

# **Transportation**

# **Objective:**

Meet the growing need for transportation services and facilities throughout the county

# What is happening in King County?

Transportation is critically important to King County and the surrounding region and has profound effects on quality of life and the vitality of the economy. Transportation provides access to jobs, education, services, recreation, and other destinations throughout King County. The current and projected economic climate, however, places severe constraints on the county's ability to meet its transportation goals. Fully achieving King County's transportation goals depends on adequate funding for transportation system and service needs. The major economic downturn that began in 2008 has had a severe impact on transportation agencies' ability to maintain and preserve existing facilities and services. Service growth and facility expansion is not possible in the current economic climate. Near term forecasts for economic recovery show slow growth and further cuts or downgrades to some services and facilities will be necessary.

The average commuter in King County spent 23 minutes travelling each way between home and work in 2011, but there is a wide range of average commutes during peak hours, depending on the route.

Overall, commute times on many major roads in King County are slightly lower than they were in 2007. Many routes saw a more significant decrease in commute times during the recession in 2008-2009, but as of 2011 many commute times had nearly returned to 2007 levels. On many roads in King County, congestion causes commute times to increase up to 50 percent longer than what one would expect based on existing speed limits. Traffic congestion causes stress, slows the movement of freight and goods, costs commuters time, increases pollution from tailpipe emissions, and decreases productivity.

King County commuters are less likely to drive to work than the national average. Fewer King County commuters drive to work alone (decreasing from 57 percent of commuters in 2007 to 53 percent in 2011) than the national average (74 percent in 2011), according to the Washington state Commute Trip Reduction Survey. This has been due in part to an increase in the percent of commuters taking public transportation and using other means like biking and walking. Since 1990 about 10 percent of commuters in King County used public transportation to commute, while the national rate held steady at 5 percent. Reducing single-occupancy vehicle travel will not only enhance regional mobility, but it is also critical for improving air quality, reducing energy consumption, and decreasing greenhouse gas emissions. Please see the Pollution and Health Strategy for maps showing mode of transportation to work by geographic area.

King County residents outside the City of Seattle are more likely to drive alone than residents living in Seattle. Commuting habits do not seem to be different for different racial or ethnic groups.

For residents that use public transit, King County measures customer satisfaction in several ways. Metro Transit's Annual Rider Survey has consistently found that over 90 percent of respondents are satisfied or very satisfied with Metro Transit's services.

King County's Resident Survey, which also included respondents who do not use public transit, found a slight increase in satisfaction with Transit's reliability between 2009 and 2012. Residents in incorporated areas were more satisfied with transit reliability than those in unincorporated King County. Differences among racial groups were significant in the Resident Survey. African American respondents were more satisfied with transit reliability than White or Hispanic respondents.

## What role does King County play?

King County plays a central role in the regional transportation sector, supporting a variety of motorized, nonmotorized, air and marine transportation needs and providing services and facilities ranging from local to international. The county has direct responsibility for the unincorporated area road network. It provides transit services and facilities throughout the county, including within cities, and also performs many of Sound Transit's services under contract. The King County International Airport (KCIA) is owned, operated and maintained by the county. King County operates passenger-only ferry service to Vashon Island and West Seattle on behalf of the King County Ferry District, a separate governmental entity.

A reliable road network and an effective transit system are key to keeping the people and economy of King County moving. Residents and businesses depend on the county's unincorporated area road network of approximately 1,500 centerline miles of arterial and local roads and approximately 180 bridges. The county's Road Services Division plans, designs, builds, operates, and maintains most roads, bridges, pathways, traffic control systems, and other road-related infrastructure in the unincorporated area, excluding interstate and state highways. While the majority of cities in the county operate their own public works departments, the division provides road and bridge services by contract to supplement many city programs. Please see Economy and Infrastructure Strategy narrative for information on pavement condition on King County Roads.

Revenues that support County-owned roads have fallen dramatically due to a 44 percent drop in property values in the rural and urban unincorporated areas of King County, and losses from annexations. At the same time, the County has not seen a proportional drop in its responsibility for repairing, maintaining, and replacing the roads, bridges, and culverts that serve more than one million drivers daily.

The Road Services Division has taken many steps to address this problem, including shifting focus from capacity projects to safety needs, preservation and repair; developing the Strategic Plan for Road Services and creating a five-tiered system to prioritize road services; implementing efficiencies from internal reorganization; and reducing the workforce by more than one-third by 2013. Unfortunately, these measures alone are not enough. The structure for funding roads does not reflect the needs of a modern transportation system in a county with a population of nearly two million people. A long-term and sustainable solution lies with authority that can only be granted by the state Legislature. King County is working with cities on a modern revenue structure that adequately and fairly funds the transportation that communities and our economy need.

King County Metro's transit system is one of the 10 largest bus systems in the nation. Metro operates a fleet of about 1,400 vehicles -- including standard and articulated coaches, electric trolleys, dual-powered buses, hybrid diesel-electric buses and streetcars -- that serves an annual ridership of

more than 112 million within a 2,134 square mile area. Metro serves riders who are disabled with accessible fixed route service (all Metro buses have wheelchair lifts or ramps and all routes and trips are accessible), as well as paratransit van service and a taxi scrip program. Metro operates one of the largest publicly owned vanpool program in the country -- with more than 1,200 vans making more than 3.1 million trips per year. Vanpools serve more than 12,000 passenger trips every weekday. The regional Ridematch System helps commuters form and sustain new carpools and vanpools in seven counties by matching names in a computer data base.

With the recession and the decline in sale tax revenue, Metro has taken many steps to reduce costs and improve efficiency. Even so, in 2011, Metro faced the possibility of a 17 percent cut of service. The County Council adopted a congestion reduction charge (CRC) for two years temporarily filling the funding gap.

Metro continues to have an inadequate financing structure. If the financing structure is not improved by the time the CRC expires, Metro will again face a revenue shortfall that would require service reductions. The Executive's budget assumes that cuts would begin in fall 2014, followed by major reductions in 2015.

King County plays a key role as a regional government by coordinating transportation decisions among state, regional and local agencies, staffing and participating in sub-regional forums, administering grant programs, and investigating new and innovative responses to transportation problems.

## What else influences these indicators?

Several factors contribute to the length of commute times and use of alternative transportation modes. Land use and development patterns--including the proximity of jobs, shopping, and services to housing--affect transit agencies' ability to provide efficient service. Densely developed areas are easier to serve with transit and provide greater opportunities for residents to pursue other options, such as biking and walking. The real or perceived safety of alternative travel modes and the safety of the travel environment (e.g., presence of sidewalks and streetlights) influences the choices commuters make. In addition, the cost of travel, including gas prices, transit fares, tolls, and vehicle ownership and maintenance costs, is a factor that impacts travel mode choices.

The price people pay for transportation can also affect how they travel. Preliminary research indicates charging tolls on freeways will cause people to change their travel behavior, potential reducing vehicle miles traveled by 10 to 20 percent.

## **Related Links**

Washington State 2011 Congestion Report

**King County Metro Travel Options** 

King County Strategic Plan for Road Services

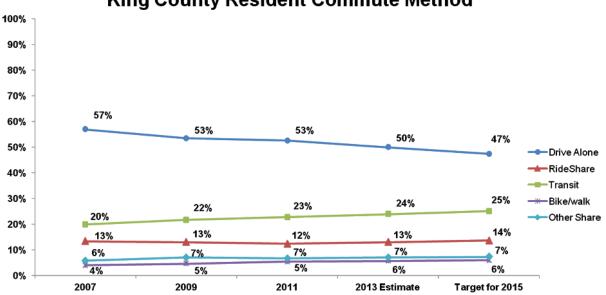
King County Metro Transit Strategic Plan for Public Transportation

King County Roads' Future

### **Technical Notes**

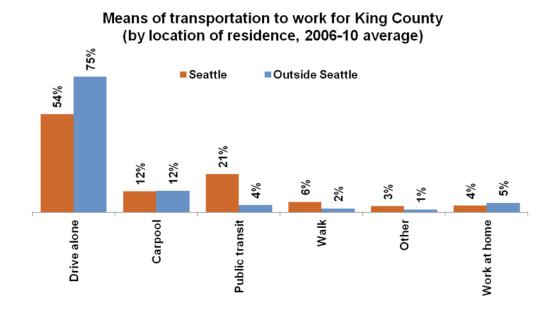
The 2012 King County Resident Survey was conducted in April and May of 2012. Surveys were administered in English, Spanish, and Mandarin. Of the 3,000 households that were selected to receive the survey, 266 completed the survey by mail and 759 completed the survey by phone for a total of 1,025 completed surveys (King County's population is about 1.9 million people). There were at least 250 respondents from Seattle and 125 surveys from each of six other areas. The overall results of the survey were weighted to reflect the actual population of each of the seven geographic areas of the County. The overall results of the survey have a precision of at least +/-3.0 percent at the 95 percent level of confidence. The results for the City of Seattle have a precision of at least +/- 6.2 percent at the 95 percent level of confidence and the results for each of the other six areas have a precision of at least of at least +/- 8.7 percent at the 95 percent level of confidence.

### **Charts and Maps**



**King County Resident Commute Method** 

Data Source: Washington State Commute Trip Reduction Survey



### Means of transportation to work for King County residents, by race/ethnicity (2006 - 10)

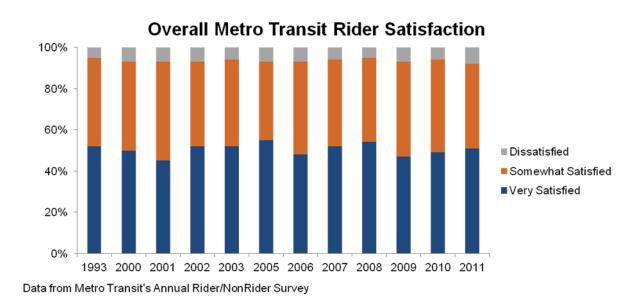
	Drive alone	Carpool	Public transit	Walk	Other	Work from home
AMERICAN INDIAN AND ALASKA NATIVE	57.8%	12.0%	19.3%	3.2%	2.2%	5.4%
ASIAN	61.7%	15.4%	13.8%	3.8%	1.2%	4.2%
BLACK OR AFRICAN AMERICAN	60.7%	11.5%	18.6%	3.9%	1.2%	4.0%
HISPANIC OR LATINO	59.8%	17.5%	13.6%	4.9%	2.0%	2.2%
NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER	68.6%	15.1%	9.1%	2.1%	2.2%	2.9%
SOME OTHER RACE	59.2%	18.8%	12.6%	5.6%	1.6%	2.2%
TWO OR MORE RACES	64.3%	11.7%	12.7%	5.7%	1.8%	3.8%
WHITE ALONE, NOT HISPANIC OR LATINO	67.6%	9.4%	9.6%	4.4%	2.8%	6.2%

Data Source: U.S. Census Bureau, 2006-2010 American Community Survey

### Means of transportation to work for King County residents, by income (2006 - 10)

	Drive alone	Carpool	Public transit	Walk	Other	Work from home
\$1 to \$24,999	59.7%	12.4%	13.3%	6.5%	2.1%	6.0%
\$25,000 to \$34,999	66.7%	12.8%	10.7%	4.2%	2.0%	3.6%
\$35,000 to \$49,999	68.1%	12.4%	11.6%	2.7%	2.1%	3.1%
\$50,000 to \$64,999	68.4%	12.4%	10.8%	2.7%	2.4%	3.3%
\$65,000 to \$74,999	68.1%	12.4%	11.6%	2.1%	2.0%	3.8%
\$75,000 or more	69.4%	9.8%	10.2%	2.0%	2.8%	5.8%

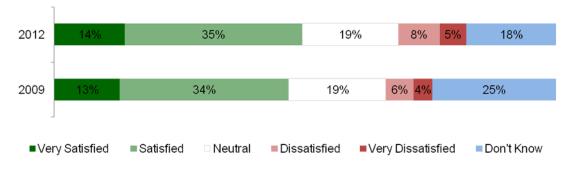
Source: U.S. Census Bureau, 2006-2010 American Community Survey



2012 27% 20% 13% 17% 9% 2009 26% 19% 11% 7% 20% Very Satisfied Very Dissatisfied Satisfied Neutral Dissatisfied Don't Know

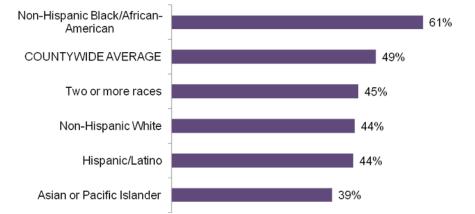
Satisfaction with transit service at the hours you need it.

# Satisfaction with the reliability of transit.



Source: King County Resident Survey, 2009 and 2012

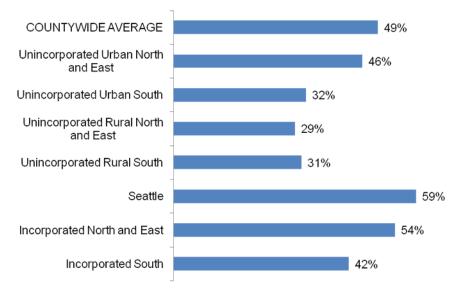
# Satisfaction with the Reliability of Transit Services (percent of respondents satisfied or very satisfied, by ethnicity)



Satisfaction with the Reliability of Transit Services (percent of respondents satisfied or very satisfied, by household income)



# Satisfaction with the Reliability of Transit Services (percent of respondents satisfied or very satisfied, by geography)

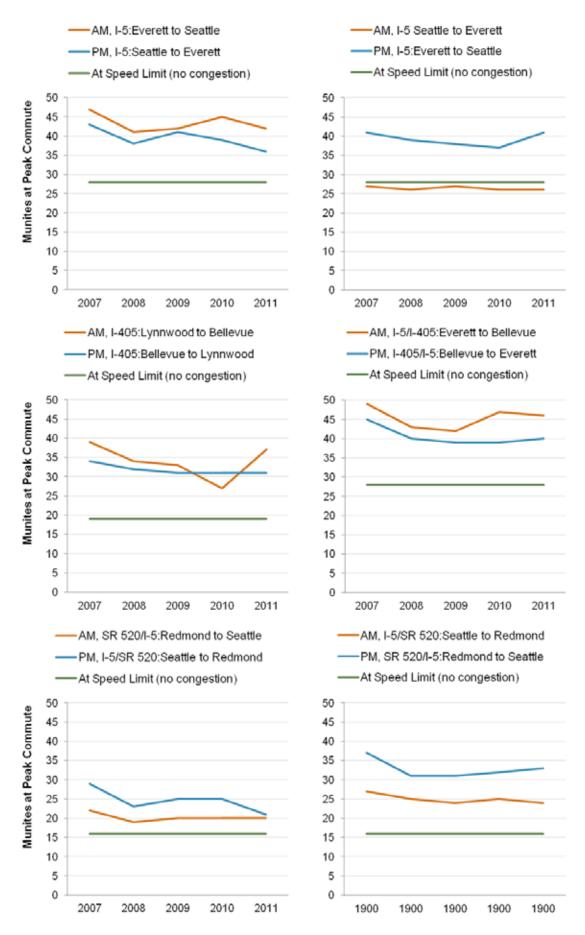


Data Source: King County Resident Survey, 2012

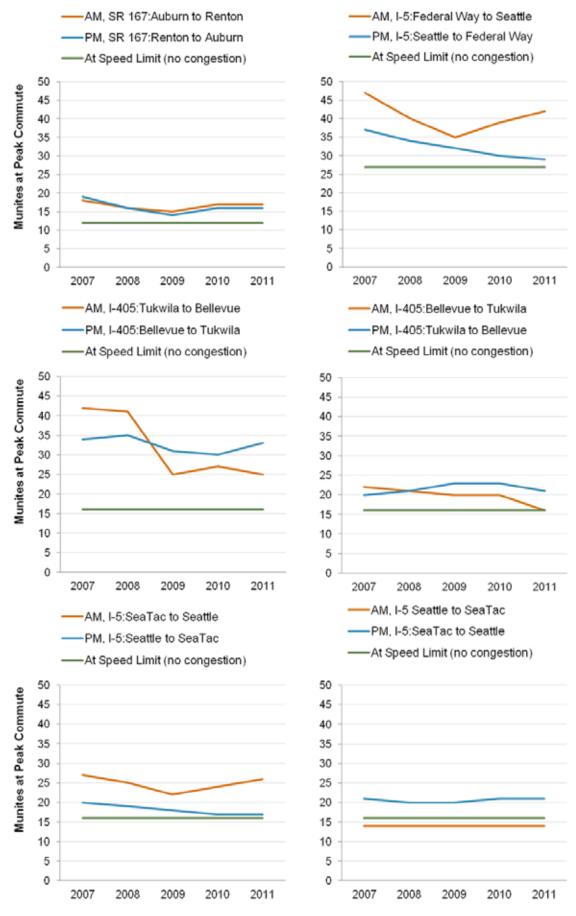
# 2012 King County Resident Survey Regions

Urban Unincorporated North and East Urban Unincorporated South Rural Unincorporated North and East Rural Unincorporated South Seattle Produced by ETC Institute and the In corporated North and East Office of Performance Strategy and Incorporated South Budget. Map colors based on www.ColorBrewer.org, by Cynthia A. Brewer, Penn State.

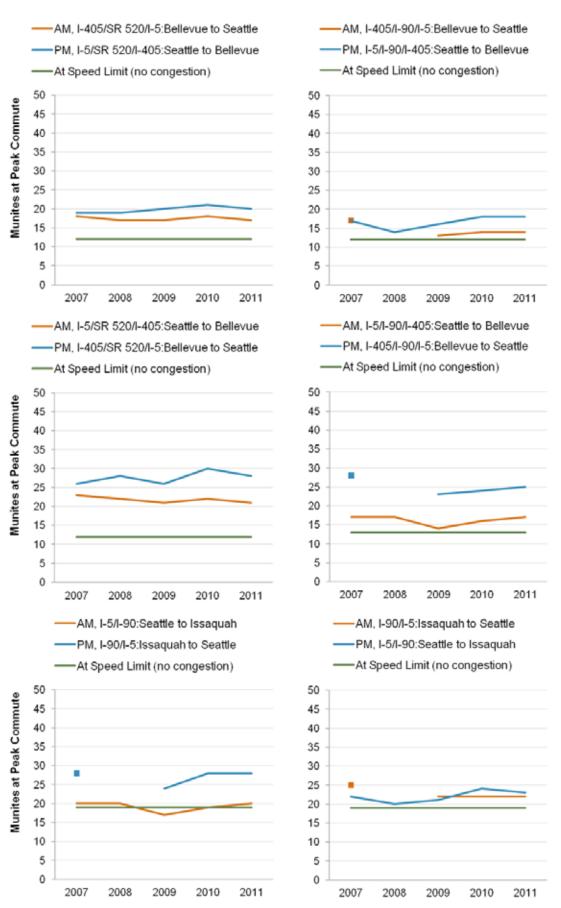
### Annual Average Commute Times for Congested North-end Routes (WSDOT 2007-2011)



### Annual Average Commute Times for Congested South-end Routes (WSDOT 2007-2011)



### Annual Average Commute Times for Congested Eastside Routes (WSDOT 2007-2011)



Commute Routes					
	% longer at peak commute compared to drive time at speed limit (2011)	% Change between 2007 and 2011			
		At least 5% shorter			
	At least 50% longer	At least 5% longer			
AM, I-5:Everett to Seattle		-12%			
PM, I-5: Seattle to Everet		-19%			
AM, I-5: Federal Way to Seattle		-12%			
PM, I-5:Seattle to Federal Way		-28%			
AM, I-90/I-5:Issaguah to Seattle		-14%			
PM, I-5/I-90: Seattle to Issaguah		4%			
AM, SR 520/I-5: Redmond to Seattle	25%	-10%			
PM, I-5/SR 520: Seattle to Redmond		-38%			
AM, I-5: SeaTac to Seattle		-4%			
PM, I-5: Seattle to SeaTac	6%	-18%			
AM, I-405/I-90/I-5: Bellevue to Seattle	17%	-21%			
PM, I-5/I-90/I-405: Seattle to Bellevue	50%	6%			
AM, I-405/SR 520/I-5: Bellevue to Seattle	42%	-6%			
PM, I-5/SR 520/I-405: Seattle to Bellevue	67%	5%			
AM, I-5/I-405: Everett to Bellevue	64%	-7%			
PM, I-405/I-5: Bellevue to Everett	43%	-13%			
AM, I-405: Lynnwood to Bellevue	95%	-5%			
PM, I-405: Bellev ue to Lynnwood	63%	-10%			
AM, I-405:Tukwila to Bellevue	56%	-68%			
PM, I-405: Belleviue to Tukwila	106%	-3%			
AM, I-5/I-90/I-405: Seattle to Bellevue		0%			
PM, I-405/I-90/I-5:Bellevue to Seattle	92%	-12%			
AM, I-5/SR 520/I-405: Seattle to Bellevue	75%	-10%			
PM, I-405/SR 520/I-5:Bellevue to Seattle	133%	7%			
AM, I-90/I-405:Issaquah to Bellevue	27%	-21%			
PM, I-405/I-90/I-5:Bellevue to Issaquah		-13%			
AM, SR 520/I-405:Redmond to Bellevue		-13%			
PM, I-405/SR 520: Bellevue to Redmond		-88%			
AM, I-405/SR 520: Bellevue to Redmond					
PM, SR 520/I-405:Redmond to Bellevue	100%				
AM, I-5/SR 520: Seattle to Redmond		-13%			
PM, SR 520/I-5:Red mond to Seattle	106%	-12%			
AM, SR 167:Auburn to Renton		-6%			
PM, SR 167:Renton to Auburn		-19%			
AM, I-5/I-90: Seattle to Issaquah		0%			
PM, I-90/I-5:Issaquah to Seattle		0%			
AM, I-405: Bellevue to Tukwila		-38%			
PM, I-405:Tukwila to Bellevue		5%			
AM, I-5 Seattle to Everet		-4%			
PM, I-5:Everett to Seattle		0%			
AM, I-5 Seattle to SeaTac		0%			
PM, I-5:SeaTac to Seattle	31%	0%			

#### Average Congestion and Congestion Change Over Time for Major Commute Routes

	Minutes Without	Annual Average in Minutes					
	Congestion	2007	2008	2009	2010	201	
AM, I-5:Everett to Seattle	t 28	47	41	42	45	42	
PM, I-5:Seattle to Everett		43	38	41	39	36	
AM, I-5:Federal Way to Seattle	2/	47	40	35	39	42	
PM, I-5:Seattle to Federal Way		37	34	32	30	29	
AM,I-90/I-5:Issaquah to Seattle	19	25	n/a	22	22	22	
PM, I-5/I-90:Seattle to Issaquah		22	20	21	24	23	
AM , SR 520/I-5:Redmond to Seattle	16	22	19	20	20	20	
PM, I-5/SR 520:Seattle to Redmond		29	23	25	25	21	
AM , I-5:SeaTac to Seattle	16	27	25	22	24	26	
PM , I-5:Seattle to SeaTac		20	19	18	17	17	
AM, I-405/I-90/I-5:Bellevue to Seattle	12	17	n/a	13	14	14	
PM, I-5/I-90/I-405:Seattle to Bellevue		17	14	16	18	18	
AM, I-405/SR 520/I-5:Bellevue to Seattle	1 1Z 1	18	17	17	18	17	
PM, I-5/SR 520/I-405:Seattle to Bellevue		19	19	20	21	20	
AM, I-5/I-405:Everett to Bellevue		49	43	42	47	46	
PM, I-405/I-5:Bellevue to Everett		45	40	39	39	40	
AM , I-405:Lynnwood to Bellevue		39	34	33	27	37	
PM, I-405:Bellevue to Lynnwood		34	32	31	31	31	
AM , I-405: Tukwila to Bellevue	16	42	41	25	27	25	
PM, I-405:Bellevue to Tukwila		34	35	31	30	33	
AM, I-5/I-90/I-405:Seattle to Bellevue	13	17	17	14	16	17	
PM, I-405/I-90/I-5:Bellevue to Seattle	15	28	n/a	23	24	25	
AM, I-5/SR 520/I-405:Seattle to Bellevue	12	23	22	21	22	21	
PM, I-405/SR 520/I-5:Bellevue to Seattle	12	26	28	26	30	28	
AM, I-90/I-405:Issaquah to Bellevue	11	17	15	15	15	14	
PM, I-405/I-90/I-5:Bellevue to Issaquah	- 11	18	15	15	16	16	
AM, SR 520/I-405:Redmond to Bellevue	7	9	7	7	8	8	
PM, I-405/SR 520:Bellevue to Redmond	1	15	10	10	10	8	
AM, I-405/SR 520:Bellevue to Redmond	7	n/a	8	8	8	8	
PM, SR 520/I-405:Redmond to Bellevue	· · ·	n/a	13	11	13	14	
AM, I-5/SR 520:Seattle to Redmond	16	27	25	24	25	24	
PM, SR 520/I-5:Redmond to Seattle	10	37	31	31	32	33	
AM, SR 167:Auburn to Renton	40	18	16	15	17	17	
PM, SR 167:Renton to Auburn	12	19	16	14	16	16	
AM, I-5/I-90:Seattle to Issaquah	40	20	20	17	19	20	
PM, I-90/I-5:Issaguah to Seattle	19	28	n/a	24	28	28	
AM, I-405:Bellevue to Tukwila	4.5	22	21	20	20	16	
PM, I-405: Tukwila to Bellevue	16	20	21	23	23	21	
AM, I-5 Seattle to Everett		27	26	27	26	26	
PM, I-5:E∨erett to Seattle	28	41	39	38	37	41	
AM , I-5 Seattle to SeaTac	40	14	14	14	14	14	
PM, I-5:SeaTac to Seattle	16	21	20	20	21	21	

### Average Peak Hour Commute Time for Major Commute Routes