u>11%</u>
Rural Non-State Facilities	<u>82</u>	<u>76</u>	<u>7</u>	<u>8%</u>
Subtotal Non-State Facilities	<u>18</u>	<u>168</u>	<u>19</u>	<u>10%</u>
State Facilities	<u>67</u>	<u>58</u>	<u>9</u>	<u>13%</u>
<b>South</b>	<u>451</u>	<u>414</u>	<u>36</u>	<u>8%</u>
Urban Non-State Facilities	<u>77</u>	<u>66</u>	<u>11</u>	<u>14%</u>
Rural Non-State Facilities	<u>263</u>	<u>259</u>	<u>4</u>	<u>1%</u>
Subtotal Non-State Facilities	<u>33</u>	<u>324</u>	<u>15</u>	<u>4%</u>
State Facilities	<u>111</u>	<u>90</u>	<u>21</u>	<u>19%</u>
<b>Total State Facilities</b>	<u>325</u>	<u>237</u>	<u>88</u>	<u>27%</u>
<b>Total Non-state Facilities</b>	<u>777</u>	<u>733</u>	<u>44</u>	<u>6%</u>
<b>Total Urban Facilities</b>	<u>250</u>	<u>221</u>	<u>29</u>	<u>12%</u>
<b>Total Rural Facilities</b>	<u>527</u>	<u>513</u>	<u>15</u>	<u>3%</u>
<b>Total All Facilities</b>	<u>110</u>	<u>970</u>	<u>132</u>	<u>12%</u>

**Table TR-26: 1994-2012 Changes in Performance in Terms of Lane Miles**

By County Subarea	1994 Lane Miles NOT Meeting LOS Standards	% 1994 Lane Miles NOT Meeting LOS Standards	2012 Lane Miles (E+C) NOT Meeting LOS Standards	% 2012 Lane Miles (E+C) NOT Meeting LOS Standards	2012 Lane Miles (Improved) NOT Meeting LOS Standards	% 2012 Lane Miles(Improved) NOT Meeting LOS Standards
North	30	7%	89	24%	68	17%
Urban Non-State	0	0%	12	19%	6	9%
Rural Non-State Facilities	0	0%	14	8%	4	2%
Subtotal Non-State	0	0%	26	11%	10	4%
State Facilities	30	27%	63	44%	58	40%
Central	19	7%	48	21%	27	11%
Urban Non-State	10	7%	23	25%	12	11%
Rural Non-State Facilities	0	0%	16	22%	7	8%
Subtotal Non-State	10	7%	39	24%	19	10%
State Facilities	9	11%	9	14%	9	13%
South	24	5%	64	16%	36	8%
Urban Non-State	11	9%	19	32%	11	14%
Rural Non-State Facilities	0	0%	7	3%	4	1%
Subtotal Non-State	11	9%	27	9%	15	4%
State Facilities	13	23%	37	35%	21	19%
Total State Facilities	52	18%	109	35%	88	27%
Total Non-State Facilities	21	10%	91	13%	44	6%
Total Urban Facilities	21	10%	54	25%	29	12%
Total Rural Facilities	0	0%	37	8%	15	3%
Total All Facilities	73	6%	200	20%	132	12%

**3. 2010 Vehicle Hours of Travel**

**Table TR-27** compares the number of vehicle hours of travel (VHT) in Kitsap County that do not meet the County’s LOS standards. Significant conclusions are as follows:

# The north subarea contains the greatest increase in the number of congested hours of travel. In 1994, over 6,000 vehicle hours are congested representing 18 percent of all vehicle travel. By 2012, this number will increase to over 24,000 vehicle hours of congested travel; representing 51 percent of all vehicle travel for the E+C Network or 18,500 congested vehicle hours (42 percent of all vehicle travel) for the Improved Network.

# All subareas for the E+C Network will increase in vehicle hours of congested travel by at least 15 percent in the year 2012. For the Improved Network congested travel measured in vehicle hours will increase significantly only in the north subarea (22 percent).

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# Countywide, nearly 20 percent of all vehicle hours of travel in 1994 were spent on congested roads; by the year 2012 this number would increase to 42 percent for the E+C Network and fall to 28 percent for the Improved Network.

# 47 percent of congested vehicle hours of travel on the 2012 E+C Network and 37% on the 2012 Improved Network would occur on State facilities.

**Table TR-27: Changes in Congested VHT, 1994-2012, in Terms of Vehicle Hours of Travel**

<b>By County Subarea</b>	<b>1994 VHT NOT Meeting LOS Standards</b>	<b>% 1994 VHT NOT Meeting LOS Standards</b>	<b>2012 VHT (E+C) NOT Meeting LOS Standards</b>	<b>% 2012 VHT (E+C) NOT Meeting LOS Standards</b>	<b>2012 VHT (Improved) NOT Meeting LOS Standards</b>	<b>% 2012 VHT (Improved) NOT Meeting LOS Standards</b>
<b>North</b>	<u>6,096</u>	<u>18%</u>	<u>24,458</u>	<u>51%</u>	<u>18,567</u>	<u>40%</u>
Urban Non-State Facilities	<u>53</u>	<u>1%</u>	<u>2,563</u>	<u>38%</u>	<u>1,421</u>	<u>21%</u>
Rural Non-State Facilities	<u>0</u>	<u>0%</u>	<u>2,380</u>	<u>22%</u>	<u>529</u>	<u>5%</u>
Subtotal Non-State	<u>53</u>	<u>1%</u>	<u>4,943</u>	<u>28%</u>	<u>1,949</u>	<u>11%</u>
State Facilities	<u>6,043</u>	<u>38%</u>	<u>19,516</u>	<u>64%</u>	<u>16,618</u>	<u>58%</u>
<b>Central</b>	<u>5,407</u>	<u>18%</u>	<u>14,524</u>	<u>37%</u>	<u>8,902</u>	<u>24%</u>
Urban Non-State Facilities	<u>2,385</u>	<u>15%</u>	<u>7,084</u>	<u>46%</u>	<u>3,681</u>	<u>26%</u>
Rural Non-State Facilities	<u>0</u>	<u>0%</u>	<u>3,044</u>	<u>45%</u>	<u>1,286</u>	<u>20%</u>
Subtotal Non-State	<u>2,385</u>	<u>15%</u>	<u>10,12</u>	<u>46%</u>	<u>4,967</u>	<u>24%</u>
State Facilities	<u>3,022</u>	<u>27%</u>	<u>4,396</u>	<u>26%</u>	<u>3,935</u>	<u>23%</u>
<b>South</b>	<u>8,477</u>	<u>23%</u>	<u>21,409</u>	<u>39%</u>	<u>11,082</u>	<u>21%</u>
Urban Non-State Facilities	<u>3,110</u>	<u>26%</u>	<u>7,681</u>	<u>60%</u>	<u>3,753</u>	<u>32%</u>
Rural Non-State Facilities	<u>0</u>	<u>0%</u>	<u>1,193</u>	<u>9%</u>	<u>562</u>	<u>4%</u>
Subtotal Non-State	<u>3,110</u>	<u>26%</u>	<u>8,874</u>	<u>34%</u>	<u>4,315</u>	<u>17%</u>
State Facilities	<u>5,367</u>	<u>39%</u>	<u>12,535</u>	<u>43%</u>	<u>6,767</u>	<u>24%</u>
<b>Total State Facilities</b>	<u>14,432</u>	<u>30%</u>	<u>36,446</u>	<u>47%</u>	<u>27,320</u>	<u>37%</u>
<b>Total Non-state Facilities</b>	<u>5,548</u>	<u>11%</u>	<u>23,945</u>	<u>36%</u>	<u>11,231</u>	<u>18%</u>
<b>Total Urban Facilities</b>	<u>5548</u>	<u>21%</u>	<u>17,327</u>	<u>50%</u>	<u>8,854</u>	<u>27%</u>
<b>Total Rural Facilities</b>	<u>0</u>	<u>0%</u>	<u>6,618</u>	<u>21%</u>	<u>2,377</u>	<u>8%</u>
<b>Total All Facilities</b>	<u>19,980</u>	<u>20%</u>	<u>60,391</u>	<u>42%</u>	<u>38,551</u>	<u>28%</u>

## IV. 2012 Transportation System Improvements

This section summarizes the transportation investments that will be required to maintain adequate levels of mobility for the projected increase in residents and jobs in Kitsap County by the year 2012. System improvements include everything from public transportation, nonmotorized facilities, ferries and roadways.

### A. Alternatives Development and Project Identification Process

This updated Kitsap County Transportation Element is designed to achieve a balanced transportation system moving people and goods, not just more cars. In order to accomplish this goal, the County will still be planning, constructing and maintaining roadways. However, County transportation planning staff will continue to work with Kitsap Transit, the Washington State Ferry System, and the Washington State Department of Transportation to implement the County's transportation goals, objectives and policies, and to maintain acceptable levels of congestion through the adoption of the County's level of service standards and concurrency management system.

The Kitsap County Public Works Department will also be coordinating transportation projects and programs with the cities of Bremerton, Port Orchard, Bainbridge Island and Poulsbo, and with its own department of Community Development, as well as Kitsap Transit, WSDOT Highways, and WSF.

The long-range transportation strategy for the Kitsap County transportation plan attempts to:

- # have less reliance on single occupant automobiles,
- # provide enhanced multimodal opportunities in the form of accessible transit and park and ride facilities,
- # develop and enhance modes of travel that are time competitive with the automobile, and
- # integrate land use and transportation planning efforts.

These goals and ideals may be difficult to achieve immediately. It will be hard to change the life-long habit of using one's personal vehicle for all transportation needs.

However, by using a transportation strategy that reduces emphasis on road widening projects, the County may be able to modify travel mode choices in the future. Road widening projects and roadway capacity enhancement projects will still appear in the County's long-range transportation plan and associated six-year capital improvement programs. However, all projects will face these questions:

- # Does the project have a multimodal emphasis? Are there pedestrian and/or bicycle components of road projects that help achieve a balance in the use alternative modes?
- # Will the project assist in providing a competitive time advantage for transit vehicles?
- # Is this a multi-jurisdictional or multi-agency project that will provide an adequate level of service for regional traffic flows and goods movements?
- # Will the project enhance economic development in those areas of the County where the creation of jobs is desired?
- # Does the project have potential for, funding from sources other than Kitsap County?

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Criticisms of past transportation planning efforts in Kitsap County were based on the belief that most transportation decisions focused on roads and roadway projects. The prior emphasis on completing roadway projects had its origins in the mission and purpose of a traditional county public works department, which was essentially to build roads.

Not all projects will be equally supported or needed by the jurisdictions in the County. In some instances, there will be direct conflicts in the defined transportation needs and priorities of the cities, state or tribes and the County. The County is determined to work with all other parties to find solutions that offer advantages to regionally important transportation facilities. Technical and policy staff from local jurisdictions, the Puget Sound Regional Council (PSRC) and the Peninsula Regional Transportation Planning Organization (PRTPO) may be consulted to negotiate regional solutions.

### **B. A Set of Choices**

The development of the recommended transportation system plan involved the detailed testing and evaluation of four alternative systems, plus the recommended plan (five in all) to meet Kitsap County's future transportation needs. Each alternative consisted of a package of improvements including roadway capacity enhancements (widening and new roads), safety and operational improvements, transit priority treatments and ferry system improvements. Each alternative addressed the County's transportation needs in a different way. The alternatives have been formulated to:

- # test the differences among the number of projects, costs, and resulting roadway levels of service;
- # determine if specific widening projects are still needed if alternate transit and ferry improvements would be implemented; and
- # provide a range of projects that might be considered either feasible or infeasible based on technical or political constraints.

They each include elements of the following, in different combinations:

- # road capacity enhancements (e.g. widening);
- # new road linkages;
- # safety and operational improvements;
- # transit service and facility improvements; and
- # ferry system improvements.

Each of these elements is discussed below. They should be considered as "equal partners" in the County's overall transportation management strategy -- road improvements are only one part of addressing the County transportation needs in a comprehensive manner.

### **C. Proposed Roadway Plan**

Table TR-28 summarizes the proposed long-range transportation solutions that may be necessary to support Kitsap County's Comprehensive Plan and address transportation deficiencies identified in the previous section of this appendix. It represents a "hybrid" list of transportation improvements that includes projects from the evaluation of alternatives by the KCTP citizen advisory committees, as well as from local and regional transportation agencies. These projects were modeled to determine potential solutions in transportation system performance relative to the 2012 "baseline" system, under future land use growth assumptions provided by Kitsap County Department of Community Development (DCD) and the PSRC.

The project code identifier in Table TR-28 relates to a location code identified in Figure TR-26. It should be noted that the project code numbers *do not signify any order of importance or prioritization*. They simply represent a numbering system to easily identify the project location and the number of projects within each county subarea and as a whole. The following paragraphs describe in detail each of the proposed transportation solutions and an explanation as to its purpose.

### **1. New Facilities**

New roadway linkages throughout Kitsap County are a key component of the Transportation Element. These types of improvements enhance local circulation of developing activity centers and communities (e.g. Silverdale) and create alternative travel paths to congested or sensitive areas (e.g. Port Gamble).

In the North County subarea, almost half of the 10 recommended transportation improvements are new linkages. They are as follows:

**Projects N-2:** As an outcome of the Kingston Circulation Study and input from the North Citizens Advisory Committee Members, roadway extension of Lindvog Road is a proposed solution.

**Project N-4:** This new two-lane roadway is a proposed solution to improve general circulation in the South Kingston-Miller Bay area and to provide local access to approved residential development in the general vicinity.

**Project N-5:** This bypass roadway is proposed to alleviate congestion on August Avenue/Miller Bay Road through the Suquamish area and at the same time provide alternative access for residents northwest of the Suquamish area.

**Project N-6:** This new 2-lane roadway is a recommendation of the North CAC to construct a new roadway between Hansville Road and Hood Canal Drive and a potential solution to provide local access and eliminate circuitous routing in the general vicinity.

The following are proposed new linkage transportation solutions in the Central County subarea:

**Project C-1:** The extension of Waaga Way in a two-lane configuration is a proposed solution to improve accessibility to areas west side of SR 3 to SR 303 and to alleviate congestion in the Silverdale area.

**Project C-2 and C-10:** These two-lane extensions along Perry Avenue and Ahlmira Drive is a proposed solution to relieve congestion along SR-303, Riddell Road and McWilliams Road. In addition, these extensions could potentially provide additional access to local residential neighborhoods.

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**Table TR-28: Kitsap County 2012 Transportation Improvement Program**

<b>Facility</b>	<b>From</b>	<b>To</b>	<b>Improvement Description</b>	<b>Code</b>	<b>Lead Agency</b>
Viking Way GC	SR-308	SR 305	Widen to 5L	N 1	KC
Lindvog Rd.	SR-104	W. Kingston Rd.	3L extension	N 2	KC
W. First St.	SR-104	W. Kingston Rd.	Widen to 3L	N 3	KC
South Kingston-Miller Bay Collector	S. Kingston Rd.	Miller Bay Rd.	New 2L road	N 4	Private / KC
Suquamish Bypass	Totten Rd.	Columbia St.	New 2L road	N 5	KC
Hansville Bypass	Hansville Rd.	Hood Canal Dr.	New 2L road	N 6	KC
Stottlemeyer Rd	Lincoln Rd	Gunderson Rd	Widen to 3L	N 7	KC
Hansville Rd	SR-104	Eglon Rd	Widen to 3L	N 8	KC
Silverdale Way	Schold Rd	Mt View	Widen to 3L	N 9	KC
McWilliams Road	Old Military Rd	Sunset Ave	Widen to 3L	N 10	KC
Waaga Way Ext.	Clear Cr. Rd.	Old Frontier Rd.	2L extension	C 1	KC
Perry Ave.	Riddell Rd.	McWilliams Rd.	2L extension	C 2	KC
Slyvan Way	SR 303	Trenton Avenue	Widen to 4L	C 3	KC
Fairgrounds Rd. GC	Tracyton Blvd.	SR-303	Add LT & RT pockets; IS	C 4	KC
Silverdale Way	Byron St.	Newberry Hill Rd.	Widen to 4L (5L @ IS)	C 5	KC
Newberry Hill Rd.	Silverdale Way	SR-3	Widen to 4L (5L @ IS)	C 6	KC
Newberry Hill Rd.	Provost Rd.	Dickey Rd.	Add WB truck climbing lane	C 7	KC
Sam Christopherson	Old Belfair Valley	Werner Rd.	New 2L road	C 8	KC
Willamette-Meridian	Terminus	Newberry Hill Rd.	New 2L road	C 9	KC
Almira Dr.	Riddell Rd.	McWilliams Rd.	2L extension	C 10	KC
Werner Rd.	Sam	SR-3	Widen to 4L	C 11	KC
Tracyton Blvd. GC	Bucklin Hill Rd.	Fairgrounds Rd.	Widen lanes/shoulders; access management.	C 12	KC
North Lake Way GC	Seabeck Hwy.	Kitsap Way	Widen to 4 Lanes	C 13	KC
Ridgetop Boulevard	Silverdale Way	Waaga Way	Widen to 5 Lanes	C 14	KC
Bucklin Hill Rd. GC	Frontier Rd.	Silverdale Way	Widen to 5 Lanes	C 15	KC
Newberry Hill Rd	Dickey Rd.	Seabeck Hwy	Widen to 3L; climbing lane	C 16	KC
Anderson Hill Rd	SR-3	Willamette	Widen to 3L	C 17	KC
Perry Avenue	Magnuson Way	Riddell Road	Widen to 3L	C 18	KC
Riddell Road	Pine Road	Perry Avenue	Widen to 3L	C 19	KC
Bethel Road GC	Mile Hill Rd.	Lund Ave.	Widen to 5L	S 1	KC
Caufield Lane	Terminus	Bethel-Burley Rd.	2L extension	S 2	KC
Jackson Ave.	Sedgwick Rd.	Mile Hill Dr.	Widen to 4L; signals	S 3	KC
Burley-Belfair	SR-16 @ B.O. IC	SR-3 @ Lk Flora	New 2L road	S 4	KC
Phillips Rd.	Mullenix Rd.	Burley-Ollala Rd.	2L extension	S 5	KC
Mile Hill Drive GC	Long Lake Rd.	California Rd.	Widen to 3 Lanes	S 6	KC
Bay Street/Beach	Retsil	Alhlstrum	Widen to 3 Lanes	S 7	KC
Lund Ave	Bethel Rd	Hoover St	Widen to 5 Lanes	S 8	KC
Lund Ave	Hoover St	Jackson Ave	Widen to 3L	S 9	KC
Glenwood Rd	Lake Flora Dr	SR-16	Widen to 3L	S 10	KC

\*GC - Project included a Greenways Corridor in the Transportation Improvement Program

**Project C-8:** This new two-lane roadway is a proposed solution to make a local north-south connection between Central and South County subareas and improve local access; this proposed improvement should also alleviate congestion on SR 3/SR 16 in the Gorst area. The potential development of this roadway corridor was a result of forecasted congested conditions along SR 3/SR 16 and a recommendation from the Central and South Citizen Committee Members.

**Project C-9:** The proposed solution of extending the Willamette Meridian Road to Newberry Hill Road could potentially improve local access and circulation through the Silverdale area.

In the South County subarea, the following proposed transportation solutions are new linkages:

**Project S-2:** The proposed two-lane extension along Caufield Lane is a potential solution to improve east-west route accessibility between Sidney Road and Bethel Burley Road.

**Project S-4:** This proposed development of this new roadway corridor between SR 3 and SR 16 in South County could potentially provide a vital east-west regional link and improve local access between these major arterials.

**Project S-5:** The proposed two-lane roadway could potentially provide an new north-south route between Mullenix Road and Burley-Olalla Road in South County. It will also provide improved residential access in this area, and is a recommendation of the South CAC.

## **2. Widening and Improvements to Existing Facilities**

Over half of the 10 projects recommended in the North County subarea are capacity-related improvements to existing roads. They are as follows:

**Project N-1:** Viking Way is to be widened to 5 lanes to alleviate congestion between SR 308 and SR 305.

**Projects N-3:** As an outcome of the Kingston Circulation Study, West First Street from SR 104 to West Kingston Road will be widened to alleviate congestion.

**Project N-7:** Stottlemeyer Road will be widened to 3 lanes to ease congestion from Lincoln Road to Gunderson Road.

**Project N-8:** Hansville Road will be widened to 3 lanes to accommodate congestion between SR 104 to Eglon Road.

**Project N-9:** Silverdale Way will be widened to 3 lanes to help alleviate congestion from Schold Road to Mt. View Road in the Silverdale area.

**Project N-10:** McWilliams Road will be widened to 3 lanes from Old Military Road to Sunset Avenue to alleviate congestion.

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More than half of the 19 Central County subarea recommendations are related to capacity improvements on existing roads. They are as follows:

**Project C-4:** Left- and right-turning lanes and intersection signals will be added along Fairgrounds Road from Tracyton Boulevard to SR 303 to help relieve congestion and improve traffic flow on this roadway.

**Project C-5 and C-6:** Silverdale Way from Byron Street to Newberry Hill Road and Newberry Hill Road from Silverdale Way to SR 3 will be widened to four lanes, with five lanes at their intersections. These measures will help alleviate congestion along these roadways and at major intersections.

**Project C-7:** A westbound truck climbing lane will be constructed along Newberry Hill Road to improve traffic flow for both vehicles and trucks from SR 3 to Dickey Road.

**Project C-11:** The recommended improvement of widening Werner Road to four lanes is needed to accommodate increased traffic due to the new bypass roadway of Sam Christopherson Road between Old Belfair Valley Road and Werner Road in western Bremerton.

**Project C-12:** Lane and shoulder widening are recommended along Tracyton Boulevard to reduce congestion from Bucklin Hill Road to Fairgrounds Road.

**Projects C-13:** North Lake Way from Seabeck Highway to Kitsap Way is a proposed to be widened to 4 lanes to ease traffic congestion along these roadways and accommodate the anticipated residential development in the area.

**Projects C-14 and C-15:** The roadway sections of Ridgetop Boulevard from Silverdale Way to Waaga Way and Bucklin Hill Road from Frontier Road to Silverdale Way are proposed to be widened to five lanes to alleviate congestion on these arterials due to increased commercial/retail development in Silverdale and residential development in these corridors.

**Project C- 16:** Widen Newberry Hill Road to 3 lanes between Dickey Rd and Seabeck Highway to alleviate congestion.

**Project C-17:** Widen Anderson Hill Road to 3 lanes between SR 3 and Willamette Meridian Road to ease congestion.

**Projects C-18 and C-19:** Perry Avenue and Riddell Road will be widened to 3 lanes: Perry from Magnuson Way to Riddell Road and Riddell from Pine Road to Perry Avenue.

In the South County subarea, seven of the 10 recommended improvements including widening and improvements to existing facilities. They are as follows:

**Project S-1:** Bethel Road will be widened to five lanes to relieve traffic congestion from Mile Hill Road to Lund Avenue.

**Project S-3:** Signal improvements and expansion of Jackson Avenue to three lanes from Sedgwick Road to Mile Hill Drive are recommended for overall traffic flow improvement along this roadway.

**Projects S-6 and S-7:** The roadways of Mile Hill Drive from Long Lake Road to California Road

and Bay Street/Beach Drive from Ahlstrum to Retsil will be widened to three lanes to alleviate congestion on these roadways.

**Projects S-8 and S-9:** Lund Avenue will be widened to 5 lanes between Bethel Road and Hoover Street and to 4 lanes between Hoover and Jackson Avenue to ease traffic congestion.

**Project S-10:** Glenwood Road will be widened to 3 lanes to relieve congestion between Lake Flora Drive and SR 16.

## **D. Public Transportation**

The primary change in Kitsap Transit's service strategy will be to redirect its focus between the basic original system, including ridesharing services, and the new high capacity corridor service plan. These new transit corridors will have tremendous facility requirements in the form of ferry terminals, remote bus transfer facilities, and HOV facilities. The cost on the capital side will be far in excess of anything experienced by Kitsap Transit in its past. A more detailed design of a 2020 system and feeding back the basic parameters into the current-term capital plan has begun with the opportunity presented by the Sinclair Landing and Bremerton Transportation Plaza proposed for the Bremerton waterfront. While it will boost near and mid-term capital budgets substantially, it should pay enormous dividends in quality of service and operating cost savings to the community over the long term.

The following paragraphs outline Kitsap Transit's long range service structure, facility requirements, and ancillary services.

### **1. Service Objectives**

Sample service objectives in the transit element would include the following:

- ! Upgrading the trunk express service between Winslow, Poulsbo, Bremerton, Silverdale and Port Orchard to every half hour and the trunk service (County Line) connections with Pierce, Mason and Jefferson Transit to every one hour.
- X ! Creation of sub-trunk service, at 1-2 hour headways, integrated with paratransit feed service within smaller zones into communities such as Hansville, Seabeck, Indianola, Manchester/Southworth, Ollala and the Belfair Highway area.
- ! Initiation of higher capacity rush-hour routed service, at the level of 75-100 seat buses to rush-hour ferries between the Bainbridge Island ferry terminal and major park-and-ride lots in Poulsbo and beyond pursuant to the conclusion of the SR-305 Corridor Study.
- ! Initiation of local circulation service in Indianola partly on a routed basis, connecting with Kingston and the north-south trunk at Poulsbo, and partly on a call-in basis to feed the new passenger ferry service direct to Seattle
- ! Initiation of private passenger only ferry service between Lynnwood Center, on Bainbridge Island, Bremerton and the Port Orchard area on the South Kitsap mainland.

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- ! Development of express service between Poulsbo and Bainbridge Island over a completely separated HOV lane, through the mixture of vanpools, small buses, and high capacity buses such that the HOV treatments and lane carries 100 percent more passengers than the "normal" auto traffic lane in half the number of vehicles.
- ! Service volumes in 25-30 bus range (50-50 large and small) at peak-hour ferries at the Bainbridge Island and Bremerton terminals, with 50-70 percent mode shares.
- ! Five to six small-bus neighborhood shuttles and an equal number of high capacity buses at each rush hour ferry at the Kingston and Southworth terminals, with these two the last to develop of the four major Kitsap ferry terminals, with per-ferry mode splits in the 30-40 percent range for auto ferries and 60-70 percent for passenger-only ferries.

### **2. Routed Service**

It is anticipated that, outside the high capacity corridors, there would be little or no change in routed service patterns between the short term and the long term. It is anticipated however, that the basic routed frequency would be one half hour by 2005 with 15-minute service in the urban cores by 2012. Kitsap Transit's base express services and the mid-day sub-trunks would continued to be refined, and in the case of the sub-trunks, expanded.

### **3. Paratransit Services**

The same comments that hold true for routed service apply to paratransit service. It is anticipated that the transit dependent population would be well-served by the basic system established and that the task in this area during the long term would be keeping up with the increasing demand among the elderly. Further, there may be supplementary paratransit opportunities in circulation services in the vicinity of new passenger-only ferry terminal sites, where the addition of passenger ferry service will create a bi-directional demand that would also flow back to the primary north-south trunk service within the County.

### **4. Rideshare Services**

In the long-term plan, rideshare and alternate connection services such as shuttles at terminals such as Kingston and Southworth, where the major destinations on the other side of Puget Sound are not in the immediate vicinity of the terminal, will continue to experience considerable growth. As well, there will be a considerable increase in mini-rideshare opportunities, such as carpooling and small vanpools at the small park-and-ride lots in the HOV corridors. Finally, there should be rideshare growth in the form of carpools and vanpools, and, in some cases, even subscription buses to the new, smaller, passenger-only terminals as they are established along Kitsap County shorelines.

### **5. Service Standards**

No degradation in level of service standards are anticipated in terms of service quality due to much of the focus on separate high capacity facilities where general congestion should have little or no impact on the levels or quality of service. It should be made clear, however, that the development of these high capacity separated services is crucial to Kitsap Transit's maintaining its utility to this community. Congestion will otherwise increase dramatically and in the areas where transit is not separated or "advantaged", the service quality will fall below an acceptable level. Regrettably,

people will switch back to the car under those circumstances. In addition to the full-fledged HOV lanes mentioned earlier, continued emphasis on signal control and other transit advantages at intersections (particularly queue-cuts) and left-(bus-only) turn opportunities will also be key to maintaining the quality of the non-high capacity services.

The only area where changes are proposed to the standards would be in terms of volume, especially on the high capacity portion, where, at rush hour 10-15 bus "caravans" or an alternative technology, would be envisioned simply to carry the volume of passengers provided by the 2,500 passenger capacity of the new auto ferries or the 350 to 650 passenger volumes of current and new passenger-only ferries.

## **6. Capital Needs for Transit**

The long-term capital plan is dominated by major fixed facilities in the primary commuter corridors. Transit/ferry terminals will require enhancements to accommodate a separate second level above the car holding and car ramp areas for as many as 20 to 40 mixed (small, medium and high-capacity) buses at a time. Even more essential will be HOV treatments and lanes extending out to the end of the heavily congested corridors, large county line park-and-ride lots, and dozens of small co-op lots throughout the county, all designed to facilitate ease of entry and exit of the transit equipment onto the HOV lane system. The plan will also have to include incremental increases in the high-capacity fleet with provision for a major shift in bus technology keyed to HOV lane usage. Everything from double-decks to fixed guideway or light-weight tram-type multi-car equipment should be investigated prior to the final-stage of development of the HOV system to see if switching to a different rolling stock technology would optimize the service capabilities or reduce the expense of the combined fleet and roadway program. Preference should be shown here for lighter weight technologies wherever possible to reduce transit's portion of the wear both on the standard street and arterial network as well as the specially developed HOV elements of the system.

During this term the base fleets that have been assembled in the medium term (2001-2012) will have to be replaced once again, and the support facilities (from the earlier park-and-ride lots to the north-south operating bases) will undoubtedly have to be scaled up significantly to respond to the new levels of operation and service.

## **7. Financing and Fares**

Since the long-term success of this plan on the scale envisioned here is entirely dependent on complete integration between land use, transit and street and road planning, it should come as no surprise that the financing of it would also have to follow a similar pattern. Existing transit financing could not in any way be stretched to encompass the enormous capital investment in terminal and transit facilities and equipment that are envisioned for the high capacity corridors. On the other hand if the community has made the commitment to an investment in transit up to this point (and received the benefits sufficient to warrant consensus on proceeding) then it is presumed that the combined funding would be feasible. Certainly, all recent plans for major additional funds for street and road improvements have clearly included a priority on transit facilities that maximize the people-carrying ability of these facilities. If that trend continues, major elements of the planned HOV network itself could probably be funded as a part of normal highway arterial and street construction. Certainly formulation of directions for long-range financing is an element here that should be fed back into the short range plan so that early success can be built on in the long term.

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As transit becomes a primary player in the commuting market under the long-range plan rather than a supplementary one as at present, higher fares (again, following the market-based concept) would appear to be feasible. Much of the growth of transit service is likely to occur in peak-hour service and as such, it would seem reasonable to predict, based on these proportionate changes in ridership mix, that the fare box recovery ratio would rise to a service, from a convenience and comfort point-of-view, will remain very competitive. While it is odd to talk about commute trips as fast as or faster than a minimum of 30-40% during this term. This presumes, however, that transit private car, especially in the financing portion of a long-term transit plan, it is crucial that this qualitative element remain at this high level if the entire plan, including fare projections, is to come to pass.

### **8. Park-and-Ride**

Kitsap Transit's Long-Range Plan calls for a number of major park-and-ride facilities located throughout Kitsap County. Kitsap Transit formulated this plan assuming that in the future, a greater balance between transit and the private automobile will occur. One of the ways this balance will be achieved is through an increase of combined commute trips where riders use their cars to travel to a park-and-ride lot. Currently, Kitsap Transit has approximately 1,300 available park-and-ride spaces throughout the County.

Kitsap Transit's park-and-ride system plan combines small neighborhood lots with collector lots in providing spaces. The smaller neighborhood park-and-ride lots (20 to 50 spaces) are distributed throughout the County; specific locations are not know at this time.

The major collector lots would contain between 300-400 parking stalls for vehicles. These lots are anticipated to be located at Kounty Korner outside of Kingston, in West Bremerton and East Bremerton (McWilliams), and outside of Southworth at the Harper Evangelical Church and at locations outside of Poulsbo. A collector lot is also anticipated for the Silverdale and Gorst areas in the distant future which will be designed more to capitalize the beginnings of HOV corridors rather than serve as an alternate or remote terminal.

For the remote terminal location at the church outside of Southworth, a co-op development or shared use appears appropriate. However, Kitsap Transit does not have plans at this time to actively seek any level of commercial development as a shared use or joint development feature for these sites, with the possible exception of child care services, which have been indicated as a high priority by a number of Kitsap Transit's current and potential riders.

Although the combination of highly distributed neighborhood co-op small lots combined with collector lots will shift to partly off-peak trip accommodation over time, it does not include the projected increases of commuters arriving from adjacent counties (Pierce, Mason, Jefferson, and Clallam Counties). Kitsap Transit is hoping that the adjacent Kitsap Peninsula transit systems and the PRTPO will plan and provide for the development of a distributed park-and-ride lot system.

## **E. Greenways (Nonmotorized Element)**

As stated earlier, the Kitsap County Greenways Plan was created to address the needs of nonmotorized users in regards to transportation and recreational uses and scenic and natural resources. From the 20-Year Priority Array in the Bicycle Facilities Plan, there are 26 high priority projects along 81.2 miles of county road. There are also 15 medium priority projects for a length of 54.4 miles along county roads. Thirteen low priority projects were also identified in the 20-year plan for a total length of 44.2 miles. There are 43 additional projects that have not been prioritized for a length of 100.2 miles along county roads.

A more detailed description of these nonmotorized improvements is found in the Kitsap County Greenways Plan.

## **F. Commute Trip Reduction Plan**

The Commute Trip Reduction (CTR) Act was passed in 1992 and requires counties with a population over 150,000 and cities within those counties with major employers develop a CTR plan that would reduce the number of single vehicle occupants (SOVs) and encourage alternative transportation modes during peak hours. Employers affected by the Act include those with 100 or more employees traveling to work between 6:00 and 9:00 a.m.

Kitsap Transit monitors the CTR program in Kitsap County and is aggressively committed to assisting the efforts of major employers' to meet their goals. Several successful services offered to the community have been established through the CTR program. "Smart Commuters" (registered vanpool or carpool riders, transit riders, walkers, and bicyclists) are offered special discounts off of merchandise and services from over 100 local merchants, and the Guaranteed Ride Home Program which promises a free ride home in case of an emergency. The Carpool Registration Program insures preferential parking spaces at work.

## **G. Ferry System Plan**

The Washington State Ferries System is currently in the process of developing a long range systems plan. Once this plan is developed, recommendations to terminal and land-side access needs, auto and passenger-only ferry services will be incorporated into and coordinated with the Kitsap County Transportation Element. Throughout the development of the WSF Long Range Systems Plan, Kitsap County staff will be involved in the review and provide input into the planning process.

## **H. State Facilities**

In identifying transportation needs, the Transportation Element of the Kitsap County Comprehensive Plan has addressed future needs on both State highways and the WSF routes and services. While definite, detailed strategies to address the transportation deficiencies have not yet been developed, WSDOT is committed to addressing these deficient sections of state highway within the 20-year period of the plan.

As a starting point for improvements to state facilities in Kitsap County to meet the long-range mobility needs of its residents, two sources were reviewed for information; the 1995 Metropolitan Transportation Plan (MTP) prepared by the Puget Sound Regional Council (PSRC), and the WSDOT's State Highways

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System Plan, their 20 year plan for state highway facilities. WSDOT's Plan identifies 22 projects which will be implemented over the next 20 years if the underlying revenue assumptions associated with the Plan prove to be accurate. These projects are identified in **Table TR-29**.

Additional mobility needs were included in PSRC's Metropolitan Transportation Plan through year 2020 which increased the state's total needs to \$238 million. Since this time frame is beyond the target year for the Comprehensive Plan, these needs were not included in the Transportation Element.

**Table TR-30** summarizes the transportation deficiencies that were identified by the long-range transportation assessment completed by Kitsap County based upon the recommended level of service standards. To adequately address the long-range transportation needs of Kitsap County, appropriate improvements were assumed in the travel demand modeling process from previous findings and recommendations of the Kitsap County Transportation Plan Citizen Advisory Members, the Kitsap County Transportation Plan published in 1996, the 1995 MTP, likely projects from WSDOT 20-Year Systems Plan that would be completed by 2012, and the recent long-range travel demand forecasting efforts with the recently approved land use element from the Planning Commission Recommended Draft Plan dated April 1998.

A total of 47 specific transportation *needs* were identified during the development of the Kitsap County Transportation Element to WSDOT facilities in Kitsap County. These needs have been identified to address deficient facilities, based upon Kitsap County's recommended transportation level of service standards, citizen input, and through coordination with local and regional agencies.

### **1. New Linkages**

Through the long-range transportation planning completed during this comprehensive planning process, a number of the capacity *needs* on State facilities were identified that are likely to require the construction of new roadway linkages. These include the Port Gamble Bypass corridor along SR 104, the Bremerton-Tracyton Connector along the SR 303 corridor in Bremerton, and the Sinclair Inlet Bypass to the SR3/SR 16 freeway system at Gorst. The need for these new linkages have been identified previously in transportation planning efforts by Kitsap County to include the Citizen Advisory Committee and long-range travel modeling (i.e., capacity and congestion measures).

**Table TR-29: State Highway System Plan (1998):**

<b>Project</b>	<b>Project Limits</b>	<b>Description of Improvement</b>	<b>Total Funds (1997 \$)</b>
SR 3	Mason/Kitsap County Line to SR 16 spur at Gorst	Widen from 2/3 lanes to 4 lanes, enhanced transit, access management	\$12.77M
SR 3	Gorst USG RR Bridge 3/105 Vicinity to SR 3/SR 304 Interchange	Widen from 4 lanes to 6 lanes creating HOV lanes	\$34.80M
SR 3	SR 3/SR 304 Interchange	Widen from 4 lanes to 6 lanes creating HOV lanes, ITS, interchange improvements, enhanced transit	\$20.30M
SR 3	SR 3/SR 303 Interchange Vicinity (Waaga Way)	Interchange improvements at Waaga Way	\$5.08M
SR 3	Finn Hill Rd U-xing Vicinity to NW Thompson Rd	SR 3/305 access improvements	\$0.58M
SR 3	SR 16 spur to RR bridge	Further study - widen to 4-6 lanes	\$5.95M
SR 3	Thompson Road to Lowfall Road	Widen to 4 lanes	\$11.68M
SR 16	SR 160 (Sedgwick Rd) Vicinity to SR 166	Widen from 4 lanes to 6 lanes creating HOV lanes, I/C improvements, TDM, ITS, enhanced transit.	\$39.12M
SR 16	SR 166 to SR 3	Widen from 6 lanes to 8 lanes creating HOV lanes and access management	\$20.60M
SR 104	SR 307 to Lindvog Rd	Widen from 2 lanes to 4/5 lanes, access management.	\$15.56M
SR 104	Lindvog Rd to Kingston Ferry and Couplet	Construct additional lanes and signals per SR 104	\$5.88M
SR 104	SR 101 to Kingston Ferry and Couplet	Further study pending MIS/EIS	\$0.11M
SR 104	Lindvog Rd to Kingston Ferry and Couplet	Further study pending regional and local discussion.	\$0.50M
SR 160	SR 160/SR 16 Interchange to Bethel Rd Vicinity	Widen from 2 lanes to 4 lanes, widen bridge 160/5 at interchange to 5/6 lanes.	\$11.56M
SR 166	Blackjack Creek to Bethell Burley Road	Further study - widen to 4-5 lanes	\$4.37M
SR 303	SR 304 to SR 3	Further study, MIS	\$0.40M
SR 304	SR 3 to Bremerton Ferry landing	Implement preferred alternative roadway improvements	\$8.40M
SR 305	Winslow Ferry Dock to end of Agate Pass Bridge	TSM/TDM treatments, intersection improvements	\$0.75M
SR 305	Winslow Ferry Dock to end of Agate Pass Bridge	Construct Core Area Bypass route	\$1.80M
SR 305	Poulsbo South corporate Limit Vicinity to Bond Road	Widen from 2/3 lanes to 4/5 lanes creating HOV lanes.	\$8.04M
SR 307	SR 305 to SR 104	Widen from 2 lanes to 4 lanes, access control	\$9.29M
SR 310	SR 3 to SR 304	Access management, TSM/TDM measures	\$2.06M
<b>TOTALS</b>			<b>\$219.6</b>

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In addition to these “linkage needs”, a regional discussion should be initiated to identify the most appropriate implementation of general arterial access and other transportation infrastructure needs between Central Kitsap County and the Seattle Urban Center. These could include the development of a regional ferry terminal and associated land-side access and roadway needs.

**Table TR-30: 2012 Transportation Needs on State Facilities in Kitsap County**

<b>Facility</b>	<b>From</b>	<b>To</b>	<b>Project Type</b>	<b>Project Code</b>	
SR 104	s/o Port Gamble	SR 104/SR 3 Wye	C/L	DOT-N	1
SR 104	Jefferson Co. Line	SR 3	C; NM	DOT-N	2
SR 3	SR 305 (53.00)	Scenic Dr. NE (58.00)	O/S	DOT-N	3
SR 3	SR 305 (53.01)	SR 104 (60.02)	C	DOT-N	4
SR 3	Bridge Way (59.84)	SR 104 (60.02)	NM	DOT-N	5
SR 104	SR 3 (15.54)	Hansville Rd. (22.00)	C	DOT-N	6
SR 104	Hansville Rd. (22.00)	Kingston FT (24.45)	C	DOT-N	7
SR 307(Bond Rd.)	SR 305	SR 104	C	DOT-N	8
SR 305	@ SR 307 (Bond Rd.)		O/S	DOT-N	9
SR 104	Kingston	Edmonds	C	DOT-N	10
SR 305	Bainbridge Island	Seattle	C	DOT-N	11
SR 305	Bainbridge Island	SR 3	C	DOT-N	12
SR 104	@ Georges Corner		C	DOT-N	13
SR 3	Luoto Rd. (SR 308)	SR 305	C	DOT-N	14
SR 3	At Kitsap Mall Blvd.		C; O/S	DOT-C	1
SR 303	Warren Bridge		C	DOT-C	2
SR 3	Newberry Hill Rd.	SR 308	S	DOT-C	3
SR 304	@ Manette Bridge		O/S; NM	DOT-C	4
SR 3	Newberry Hill Rd.	SR 304 (MP)	C	DOT-C	5
SR 3	Chico Way (40.40)	SR 304 (MP)	O/S	DOT-C	6
SR 303	6th St. (0.26)	Waaga Way (5.43)	O/S	DOT-C	7
SR 303	Riddell Rd. (3.00)	McWilliams Rd. (5.00)	O/S	DOT-C	8
SR 303	6.50	7.50	O/S	DOT-C	9
SR 303	8.50	8.73	C	DOT-C	10
SR 304	SR 3 (0.00)	Bremerton FT (3.51)	C; O/S	DOT-C	11
SR310(KitsapWy)	SR 3	SR 304	O/S	DOT-C	12
SR 3	SR 303		C/I	DOT-C	13
SR 16	@ Burley Ollala Rd.		C	DOT-S	1
SR 16	At Anderson Hill Rd.		O/S	DOT-S	2
SR 3	Division Rd. (33.72)	SR 16	C	DOT-S	3
SR 3	SR 304 IC (36.71)Chico	Chico Way (40.43)	C	DOT-S	4
SR 16	Tremont St	SR 3/SR 304 IC	C	DOT-S	5
SR 3	Mason Co. Line	Lk Flora Rd	O/S	DOT-S	6
SR 3	Lk. Flora Rd. (28.23)	Division Rd. (33.72)	C	DOT-S	7
SR 3	Imperial Way (31.00)	SR 16 IC (34.50)	O/S	DOT-S	8

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SR 3	Riverside St. (34.17)	Sam Christopherson (34.31)	NM	DOT-S	9
SR 16	Pierce Co. LineSR 302 Spur	Bethel Rd. (23.80)	C	DOT-S	10
SR 16	Bethel Rd. (23.80)	Bay St. (28.16)Tremont	C	DOT-S	11
SR 16	Bay St. (28.16)	SR 3 IC (29.19)	C	DOT-S	12
SR 16	@ Sedgwick Rd.		O/S	DOT-S	13
SR 16	Sedgwick Rd. (26.00)	SR 3 IC (29.00)	O/S	DOT-S	14
SR 16	Tremont St. (26.72)	SR 3 IC (29.03)	NM	DOT-S	15
SR 166	SR 16 (0.00)	Mile Hill Road (4.95)	O/S, C	DOT-S	16
SR 160	SR 16 (0.00)	Jackson Ave. (4.50)	O/S, C	DOT-S	17
SR 16	SR 160	SR 3	C	DOT-S	18
SR 16	@ Mullenix Rd.		C	DOT-S	19
SR160(Sedgwick)	SR 16	Jackson Ave.	C	DOT-S	20

Project Types: C = Capacity,  
 L = Linkage,  
 O/S = Operations/Safety,  
 NM = Nonmotorized, S = Study, I = New Interchange

## **V. FINANCING AND IMPLEMENTATION OF THE TRANSPORTATION ELEMENT**

### **A. Introduction**

Kitsap County's ability to pay for the potential solutions recommended in the transportation Plan is a driving force in its implementation. Without adequate funding, the capital projects, programs, and policies that make up this plan will remain ideas, and will not become a reality. As discussed in the Capital Facilities Plan of the Comprehensive Plan, a funded and concurrent transportation system is required by GMA for the first six years of the planning period. Beyond this time frame, a "funded" list of potential transportation improvements is not required. However, costs of proposed transportation solutions, in addition to financing and implementation strategies, are keys to the success of the 2012 Comprehensive Plan and are summarized in this section.

#### **1. Focus on the County's Responsibility**

Kitsap County is responsible only for a portion of the overall system of transportation facilities and services in the county. The U.S. government, the State of Washington, the Cities of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo all own, operate and maintain significant portions of the transportation system that serve travel into, out of, within and through the county.

The wide range of improvements and programs listed in this element to increase mobility throughout Kitsap County affect many facilities and services administered by other jurisdictions. The costs of the recommendations may be split between several jurisdictions, but the analysis of what could potentially be paid for is limited to Kitsap County's portion. Each of the other jurisdictions are invited to adopt the recommendations of this plan as their own, and are encouraged to find ways to implement them in support of Kitsap County and their GMA plans.

### **B. Financial Analysis and Forecasts**

Transportation funding constitutes a major expenditure for Kitsap County. Transportation costs have grown from \$12.5 million in 1985 to almost \$18.6 million in 1992, an increase of about 49 percent. During this same period, Kitsap County's population grew about 23 percent.

#### **1. Revenue Sources - Historical Trends**

Kitsap County collects transportation revenue from a variety of sources. The most prominent sources are the unincorporated area road levy (property tax) and the state gas tax allocation to the County. **Figure TR-27** shows where and how much transportation-related revenues came from in 1992. In that year, the road levy made up about 41 percent of all transportation revenues received by the County. Kitsap County assessed \$1.65 per thousand dollar value on real property in unincorporated Kitsap County in that year, generating almost \$8 million in revenues. Between 1983 and 1992, the county road levy rate averaged \$1.36 per thousand dollars value.

Kitsap County's allocation from the state motor vehicle fuel tax ("gas tax") made up another 22 percent of transportation revenues in 1992. This translated into almost \$4 million in revenue for the County. Federal and state transportation grants made up about four percent of the County's transportation revenues that same year, totaling over one million dollars. Together, special assessments on road improvement districts (RIDs), investment interest, and over 20 other small county revenue sources generated the remaining 33 percent of transportation related revenues in 1992.

**2. Transportation Expenditures (Operations, Maintenance, Construction)**

Figure TR-28 shows how the County spent its transportation funds in 1992. Operating and maintaining the County's transportation facilities required almost a third of the annual transportation budget. Capital construction and administration each represent between a fifth and a quarter of the budget. Remaining costs were distributed between debt service (interest on loans, for example) and street expenditures such as facilities maintenance and contract work. In recent years, the expenditures for maintenance and operations have grown at a faster rate than spending on capital construction; maintenance and operations costs rose an average of 6.4 percent per year between 1985 and 1992, while during the same period, construction spending only grew at an average rate of 2.8 percent.

**C. Project Implementation**

The recommended transportation element includes 39 improvement projects to be implemented over 20 years, at a total estimated cost of \$118 million in 1997 dollars. These projects were distributed throughout the county as follows:

- # North County Sub-Area: 10 projects at a total estimated cost of \$37.1 million;
- # Central County Sub-Area: 19 projects at a total estimated cost of \$50.7 million;
- # South County Sub-Area: 10 projects at a total estimated cost of \$30.1 million.

Table TR-31 lists each project with its estimated costs allocated by urban and rural areas of the county. Project costs were estimated using cost factors approved by the Kitsap county Department of Public Works. Detailed breakdowns of project costs are available from the Public Works Department. Approximately 60 percent, 97 percent, and 56 percent of total transportation funds allocated by the plan are expected to be expended in urban areas in North, Central, And South county subareas, respectively. Countywide, 75 percent of all transportation dollars would be invested into urban areas and 25 percent into rural areas of Kitsap County.

Figure TR-27: 1992 Kitsap County Transportation Revenues

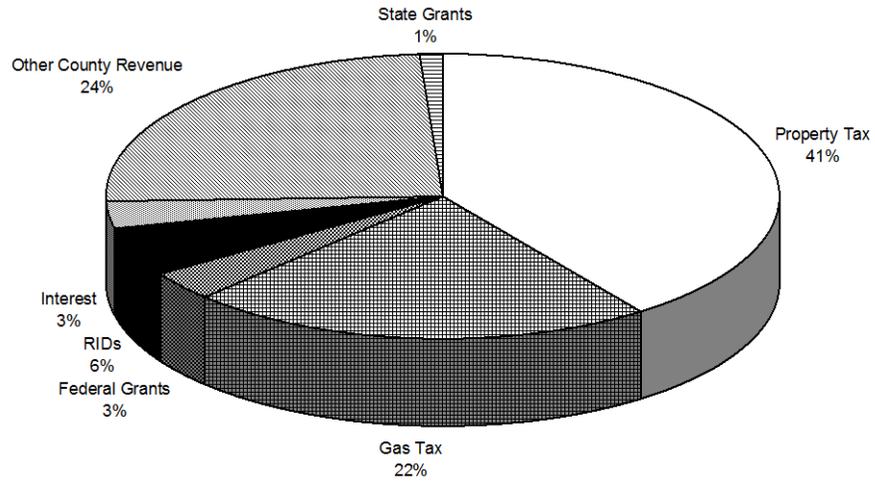
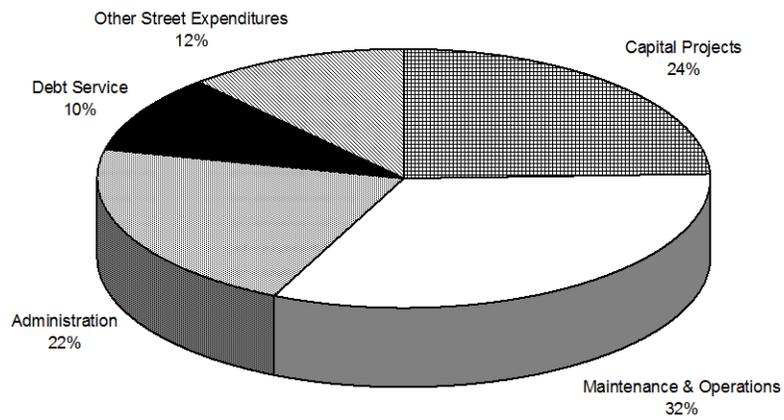


Figure TR-28: 1992 Kitsap County Transportation Expenditures



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**Table TR-31: Kitsap county 20-Year Project Costs, Urban vs Rural**

Facility	From	To	Code	Estimated	Percent by Area		Cost by Area	
					Urban	Rural	Urban	Rural
Viking Way	SR-308	SR 305	N 1	\$9,571,731	70%	30%	\$6,700,21	\$2,871,51
Lindvog Rd.	SR-104	W. Kingston Rd.	N 2	\$1,823,700	100%	0%	\$1,823,70	\$0
W. First St.	SR-104	W. Kingston Rd.	N 3	\$563,713	100%	0%	\$563,713	\$0
South Kingston-Miller Bay Collector	S. Kingston Rd.	Miller Bay Rd.	N 4	\$3,920,293	0%	100%	\$0	\$3,920,293
Suquamish Bypass	Totten Rd.	Columbia St.	N 5	\$2,510,646	50%	50%	\$1,255,32	\$1,255,32
Hansville Bypass	Hansville Rd.	Hood Canal Dr.	N 6	\$7,780,000	0%	100%	\$0	\$7,780,00
Stottlemeyer Rd	Lincoln Rd	Gunderson Rd	N 7	\$1,807,508	0%	100%	\$0	\$1,807,50
Hansville Rd	SR-104	Eglon Rd	N 8	\$3,775,140	0%	100%	\$0	\$3,775,14
Silverdale Way	Schold Rd	Mt View	N 9	\$2,879,485	100%	0%	\$2,879,48	\$0
McWilliams Road	Old Military Rd	Sunset Ave	N 10	\$2,431,770	100%	0%	\$2,431,77	\$0
		<b>North County Subtotal</b>		<b>\$37,063,986</b>				
Waaga Way Ext.	Clear Cr. Rd.	Old Frontier Rd.	C 1	\$1,151,086	100%	0%	\$1,151,08	\$0
Perry Ave.	Riddell Rd.	McWilliams Rd.	C 2	\$2,171,860	100%	0%	\$2,171,86	\$0
Slyvan Way	SR 303	Trenton Avenue	C 3	\$2,171,860	100%	0%	\$2,171,86	\$0
Fairgrounds Rd.	Tracyton Blvd.	SR-303	C 4	\$5,879,906	100%	0%	\$5,879,90	\$0
Silverdale Way	Byron St.	Newberry Hill Rd.	C 5	\$1,259,679	100%	0%	\$1,259,67	\$0
Newberry Hill Rd.	Silverdale Way	SR-3	C 6	\$586,402	100%	0%	\$586,402	\$0
Newberry Hill Rd.	Provost Rd.	Dickey Rd.	C 7	\$4,643,900	100%	0%	\$4,643,90	\$0
Sam Christopherson Rd.	Old Belfair Valley Rd.	Werner Rd.	C 8	\$6,856,109	100%	0%	\$6,856,10	\$0
Willamette-Meridian Rd.	terminus	Newberry Hill Rd.	C 9	\$2,135,159	100%	0%	\$2,135,15	\$0
Almira Dr.	Riddell Rd.	McWilliams Rd.	C 10	\$2,171,860	100%	0%	\$2,171,86	\$0
Werner Rd.	Sam Christopherson	SR-3	C 11	\$1,628,895	100%	0%	\$1,628,89	\$0
Tracyton Blvd.	Bucklin Hill Rd.	Fairgrounds Rd.	C 12	\$737,315	100%	0%	\$737,315	\$0
North Lake Way	Seabeck Hwy.	Kitsap Way	C 13	\$2,323,890	50%	50%	\$1,161,94	\$1,161,94
Ridgetop Boulevard	Silverdale Way	Waaga Way	C 14	\$2,475,920	100%	0%	\$2,475,92	\$0
Bucklin Hill Rd.	Frontier Rd.	Silverdale Way	C 15	\$1,342,068	100%	0%	\$1,342,06	\$0
Newberry Hill Rd	SR-3	Seabeck Hwy	C 16	\$4,908,869	30%	70%	\$1,472,66	\$3,436,20
Anderson Hill Rd	SR-3	Willamette	C 17	\$3,183,291	40%	60%	\$1,273,31	\$1,909,97
Perry Avenue	Magnuson Way	Riddell Road	C 18	\$2,783,546	100%	0%	\$2,783,54	\$0
Riddell Road	Pine Road	Perry Avenue	C 19	\$2,239,893	100%	0%	\$2,239,89	\$0
		<b>Central County Subtotal</b>		<b>\$50,651,508</b>				
Bethel Road	Mile Hill Rd.	Lund Ave.	S 1	\$2,870,940	100%	0%	\$2,870,94	\$0
Caufield Lane	terminus	Bethel-Burley Rd.	S 2	\$825,307	0%	100%	\$0	\$825,307
Jackson Ave.	Sedgwick Rd.	Mile Hill Dr.	S 3	\$3,769,221	100%	0%	\$3,769,22	\$0
Burley-Belfair Connector	SR-16 @ B.O. IC	SR-3 @ Lk Flora	S 4	\$7,300,122	20%	80%	\$1,460,02	\$5,840,09
Phillips Rd.	Mullenix Rd.	Burley-Ollala Rd.	S 5	\$2,769,122	0%	0%	\$0	\$0
Mile Hill Drive	Long Lake Rd.	California Rd.	S 6	\$1,854,817	90%	10%	\$1,669,33	\$185,482
Bay Street/Beach Drive	Retsil	Alhllstrum	S 7	\$2,460,160	100%	0%	\$2,460,16	\$0
Lund Ave	Bethel Rd	Hoover St	S 8	\$345,000	100%	0%	\$345,000	\$0
Lund Ave	Hoover St	Jackson Ave	S 9	\$3,820,614	100%	0%	\$3,820,61	\$0
Glenwood Rd	Lake Flora Dr	SR-16	S 10	\$4,092,440	0%	100%	\$0	\$4,092,44
		<b>South County Subtotal</b>		<b>\$30,107,743</b>				
		<b>Grand Total</b>		<b>\$117,823,237</b>				

## **D. Transportation Revenue Forecasts**

While there can be no definitive answer as to whether enough money will be available to fund the plan, it is possible to estimate revenue trends over the next 20 years, and compare the estimated transportation improvement costs to possible revenues.

### **1. Forecasting Approach**

A great deal of uncertainty exists in forecasting revenues. Interest rates may change, a building boom or economic stagnation may effect road levy receipts, or the political climate may influence the availability of state and federal transportation funds. Without knowing what will happen to specific revenue sources in the future, more generic methods can help determine how much money the County will have available. The revenue and expenditure comparisons described here are based on a revenue forecasting methodology which assumes that any money left over after non-capital expenditures (i.e. administration, maintenance and operations, etc.) will be available for Kitsap County to spend on capital projects.

Since the rate of “real” growth (before inflation is factored) is speculative, this analysis views capital project revenue availability from a “what if” standpoint. For example, assuming that real growth in transportation revenues will average X percent between 1994 and 2012, and that the proportion of non-capital expenditures to revenue will remain constant, it is possible to estimate how much money would be left over in each year to pay for capital projects given the revenue growth assumptions.

The analysis was based on a “what-if” annual uninflated revenue growth of 4 percent per year. In contrast, average revenue growth from 1985 to 1992 was over 11 percent. However, this latter growth rate includes both “real” growth and the effects of inflation. Actual revenue growth is not apparent since annual reporting figures include the effects of inflation. For each scenario, it is assumed that the average proportion of non-capital expenditures to revenues between 1985 and 1992 (92 percent) will continue to hold true through the planning period.

The revenue and non-capital expenditure amounts that form the basis of the forecasts are the *average* amounts for each from 1985 to 1992. Using these average amounts helps to avoid overstating or understating revenues and non-capital expenditures based on a single year, as well as reducing the effects of inflation. Averaging historic revenue and non-capital expenditure trends over this period produces a more reliable “base” for generating forecasts.

### **2. 20-Year Annual Forecasts**

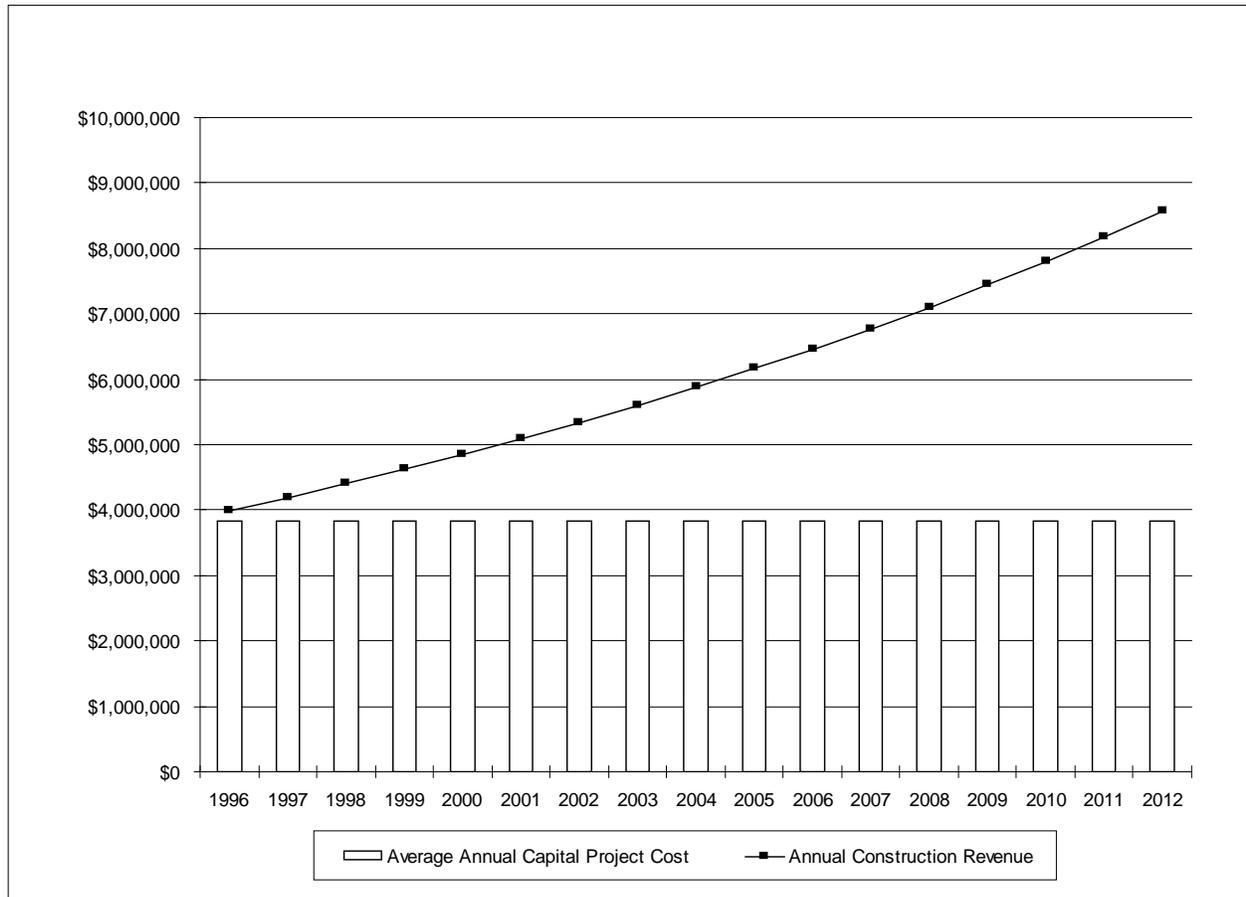
**Figure TR-29** shows the amount of revenue available in each year between 1994 and 2014 for capital projects based on 4% annual growth. It also shows how revenue estimates relate to the estimated average Kitsap County capital costs for capacity projects in each year.

### **3. Financial Feasibility**

Based on the results of the analysis, Kitsap County will have enough revenue on average to pay for its share of the capital projects. Average annual capital costs for capacity projects are estimated to be about \$5.1 million. If revenues available for capital construction activities grow at four percent

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Figure TR-29: 1996-2014 Estimated Construction Revenue Versus Capital Project Costs



per year, approximately \$6.0 million is available for funding on average.

The funding situation is complicated, however, by the annual availability of funds. Though it appears that Kitsap County will have enough revenues available on average to pay for the recommended capital projects, actual availability in any one year differs.

Based on four percent annual growth, Kitsap County would be able to pay for all of its average annual commitment only after 1998. The shortfall in fund availability until that year can be addressed largely through "backloading" the project schedule—delaying the most expensive projects until near the end of the 20-year period, when more revenue is available to pay for them in specific years.

## **E. Implementation Guidelines**

As mentioned above, it appears as though Kitsap County will have enough funds to pay for its projects, and any short fall in funds can be addressed by delaying large construction projects until the end of the 20-year period. However, if the revenue forecasts are overly optimistic, Kitsap County can access a number of transportation revenue sources to obtain additional revenue. These include existing sources that could be tapped for more money and new sources that the County does not currently use. Much of the following discussion of existing and potential revenue sources, and estimated potential receipts, is drawn from Cambridge Systematics, Inc.'s 1993 report to the Washington State Legislative Transportation Committee entitled "Task C: Transportation Capacity Demand and Evaluation of Demand Management and Revenue Tools."

### **1. Local Sources**

Existing local transportation revenue sources that could provide more money for Kitsap County are limited to the road levy. Currently unused, but authorized, sources include the commercial parking tax, local option motor vehicle fuel tax, local option vehicle license fee, impact mitigation fees, and transportation benefit districts.

#### **a. County Road Levy**

Kitsap County currently levies property tax (road levy) on real and personal property in the unincorporated area. This levy is dedicated to the road fund. In 1992, this tax was levied at the rate of \$1.65 per one thousand dollars of assessed value. The Revised Code of Washington statutorily sets the maximum allowable road levy rate for counties at \$2.25 per thousand dollars assessed value. Kitsap County could generate additional road fund revenues by raising the road levy rate. If the road levy had been assessed at the maximum rate in 1992, Kitsap County could have increased its revenues from this source by 36 percent, from an estimated \$13 million to over \$18 million.

#### **b. Commercial Parking Tax**

Counties are authorized by state law to levy a tax on commercial parking businesses in unincorporated areas based on gross proceeds, on the number of stalls, or on the rate charged for parking. There are no rate restrictions, though certain rate setting parameters are required. The proceeds of the tax can only be used on any transportation projects approved as part of both regional and county transportation plans. This tax may be approved by the County Commission, but can be repealed or modified by voter referendum. To date, no counties have imposed this tax. No estimate of potential receipts from this

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tax is available since the rate is variable.

*c. Local Option Motor Vehicle Fuel Tax*

This tax may be levied only by counties upon motor vehicle fuel sold within the county that is subject to state motor fuel tax ("gas tax"). The tax may be levied at a rate of 10 percent of the current state gas tax. Currently, the maximum rate would be 2.3 cents per gallon. Voter approval is required to impose this tax. Proceeds must be shared with cities within the county in proportion to population in each jurisdiction. Proceeds may be spent for the same purposes as the state gas tax. It may not be used for transit purposes. Potential 1993 revenues from this source, if approved, would have exceeded \$2 million. To date, no counties have imposed this tax.

*d. Local Option Motor Vehicle License Fee*

This tax may be levied only by counties, and represents a surcharge on the state vehicle registration fee. The maximum authorized fee is \$15. Proceeds are shared with cities within the county on the same proportional basis as the local option motor vehicle fuel tax. Like the commercial parking tax, this fee may be imposed by the County Commission, but is subject to repeal or modification by voter referendum. Use of proceeds is limited to projects included in both the regional and county transportation plans. To date, King, Pierce and Snohomish Counties have levied this tax. In counties with relatively high vehicle travel, and consequently high fuel consumption, this tax has the potential to generate significant additional funds. In 1993, Kitsap County could have generated an estimated additional \$1.7 million from this source, if it had been approved.

*e. Impact Mitigation Fees*

Kitsap County is willing to work with the WSDOT Highways and Ferries Divisions to develop interlocal agreements that provide a working arrangement for fund sharing on mutual projects. The agreements would address how impact fees related to local and regional growth should be applied to improvements on the State systems, in addition to the impact fees collected and applied to local roads.

The 1990 Growth Management Act (GMA) authorizes counties (and cities) to impose transportation impact mitigation fees to fund transportation improvements necessitated by the growth effects of new development. Counties must adopt an ordinance that contains an equitable formula for measuring the transportation impacts of development. Fees may be imposed on development in proportion to the level of transportation impact caused by the development. Fees can be assessed on both commercial and residential development, to be collected during the permitting process.

The GMA requires that the imposing jurisdiction have a comprehensive transportation plan that identifies transportation facilities that will be needed to accommodate future growth, based on level of service policies. The estimated costs of the needed facilities must be the basis for calculating the fees. Fees are specifically dedicated to transportation facilities being constructed by the levying jurisdiction.

Kitsap County should revise their existing impact fee ordinance and link it directly to the Capital Facilities Element in order to legally collect impact fees once the Comprehensive Plan is adopted. No estimate of potential receipts from these fees are available since fees have not yet been set. However, the estimates of proportional cost responsibility for the projects recommended in this plan. These estimates include assumptions about private sector participation in improvement funding, in part based on the assumption that impact fees will be imposed within the planning horizon of this plan.

*f. Transportation Benefit Districts*

The state legislature authorized transportation benefit districts (TBDs) in 1987. Counties (and cities) may create these districts to fund specific transportation needs. The district provides a mechanism for coordinating public and private funds on specific projects. TBDs are authorized to levy special property taxes for one year, or to fund bond issues, approved by the county's voters. Districts may also for a local improvement district (LID) to assess property owners within the LID boundaries a portion of the cost of transportation improvements. A TBD may also impose development impact fees on private development and on the subdivision of land.

A 60 percent majority of voters is required to form a TBD and levy special taxes or fund bond issues. To date, no TBD has been formed in Washington. Most of the financing options available under a TBD are already available to Kitsap County in other ways. The County regularly participates in voluntary road improvement districts (RIDs), which are LIDs within the unincorporated area. Impact fees are now authorized under the GMA, and can be applied to the whole county, not just within a TBD.

**2. State and Federal Sources**

There are two major categories of funding available to Kitsap County that are not under the County's control: federal and state grants. Federal transportation grants are now governed by the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), which re-organized where federal transportation grant funds come from, what they may be used for, and how they are obtained. State transportation grants are available from several programs, but most are funded by a common source -- the state gas tax. Kitsap County also receives formula allocations of state gas tax revenues, but must rely on the legislature to authorize additional statutory gas tax allocations. Kitsap County must compete with other jurisdictions for federal and state grant funds.

*a. Federal ISTEA Programs*

ISTEA fundamentally changed the way federal transportation dollars are allocated to states, counties and local jurisdictions. The Act's "new philosophy" includes new emphases on the following:

- # Balancing all modes of transportation, creating a truly multimodal transportation system and reducing reliance on the automobile;
- # Allowing greater flexibility in how federal grants are spent, eliminating in some cases previous restrictions on the use of road funds for public transportation, and vice versa;
- # Making regional transportation decisions, and ensuring that local decisions complement regional goals and priorities;

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- # Statewide and regional transportation planning;
- # Avoiding "wish lists" of solutions to transportation needs using clear regional and statewide prioritizing criteria, and ensuring that improvement programs are limited to what jurisdictions can afford;
- # Providing better information from transportation decisions through new information management systems;
- # Ensuring that sufficient opportunities are provided for meaningful public input during the planning process;
- # Achieving regional and statewide air quality goals; and
- # Finding new solutions to transportation problems through new and innovative technologies.

All of ISTEA's programs carry these new emphases. It will be particularly important for Kitsap County to develop strategies for addressing transportation problems that have the following attributes if the County is to be competitive for ISTEA funds in this region. Strategies should, among other things:

- # Address multiple transportation modes;
- # Include participation by multiple jurisdictions;
- # Reduce reliance on the single occupant automobile, and promote transportation demand management;
- # Improve air quality;
- # Maximize the cost effective use of innovative technologies; and
- # Minimize costs

### b. State Gas Tax and Related Programs

The state motor vehicle fuel tax ("gas tax") provides significant transportation funding for counties. From 1984 to 1990, the state tax on gasoline and other motor fuels was 18 cents per gallon. Of that amount, 22.78 percent, or about 4.1 cents, was dedicated to counties for transportation uses. In 1990, the Washington State Legislature approved a five cent per gallon increase, phased in over two years. Eleven percent, or 0.55 cents, of that increase is allocated to counties. Another 0.70 cents is allocated to programs administered by the County Rural Arterial Board (CRAB), which allocates its funds to counties on a competitive basis. Another 1.5 cents of the increase is dedicated to the Transportation Improvement Board (TIB), which also provides state grants to local jurisdictions (cities, counties, and transit agencies) on a competitive basis.

As noted, counties receive a minimum of 4.1 cents per gallon of fuel as a formula allocation, which is not adjustable. Kitsap County must compete for the other gas tax grant funds. By and large, the TIB and CRAB prioritize grant applications using criteria and priorities similar to those required under ISTEA. By applying for grants for projects that engender these priorities, Kitsap County may be able to obtain additional transportation funds on a case-by-case basis in the future.

**3. Coordinate with Other Agencies**

Many of the projects identified in the plan are located adjacent to or partially within the incorporate cities in the county. In addition, many road improvements will benefit Kitsap Transit and/or future private sector development. These other beneficiaries will bear a portion of the total project cost along with the County. Poor coordination with these jurisdictions, agencies, and developers, however, may result in the County fronting the cost of a multi-jurisdictional project for several years until the other sources acquire matching shares. Kitsap County should attempt to coordinate the construction of such projects with the needs and schedule of these other jurisdictions and agencies to further aid in the funding process. If the County can minimize the amount of funds needed to front multi-jurisdictional projects, more money will be freed for other projects in the plan.

**4. Integrate Land Use and Transportation Planning**

As it continues to develop, Kitsap County can minimize the needs for infrastructure improvements by adopting a policy that links land use development with transportation planning. When these policies are interwoven, the County will be able to identify and plan for growth in certain areas and take steps to insure that the plans for long term growth have been included in the design of the short term transportation infrastructure (for example, purchasing right-of-way in areas that are currently undeveloped but are forecast for higher intensity land use in the long term). This will reduce the cost of the infrastructure development down the road. The County should also work with the private sector so that developers' plans include a road system that is consistent with the county's plans for that area.

**5. Complete Follow-on Activities**

To make the 20-year plan a reality, Kitsap County will need to continually update its 6-year TIP with projects from the 20-year plan. To this end, Kitsap County should continue working toward adopting a Concurrency Management System (CMS), which will not only control the location and ultimate use of development, but also the timing or pace at which undeveloped areas are filled to planned densities. CMS will also aid in selecting the appropriate projects from the 20-year plan for inclusion in the 6-year TIP so that the timing and location of public facilities matches the timing and location of development.

At the same time, the County should work toward adopting other ordinances and policies that are consistent with the goals of the plan, such as updating the current impact fee ordinance and/or adopting Travel Demand Management policies. These measures not only may increase the amount and sources of project funding, but also may help reduce the overall demand on the infrastructure.

## **F. Monitoring**

Kitsap County should take steps to monitor the implementation of the system not only from a transportation needs viewpoint, but also a financial perspective. This may create problems at times, since sometimes the most pressing needs can be some of the more expensive construction items. As mentioned above, during the first few years of implementation, forecasted construction revenues will not be as great as during the later years of the plan. Particular care should be taken during this early period to avoid scheduling several high cost projects at or near the same time.

## **G. Conclusions**

The 20 year list of transportation project represents a bold but expensive effort to ensure adequate transportation mobility throughout Kitsap County. Though the revenue estimation indicates it may be able to pay for its share of the recommended improvements, Kitsap County should explore new ways to fund transportation projects. None of the assumptions about existing sources in this analysis are guaranteed. The County must remain competitive for grant funds whenever and from wherever they become available. A key part of this strategy will be to convince the cities, Kitsap Transit, the State, the private sector, and any other players to share the costs of the necessary improvements.

Finally, reducing non-capital expenditures will enable the County to spend more on capital improvements. The County should explore ways to streamline its transportation functions, and reduce expenditures as much as possible without sacrificing transportation safety, efficiency or operations.