Transportation

Regional Transportation System

Communities throughout the Thurston region have adopted comprehensive strategies to meet the mobility needs of people, goods, and services well into the future. These strategies address all aspects of the region's transportation system, including streets and roads, public transportation, rail, bicycle and pedestrian facilities, and marine and aviation facilities. To ensure the system works seamlessly, individual efforts of local agencies are guided by principles established in the 2025 Regional Transportation Plan: Guiding Our Future (TRPC, May 2004).

Vehicle Ownership Trends

The challenge of efficiently maintaining and operating a system comprised of almost 2,000 miles of roadway, dozens of transit routes and services, hundreds of miles of bike lanes and sidewalks, almost 90 miles of rail, a marine terminal, and a regional airport is compounded by trends in personal travel. While population in the region has increased at an average annual rate of 4 percent from 1970 to 2000, vehicle registration during the same time period increased by 6 percent per year.

Table VII-1 provides Federal functional classification for roads in Thurston County.

Table VII- 2 shows a historical comparison between population and registered vehicles.

Table VII-3 and **Figure VII-1** present driver and vehicle statistics.

Table VII-4 shows historical trends in cars per household between 1960, 1990, and 2000.

This is compatible with trends in household vehicle ownership. In 1960, 67 percent of households in the region owned one or fewer vehicles, by 2000 only 36 percent of households owned one or fewer vehicles. The changes between 1960 and 2000 are most pronounced in the households with three or more cars. A mere 5 percent of households had 3 or more vehicles in 1960. By 2000, 24 percent, or about 1 in 4 households, owned 3 or more vehicles.

Examining patterns in the correlation between household vehicle ownership and household size provides additional information on vehicle ownership trends. Sixty-one percent of households which do not own a vehicle are 1-person households. Likewise, the majority (65.4 percent) of 1-person households own only 1 vehicle. At the other end of the spectrum, 71.3 percent of households owning 4 or more

Table VII-5 shows data on household size by vehicles available.

vehicles are 3-or-more person households. Contrary to this trend, the majority of 3-vehicle households (35.9 percent) are actually 2-person households; they are followed closely by 4-or-more-person households (34.8 percent), with 3-person households accounting for only 24.2 percent.

Table VII-6 provides historical and forecasted Washington State vehicle miles traveled statistics.

Vehicle ownership in the region corresponds to trends in "vehicle miles traveled" at the state level. "Vehicle Miles Traveled" (VMT) is a measure of how many miles are driven, in this case, how many miles the average driver puts on his or her vehicle in the course of a year. In Washington State in 2000, the average driver put 19 percent more miles on their car daily than they did in 1980. Since 2000, the average daily mileage of each driver has decreased by over 10 percent.

Means Of Travel

Commuting Trends

Table VII-7 shows information on outbound and inbound commuters.

Tables VII-8 through **VII-10** show information on means of travel and travel time.

Outbound commuters are people who live in Thurston County and work in a different county, whereas **inbound commuters** work in Thurston County and live in a different county.

Census 2000 data on county-to-county commute flows indicate that increased driving trends are not only a result of trips taking place within Thurston County, but an increasing number of outbound and inbound commute trips as well.

In 1980, 18.6 percent of the total working residents of Thurston County commuted to employment located outside the County. By 2000 the share of outbound commuters had increased to a 26.6 percent share of the County's total working residents. Conversely, inbound commuting is growing as well. In 1980, inbound commuters made up 11.2 percent of total workers with jobs in Thurston County. By 2000, the percent of total workers with jobs in Thurston County who lived outside the County had grown to 16.7 percent.

As a share of total commuters, the percent of those who drove alone dropped slightly between 1990 and 2000, from 78.7 percent to 77.2 percent. The share of commuters who carpooled increased a bit, from a 12.1 percent share to a 12.7 percent share of commuters. Those using public transportation grew from a 1.4 percent share to a 2.2 percent share.

Census data also show that overall mean travel time to work increased from 20.7 minutes in 1990 to 24.4 minutes in 2000, an increase of 3.7 minutes. Commuters who either bicycled or walked had the shortest

mean travel time to work, 13.1 minutes. Those who drove alone had a mean travel time to work of 23.2 minutes, while those who carpooled had a travel time of 30.4 minutes. Mean travel time for workers using public transportation was 43.5 minutes.

Reducing Wasted Capacity

Because of the significant social, environmental, and financial costs associated with road building, policies in the region focus on making the existing transportation system work as well as possible before spending limited public resources on expanding it. This means reducing wasted capacity and improving operational efficiency wherever possible. This increasingly involves the use of transportation technologies, or Intelligent Transportation Systems, and travel demand management programs. Both of these efforts help communities across the region provide more transportation capacity with the same finite resources.

Travel Demand Management programs are sponsored by the Washington State Department of Transportation, Thurston Regional Planning Council, and the communities of Lacey, Olympia, Tumwater, Yelm, and Thurston County. Their goal is to decrease the number of vehicles needed for commuters to get to work, which helps postpone or even eliminate the need to make costly expansions in roadway capacity.

Table VII-11 shows data on current commute practices.

Public Transportation – Urban Area

Another important goal is to provide viable travel alternatives that help mitigate the impacts of growth in vehicular traffic, and provide higher quality transportation choices to all residents in the region. These alternatives, like public transportation, bike lanes, sidewalks, and rail, provide more people with feasible options for getting from Point A to Point B. These alternatives also improve the quality of life for neighborhoods, downtown core areas, and busy corridors linking important activity centers.

Table VII-12 shows a summary of Intercity Transit

The majority of public transportation needs in Thurston County are met by Intercity Transit. The public transit system offers a mix of programs and services to meet diverse community needs, including fixed-service routes throughout the urban area, express routes providing service connections to the central Puget Sound area, vanpools serving area commuters, and demand response “Dial-a-Lift”

services for qualified ADA recipients that are unable to use regular fixed-route buses. Intercity Transit complements these basic services with a variety of other programs including regional commuter ride-match services, employer based trip reduction program support, and a "Village Vans" program targeted to the needs of certified Work First clients.

A few years ago Intercity Transit experienced shifting needs in its transit service district when a 45 percent reduction in revenue occurred. This was a result of the state Legislature repealing the collection of local Motor Vehicle Excise Tax, an important source of revenue for public transit systems. This required Intercity Transit to significantly reduce service between 2000 and 2002. It also precipitated in 2002 a reduction of the system's service boundary. The emphasis on service then shifted to serving the more populated urbanized areas of Thurston County (Lacey, Olympia, Tumwater and Yelm). In late 2002, voters within the redrawn service district approved a local sales tax increase to help sustain, re-establish and expand Intercity Transit's service within this new district. Starting in 2003, Intercity Transit implemented a three-phase, three year strategic plan for restoring routes, increasing frequency, and providing limited but new service in areas where there was market demand. The final Phase 3 service elements were implemented in early 2006 and restored the final touches to many of the services previously reduced or cut. Overall, fixed route service hours increased by approximately 32 percent during the three years. Within the new service boundary, future service development coupled with improved service efficiency, have now become important areas of focus for the transit system.

Public Transportation – Rural and Special Needs Residents

Non-traditional providers, like social service organizations, non-profit groups, and for-profit companies meet other transportation needs. The region continues to pilot coordinated transportation models to serve rural and special needs residents. The Thurston Regional Planning Council and the Thurston County Human Services Transportation Forum developed the Rural and Tribal Transportation Program (R/T) for residents of Rochester, Tenino, and Bucoda, Rainier, Yelm and other rural portions of the County. R/T also serves the Nisqually Indian Tribe, the Confederated Tribes of the Chehalis Reservation and connects to Intercity Transit and Twin Transit. Clark County's Community Action Agency provides regular "rural" van service

between Vancouver, Centralia and Tumwater with connections to local transit service. Intercity Transit provides connections with other regional transit providers including Grays Harbor Transit, Mason Transit, Pierce Transit and Sound Transit (bus and commuter rail).

Traffic Count Estimates

As the region's population continues to grow, more people will travel state, county, and municipal roads to work, drop children off at school, go shopping, or fulfill other activities of daily living. Traffic count estimates show the number of vehicles for each direction of travel for a given segment of road. The Regional Travel Demand Model, from which the estimates are derived, indicates that over time, our public roadways will continue to see an increase in the number of vehicles on all types of roads, from highways to local neighborhood streets. More information about future travel conditions is available in the 2025 Regional Transportation Plan: Guiding our Future (TRPC, May 2004).

Maps 16 and 17 show the 2006 average weekday afternoon peak hour traffic volumes (number of cars) at selected arterials and major collectors.

Freight Transportation

Transporting and managing freight represented a 9 trillion dollar U.S. industry in 1998, expected to grow to 30 trillion dollars by 2020. Much of this traffic is managed through or near ports. Thurston County is situated on the main truck and rail corridors serving the Pacific Northwest complex of mega ports, Vancouver, B.C., Seattle, Tacoma, and Portland/Vancouver, as well as on the primary West Coast corridor additionally serving Los Angeles, Long Beach and a host of other ports, including the Port of Olympia. Freight shipments to, from, and within Washington State accounted for 477 million tons of goods in 2002, an amount projected to more than double to 976 million tons by 2035. Much of that freight will move through Thurston County.

Tables VII-14 and **VII-15** show data on freight transportation.

The largest volumes of freight moved in Washington State include lumber/wood products, nonmetallic minerals, farm products, food/kindred products, and general freight. While volumes are projected to grow in all these categories, food/kindred products and general freight will see the largest increases, projected to more than double by 2020. The highest value products include transportation equipment, food/kindred products, general freight, machinery, and chemicals/allied products. The value of these products is expected to at least double, quadrupling in some cases by 2020. Primarily, these are products destined for domestic markets.

Industrial Activity

Freight transportation is closely associated with industrial activity, especially manufacturing. A host of industries manufacture products in Thurston County and several major distribution hubs have opened here along the Interstate 5 corridor. Some of the larger manufacturing employers include bottling, box and can plants, plastic products, concrete, windows, and lumber. These and many other small- and medium-sized industries contribute to locally generated freight flows. The region has several manufacturing hubs, such as Olympia's Mottman Industrial Park, the Hawks Prairie area in Lacey, and the Port's marine terminal, airport and New Market Industrial Campus. The local freight industry itself, especially warehousing, trucking, marine and air cargo, has been growing steadily for many years. The new distribution centers have brought additional employment to Thurston County's freight sector. This, however, is balanced by the loss in recent years of some of the larger manufacturing employers, such as the brewery in Tumwater.

Truck

About two thirds of all freight shipped to, from, and within Washington moves by truck, an amount that is expected to grow 105 percent between 2002 and 2035, with the value of those goods growing over 200 percent. While Interstate 90, U.S. 395, and State Route 12 will carry some of the volumes, the majority will be transported on Interstate 5 between Everett and Vancouver, WA, passing through Thurston County and the Lacey-Olympia-Tumwater metropolitan area. The number of local freight transportation employees continues to steadily increase as well. Truck traffic will have a continuing impact on the region's transportation system. For example, in 2001, trucks accounted for 26 percent of all southbound traffic leaving Thurston County on Interstate 5 during the day (6 a.m. to 6 p.m.), and 35 percent at night (6 p.m. to 6 a.m.).

Rail

Washington's main north/south rail line runs through Thurston County and the small rural jurisdictions of Tenino and Bucoda. The primary freight rail flows connect Chicago, IL and Omaha, NE with Western Washington, traveling along the Columbia River and the north/south Burlington Northern Santa Fe (BNSF) mainline to/from Puget Sound. Rail freight in Washington State is forecast to nearly double in volume

by 2035 and increase in value by 43 percent. This means Thurston County will see a significant increase in train traffic moving through the region.

There are nearly 90 miles of rail lines throughout Thurston County. Active rail lines include portions of the Tacoma Rail Mountain Division, BNSF St. Clair Line, the Puget Sound and Pacific Railroad, Union Pacific and the BNSF mainline. These make important intermodal connections at the Port of Tacoma and in Centralia. The Union Pacific branch line connects the Port of Olympia with the BNSF mainline as well as connecting to another branch of BNSF serving Olympia's Mottman Industrial Area. The Port of Olympia's Marine Terminal is served by the Tri-City and Olympia Railroad operating on Union Pacific rail. The Yelm Prairie Line, owned by the City of Yelm, connects to their industrial area, although this portion of the Prairie Line is currently inactive.

Thurston County was previously traced with a web of small logging railroads as well as now defunct lines originally owned by the national railroads. Some of these, most notably the Chehalis Western, Yelm-to-Tenino (Prairie Line), Lacey and Olympia Woodland (St. Clair), and Gate-to-Belmore, are converted to, or held for, pedestrian and bicycle trails.

Table VII-13 shows data on rail rights-of-way in Thurston County.

Marine

The citizens of Thurston County created the Port of Olympia in 1922. The Port District's boundaries are countywide and its primary holdings are located in Tumwater and Olympia with airport and marine terminals.

The marine terminal is located on the Port Peninsula in Budd Inlet. It provides a full range of services including breakbulk, roll-on/roll-off, bulk, forest products, and containerized cargo handling. This multimodal facility serves ocean-going and short-sea vessel, truck, and rail cargos. The marine terminal's focus is specialized services for its customers. The Port of Olympia plays a strategic role in serving the Puget Sound freight market. Its specialty services complement those provided on Puget Sound in Seattle and Tacoma, and will become increasingly important as mega port containerized demand grows, squeezing out specialized services for all but the super carriers at these super ports. The marine terminal can accommodate up to three vessels at one time. Historically, primary cargoes included logs, lumber,

and food products. This has expanded in recent years to include a wide variety of bulk commodities and equipment. The Port's marine terminal also supports the deployment of equipment and supplies from Fort Lewis, as well as military installations from California and other states.

Aviation

For more information on the Port of Olympia, visit their website at www.portolympia.com. More information is included in the Economic Development section of the Economics chapter.

The Olympia Airport is among the first public airports in the country. It was created in 1927, with the Port of Olympia assuming ownership in 1963. Located near Interstate 5 in Tumwater, the airport's facilities include aircraft service operations, hangars, corporate offices, and a public terminal. Tower-controlled and full-instrument approach provides access on two runways for corporate, commercial and recreational users, including light freight aircraft. The 100-acre industrial aviation district at the airport supports air-oriented manufacturing and warehousing.

Near the airport, the Port's New Market Industrial Campus offers over 500 acres of commercial, corporate, mixed and warehousing, distribution and light industrial uses, with good access to Tumwater Boulevard and Interstate 5. While still developing, the area is home to a variety of distribution, manufacturing, service, lodging and commercial/retail businesses, some of which rely on aviation access.

Table VII-1
Federal Functional Classification of Roads in Thurston County, 2005

Jurisdiction	Miles of Classified Roads or Streets		
	Classified Roads o	Arterial	Collector
Bucoda	0.00	0.00	1.18
Lacey	8.88	27.07	4.68
Olympia	17.67	38.52	22.30
Rainier	0.00	1.27	2.02
Tenino	0.00	1.97	2.71
Tumwater	12.61	15.05	9.80
Yelm	0.00	3.11	3.53
Unincorporated County	50.59	134.22	311.92
County Total	**89.75**	**221.21**	**358.14**

Source: TRPC, 2005.

Explanations: Federal Functional Classification of roads reflects established criteria concerning traffic volume, adjacent land uses, proximity of additional roads, etc. It includes all National Highway System routes as well as any other facilities considered part of the regional transportation system. It does not include local access streets or roads, which account for the vast majority of facilities. Numbers reflect center-line miles.

Table VII-2
Trends in Population Compared to Vehicle Registration Thurston County, 1970-2000

Year	Population		Registered Vehicles	
	Count	Avg. Annual Rate of Change	Count	Avg. Annual Rate of Change
1970	76,890	-	42,948	-
1980	124,264	4.9%	119,479	10.8%
1990	161,238	2.6%	173,118	3.8%
2000	207,355	2.5%	238,830	3.3%
Thirty Year Change	130,465	3.4%	195,882	5.9%

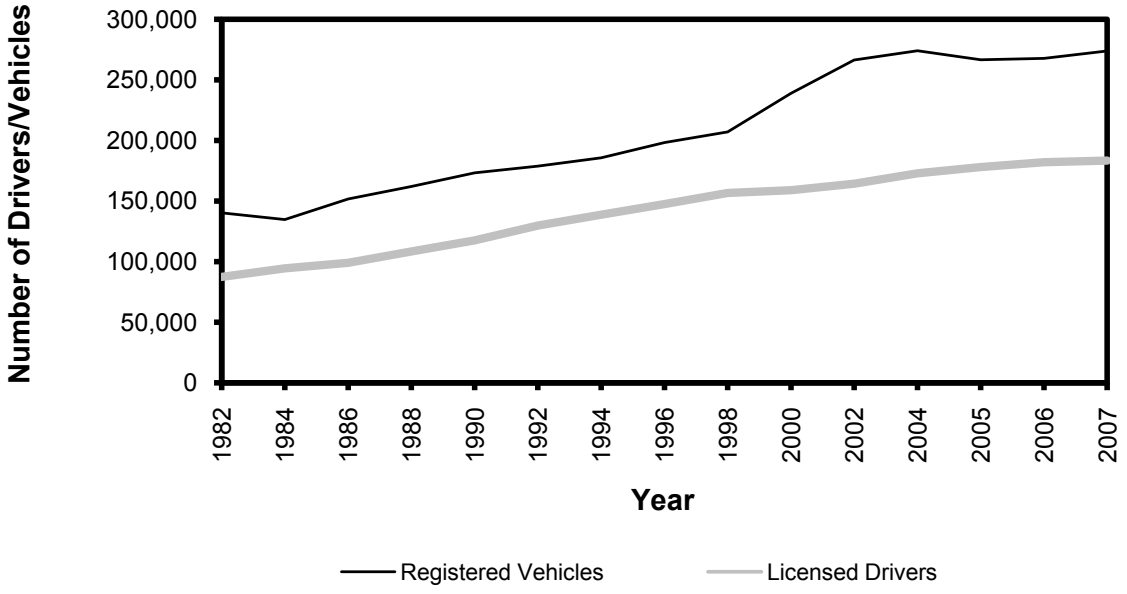
Sources: U.S. Bureau of the Census; Washington State Department of Licensing; TRPC.

Table VII-3
Driver and Vehicle Statistics Thurston County, 1980, 1990, 2000, 2004-2007

Registered Vehicles	1980	1990	2000	2004	2005	2006	2007
Passenger	74,054	104,211	145,860	163,196	156,735	156,059	159,030
Trucks	24,885	40,989	55,865	63,091	61,421	52,225	53,037
Misc. (including recreation)	10,847	13,169	18,142	23,775	23,615	24,736	25,517
Trailers	9,499	14,721	18,819	23,649	22,639	23,548	24,219
Other	194	28	209	265	2,130	11,118	11,962
Total Registered Vehicles	**119,479**	**173,118**	**238,895**	**273,976**	**266,540**	**267,686**	**273,765**
Licensed Drivers	76,628	117,464	158,858	172,793	178,094	182,079	183,380
Vehicles Per Driver	1.56	1.47	1.50	1.59	1.50	1.47	1.49

Source: Washington State Department of Licensing.
Explanations: Data is from the fiscal year.

Figure VII-1
Driver and Vehicle Trends in Thurston County, 1982-2007



Sources: Department of Licensing; TRPC.
Explanations: See Table VII-3 for supporting data.

Table VII-4
Automobile Trends Per Household
Thurston County, 1960, 1990, and 2000

Cars Per Household	1960	1990	2000
None	13.3%	5.6%	6.3%
1	53.3%	30.0%	29.8%
2	28.4%	40.8%	40.3%
3+	5.0%	23.6%	23.6%
Mean	--	1.9	1.9

Source: U.S. Bureau of the Census.

Table VII-5
Household Size by Vehicles Available
Thurston County, 2000

Household Size	Mean vehicles per household	Vehicles available 0	1	2	3	4+	Total households
1-person household	**1.1**	**3,160**	**13,385**	**3,005**	**715**	**190**	**20,455**
Percent of 1-person households	--	15.4%	65.4%	14.7%	3.5%	0.9%	100%
2-person household	**2.0**	**1,015**	**6,255**	**15,470**	**4,985**	**1,360**	**29,085**
Percent of 2-person households	--	3.5%	21.5%	53.2%	17.1%	4.7%	100%
3-person household	**2.3**	**485**	**2,440**	**5,990**	**3,365**	**1,360**	**13,645**
Percent of 3-person households	--	3.6%	17.9%	43.9%	24.7%	10.0%	100%
4-or-more-person household	**2.4**	**485**	**2,090**	**8,570**	**4,830**	**2,505**	**18,480**
Percent of 4-or-more-person households	--	2.6%	11.3%	46.4%	26.1%	13.6%	100%
Total households	**1.9**	**5,145**	**24,170**	**33,040**	**13,895**	**5,415**	**81,665**
Percent of total households	--	6.3%	29.6%	40.5%	17.0%	6.6%	100%

Source: U.S. Census Bureau, Census 2000.

Table VII-6
Washington State Vehicle Miles Traveled Statistics
Fiscal Years 1980-2025

Washington Annual Statistics	Estimate											Forecast	
	1980	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2010	2025
Vehicle Registrations	3,092,000	4,219,000	5,195,000	5,256,000	5,422,000	5,479,000	5,645,000	5,720,000	5,832,000	5,978,000	6,160,000	6,430,000	8,200,000
Licensed Drivers	2,663,000	3,377,000	4,155,000	4,238,000	4,381,000	4,407,000	4,505,000	4,682,000	4,791,000	4,886,000	4,960,000	5,110,000	6,110,000
Vehicles Per Driver	1.16	1.25	1.25	1.24	1.24	1.24	1.25	1.22	1.22	1.22	1.24	1.26	1.34
Net Highway Use in Millions of Gallons[1]	2,087	2,568	3,140	3,148	3,142	3,198	3,266	3,237	3,282	3,284	3,253	3,348	4,452
Gallons Fuel/Vehicle	675	609	604	599	579	584	579	566	563	549	528	520	543
Gallons Fuel/Driver	784	761	756	743	717	726	725	691	685	672	656	655	728
Avg Miles/Gallon	13.78	17.11	16.98	17.10	17.25	17.16	16.94	17.17	17.06	17.07	17.22	17.32	17.95
Vehicle Miles (Billions)	28.77	43.93	53.32	53.83	54.20	54.89	55.33	55.58	55.99	56.06	56.01	58.01	79.90
Avg Annual Miles/Vehicle	9,303	10,413	10,264	10,242	9,997	10,018	9,801	9,717	9,601	9,377	9,090	9,017	9,746
Avg Annual Miles/Driver	10,803	13,011	12,834	12,702	12,371	12,454	12,283	11,872	11,687	11,474	11,292	11,350	13,069
Avg Daily Miles/Driver	29.52	35.65	35.07	34.80	33.89	34.12	33.56	32.53	32.02	31.44	30.94	31.10	35.81

Source: Washington State Department of Transportation, "Forecast of Fuel, Vehicles, and Related Data Through 2025, Forecast June 2008."

Explanation: Motorized vehicle registratio

[1]Net Highway Use Consumption is gross fuel consumption with non-highway refunds and transfers subtracted out.

Table VII-7
Outbound and Inbound Commuters, Thurston County, 1960-2000

Outbound Commuters[1]										
County of Workplace	**1960**		**1970**		**1980**		**1990**		**2000**	
Pierce	1,937	62.9%	1,975	53.1%	3,768	38.6%	8,526	52.3%	14,352	53.3%
Lewis	331	10.7%	702	18.9%	1,950	20.0%	2,610	16.0%	2,843	10.6%
King	155	5.0%	359	9.7%	812	8.3%	2,064	12.7%	5,350	19.9%
Mason	127	4.1%	243	6.5%	717	7.4%	1,086	6.7%	1,597	5.9%
Grays Harbor	102	3.3%	67	1.8%	1,651	16.9%	683	4.2%	951	3.5%
Kitsap	12	0.4%	23	0.6%	40	0.4%	180	1.1%	267	1.0%
Snohomish	22	0.7%	21	0.6%	38	0.4%	172	1.1%	243	0.9%
Other	395	12.8%	326	8.8%	776	8.0%	974	6.0%	1,305	4.8%
Total outbound commuters	**3,081**	**100.0%**	**3,716**	**100.0%**	**9,752**	**100.0%**	**16,295**	**100.0%**	**26,908**	**100.0%**
Total working residents of Thurston County	19,326	--	27,107	--	52,411	--	75,364	--	100,986	--
Percent outbound commuters	**--**	**15.9%**	**--**	**13.7%**	**--**	**18.6%**	**--**	**21.6%**	**--**	**26.6%**

Inbound Commuters[2]										
County of Residence	**1960**		**1970**		**1980**		**1990**		**2000**	
Pierce	379	37.9%	1,029	41.2%	2,355	43.6%	3,750	38.7%	4,953	33.3%
Lewis	277	27.7%	530	21.2%	842	15.6%	1,749	18.1%	2,383	16.0%
King	171	17.1%	288	11.5%	864	16.0%	1,304	13.5%	1,792	12.1%
Mason	111	11.1%	350	14.0%	770	14.3%	1,438	14.9%	2,841	19.1%
Grays Harbor	39	3.9%	216	8.6%	329	6.1%	953	9.8%	1,595	10.7%
Kitsap	12	1.2%	8	0.3%	54	1.0%	109	1.1%	325	2.2%
Snohomish	0	0.0%	0	0.0%	13	0.2%	108	1.1%	263	1.8%
Other	12	1.2%	79	3.2%	170	3.1%	270	2.8%	719	4.8%
Total inbound commuters	**1,001**	**100.0%**	**2,500**	**100.0%**	**5,397**	**100.0%**	**9,681**	**100.0%**	**14,871**	**100.0%**
Total workers with jobs in Thurston County	17,246	--	25,891	--	48,056	--	68,750	--	88,949	--
Percent inbound commuters	**--**	**5.8%**	**--**	**9.7%**	**--**	**11.2%**	**--**	**14.1%**	**--**	**16.7%**
Net Outbound Commuters	**2,080**		**1,216**		**4,355**		**6,614**		**12,037**	
Ratio of Outbound to Inbound Commuters	**3.1**		**1.5**		**1.8**		**1.7**		**1.8**	

Source: U.S. Bureau of the Census, Census 1960, 1970, 1980, 1990, and 2000.

Explanations: [1]Outbound commuters" refers to people who live in Thurston County and work in a different county.

[2]Inbound commuters" refers to people who work in Thurston County and live in a different county.

Table VII-8
Transportation to Work
Thurston County, 2000

Subject	1990 Census Number	1990 Census Percent	2000 Census Number	2000 Census Percent	Change 1990 to 2000 Number	Change 1990 to 2000 Percent
MEANS OF TRANSPORTATION TO WORK						
Drove alone	59,337	78.7%	77,933	77.2%	18,596	31.3%
Carpooled	9,116	12.1%	12,808	12.7%	3,692	40.5%
Public transportation (including taxicab)	1,089	1.4%	2,184	2.2%	1,095	100.6%
Bicycle or walked	2,539	3.4%	3,521	3.5%	982	38.7%
Motorcycle or other means	655	0.9%	653	0.6%	-2	-0.3%
Worked at home	2,628	3.5%	3,887	3.8%	1,259	47.9%
Total workers 16 years and over	**75,364**	**100.0%**	**100,986**	**100.0%**	**25,622**	**34.0%**
TRAVEL TIME TO WORK						
Less than 5 minutes	2,006	2.8%	2,935	3.0%	929	46.3%
5 to 9 minutes	7,828	10.8%	9,736	10.0%	1,908	24.4%
10 to 14 minutes	14,078	19.4%	16,197	16.7%	2,119	15.1%
15 to 19 minutes	15,704	21.6%	18,443	19.0%	2,739	17.4%
20 to 29 minutes	16,452	22.6%	21,698	22.3%	5,246	31.9%
30 to 44 minutes	10,006	13.8%	15,240	15.7%	5,234	52.3%
45 or more minutes	6,662	9.2%	12,850	13.2%	6,188	92.9%
Mean travel time to work (minutes)	20.7	(N/A)	24.4	(N/A)	3.7	(N/A)
Total workers who did not work at home	**72,736**	**100.0%**	**97,099**	**100.0%**	**24,363**	**33.5%**
TIME LEAVING HOME TO GO TO WORK						
5:00 a.m. to 6:59 a.m.	18,078	24.9%	26,461	27.3%	8,383	46.4%
7:00 a.m. to 7:59 a.m.	27,367	37.6%	32,439	33.4%	5,072	18.5%
8:00 a.m. to 8:59 a.m.	10,839	14.9%	13,369	13.8%	2,530	23.3%
9:00 a.m. to 9:59 a.m.	3,205	4.4%	5,118	5.3%	1,913	59.7%
10:00 a.m. to 11:59 a.m.	2,213	3.0%	3,900	4.0%	1,687	76.2%
12:00 p.m. to 11:59 p.m.	9,122	12.5%	12,071	12.4%	2,949	32.3%
12:00 a.m. to 4:59 a.m.	1,912	2.6%	3,741	3.9%	1,829	95.7%
Total workers who did not work at home	**72,736**	**100.0%**	**97,099**	**100.0%**	**24,363**	**33.5%**

Source: U.S. Census Bureau, 1990 Census and Census 2000.

Table VII-9
Means of Transportation to Work by Travel Time to Work
Thurston County, 2000

Means of Transportation	Mean travel time to work (minutes)	Travel time to work (minutes)					Total workers who did not work at home
		< 10	10-19	20-29	30-44	45+	
Drove alone	**23.2**	**9,735**	**29,115**	**18,200**	**11,820**	**9,060**	**77,935**
Percent of workers who did not work at home	--	12.5%	37.4%	23.4%	15.2%	11.6%	100%
Carpooled	**30.4**	**1,095**	**3,885**	**2,770**	**2,425**	**2,630**	**12,810**
Percent of workers who did not work at home	--	8.5%	30.3%	21.6%	18.9%	20.5%	100%
Public trans. (including taxicab)	**43.5**	**35**	**340**	**325**	**670**	**815**	**2,185**
Percent of workers who did not work at home	--	1.6%	15.6%	14.9%	30.7%	37.3%	100%
Bicycle or walked	**13.1**	**1,675**	**1,110**	**350**	**260**	**130**	**3,520**
Percent of workers who did not work at home	--	47.6%	31.5%	9.9%	7.4%	3.7%	100%
Motorcycle or other means	**57.5**	**130**	**190**	**55**	**65**	**215**	**655**
Percent of workers who did not work at home	--	19.8%	29.0%	8.4%	9.9%	32.8%	100%
Total workers who did not work at home	**24.4**	**12,670**	**34,640**	**21,700**	**15,240**	**12,850**	**97,100**
Percent of workers who did not work at home	--	13.0%	35.7%	22.3%	15.7%	13.2%	100%

Source: U.S. Census Bureau, Census 2000.

Table VII-10
Mode Share at Commute Trip Reduction Work Sites
Thurston County, 1993, 2001, 2003, 2005 and 2007

	Travel Mode						
	Drive Alone	Car and Vanpool	Transit	CWW[1]	Walk	Bike	Other
1993 (Base Year)							
Unincorp. County	78.54%	12.32%	4.76%	1.52%	1.18%	0.98%	0.71%
Lacey	80.23%	11.24%	1.30%	2.50%	1.25%	1.60%	1.89%
Olympia	78.97%	11.34%	2.39%	3.14%	1.91%	1.04%	1.21%
Tumwater	83.38%	11.13%	1.17%	1.89%	0.75%	0.65%	1.02%
Yelm	76.22%	21.56%	0.00%	0.09%	0.82%	1.32%	0.00%
2001							
Unincorp. County	74.34%	14.77%	4.69%	2.40%	1.50%	2.03%	0.26%
Lacey	75.78%	14.38%	2.15%	3.85%	0.56%	1.77%	1.51%
Olympia	75.02%	13.13%	2.76%	4.88%	1.95%	0.97%	1.28%
Tumwater	77.89%	13.59%	1.33%	4.63%	0.78%	0.48%	1.30%
Yelm	77.57%	19.64%	0.00%	0.12%	1.33%	0.61%	0.73%
2003							
Unincorp. County	77.15%	12.14%	4.86%	1.62%	1.00%	2.50%	0.72%
Lacey	76.70%	12.96%	1.87%	4.42%	0.62%	1.61%	1.82%
Olympia	76.24%	12.00%	2.51%	4.62%	2.20%	1.19%	1.24%
Tumwater	74.59%	15.61%	2.16%	4.81%	0.88%	0.48%	1.47%
Yelm	82.23%	16.90%	0.00%	0.21%	0.55%	0.10%	0.00%
2005							
Unincorp. County	66.94%	14.49%	4.25%	4.19%	1.65%	6.87%	1.62%
Lacey	75.61%	12.57%	2.90%	4.10%	0.65%	2.34%	1.81%
Olympia	76.20%	11.62%	2.83%	4.53%	2.14%	1.48%	1.20%
Tumwater	74.17%	15.01%	2.44%	5.12%	0.80%	0.60%	1.87%
Yelm[2]	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2007							
Unincorp. County	66.76%	12.23%	6.70%	3.03%	2.11%	5.82%	3.35%
Lacey	75.09%	13.76%	2.96%	3.05%	0.66%	2.49%	1.99%
Olympia	74.33%	12.23%	3.64%	4.61%	2.03%	1.63%	1.53%
Tumwater	72.73%	16.69%	1.70%	5.01%	0.79%	0.87%	2.20%
Yelm	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: Washington State Department of Transportation Commute Trip Reduction Office.

Explanations: Reported by work site location. The Washington State Commute Trip Reduction law stipulates that all employers with 100 or more employees arriving
vehicle mi fects of
compressed workweeks. This revision was applied to all past surveys.

[1]CWW refers to Compressed Work Week, whereby full-time employees compress their schedules into something less than the traditional 5-day work week.

[2]In 2005 Yelm's only CTR worksite was a voluntary worksite with few employees. It did not survey in 2007.

Table VII-11
Current Commute Practices, 2005

Travel Mode	Percent of Commute Trips
Drive Alone	57.0%
Carry Kids	19.0%
Drive, taking another adult along	7.6%
Get a ride with others, carpool	4.6%
Bus	4.0%
Vanpool	2.4%
Bicycle	2.1%
Walk	1.9%
Mixed, SOV and alt mode	0.8%
Mix of alternate modes	0.6%
Telecommute, compressed week, or part time	0.1%

Source: Intercity Transit 2005 Worksite Commuter Survey.

Table VII-12
Intercity Transit System Service Summary, 2000, 2005-2008

Service	2000	2005	2006	2007	2008[1]
Annual Boardings (millions)					
Fixed Route	2.78	2.87	3.26	3.64	4.00
Vanpool	0.23	0.38	0.47	0.53	0.62
Dial-A-Lift	0.11	0.11	0.13	0.13	0.14
Boardings per Vehicle Service Hour					
Fixed Route	22.0	19.1	18.9	20.8	22.1
Vanpool[2]	8.9	9.0	9.1	9.2	9.3
Dial-A-Lift	2.5	2.6	2.5	2.3	2.4

Source: Intercity Transit, 2008 Annual Boardings Report.

Explanations: Passenger trips reflect individual boardings, not people. Service reductions in 2000-2002 reflect a 45% decrease in revenue due to reductions in the motor vehicle excise tax.

[1]Estimates.

[2]Figures for vanpool passengers per vehicle hour are based on the number of active vanpools.

Table VII-13
Rail Lines in Thurston County, 2008

	Miles (Approx.)
Rail Lines	
Burlington Northern Santa Fe	36.0
Port of Olympia	1.0
Puget Sound and Pacific	10.0
Tacoma Rail	31.5
Union Pacific	8.0
City of Yelm (inactive)	2.5
Total Rail Lines[1]	**89.0**
Trails Along Former Rail Right-of-Way[2]	
Chehalis Western Trail	24.5
Gate-to-Belmore Trail	12.5
Lacey St. Clair Trail	3.0
Olympia Woodland Trail	2.0
Yelm-to-Tenino Trail	13.5
Total Trails along former Rail ROW[1]	**55.5**

Source: TRPC and information provided by local jurisdictions.

Explanation: See Map 15 for rail lines and Map 16 (in Chapter VIII) for trails.

[1]Numbers may not add due to rounding.

[2]For trail status, see the map or Tables VIII-6 and VIII-7 (in Chapter VIII).

Table VII-14
Estimate and Forecast of Freight Shipments To, From, and Within Washington, 2002 and 2035

	Tons (millions) 2002	Tons (millions) 2035	Value (billions) 2002	Value (billions) 2035
State Total	**477**	**976**	**$371**	**$1,239**
By Mode				
Truck	283	581	$238	$812
Rail	45	86	$14	$20
Water	48	124	$4	$11
Air, air & truck	<0.4	<0.7	$10	$50
Truck & rail	<1.7	3	$2	$4
Other intermodal	3	7	$37	$152
Pipeline & unknown	98	176	$67	$190

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations Freight Transportation Profile - Washington Freight Analysis Framework, November 2002.

Explanations: Numbers may not add to totals due to rounding.

Table VII-15
Top Five Commodities Shipped To, From, and Within Washington by All Modes: Weight and Value, 2002

Commodity	Tons (millions)		Value (billions)
Within State Total	**243.5**	**Within State Total**	**$141.5**
Gravel	67.9	Unknown	$44.1
Gasoline	24.8	Mixed Freight	$19.3
Waste/scrap	20.8	Machinery	$9.7
Logs	18.5	Gasoline	$6.4
Cereal Grains	11.1	Electronics	$5.8
From State Total	**104.3**	**From State Total**	**$77.0**
Coal, n.e.c.[1]	23.7	Electronics	$8.7
Gravel	15.8	Coal, n.e.c.[1]	$7.2
Wood Products	10.5	Machinery	$5.4
Cereal Grains	9.4	Mixed Freight	$4.8
Other Agricultural Products	6.5	Misc. mfg. products	$4.1
To State Total	**129.5**	**To State Total**	**$152.7**
Coal, n.e.c.[1]	31.4	Machinery	$45.5
Crude Petroleum	27.3	Electronics	$19.5
Cereal Grains	7.6	Mixed Freight	$12.1
Coal	6.0	Coal, n.e.c.[1]	$8.8
Machinery	4.8	Motor Vehicles[2]	$6.6

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Transportation Profile - Washington Freight Analysis Framework, November 2002.

Explanation: [1]Coal and petroleum products, not elsewhere classified.

[2]Motorized and other vehicles (including parts).