



Transportation 2040 Update: Travel Trends

Transportation Policy Board
June 9, 2016



Puget Sound Regional Council

Today's Discussion

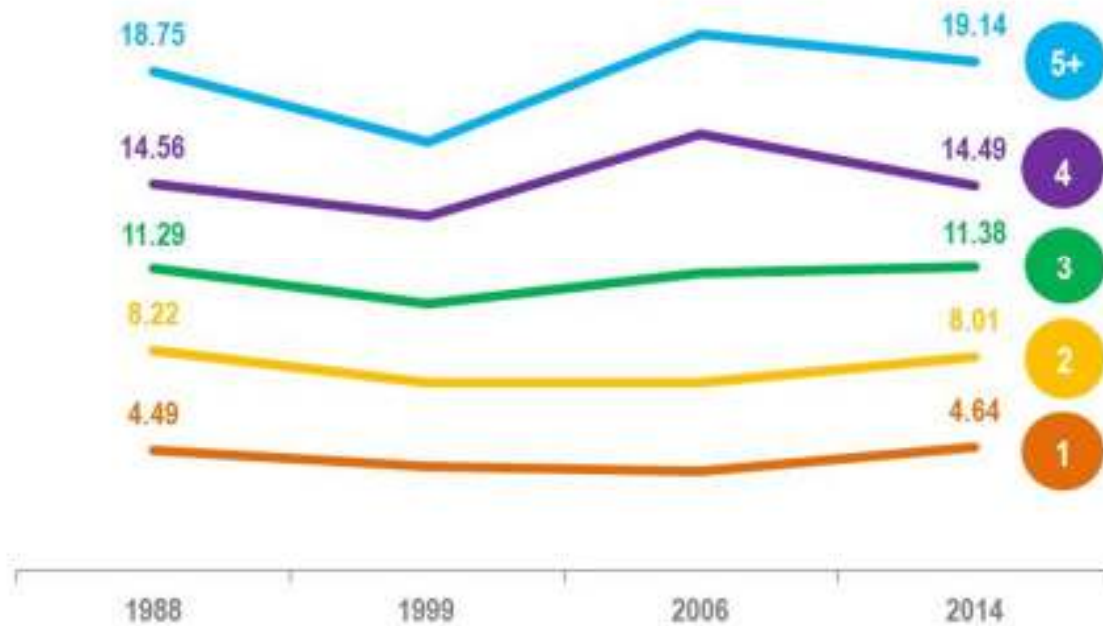
- How has travel behavior changed?
- How are we growing and how has that affected our travel patterns?



How has travel behavior changed?



People make just as many trips today as they did in 1988

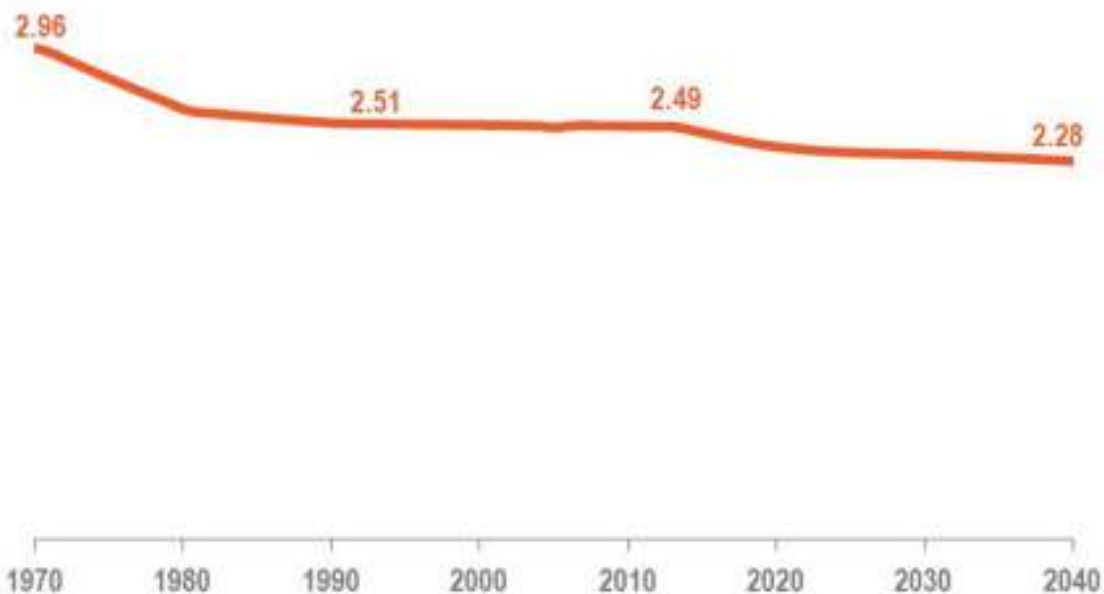


- Total daily trips by household size were similar in 1988 and 2014.
- An average 1-person household makes a little more than 4-1/2 trips per day.



Source: PSRC Regional Household Travel Survey, 1988, 1999, 2006 and 2014

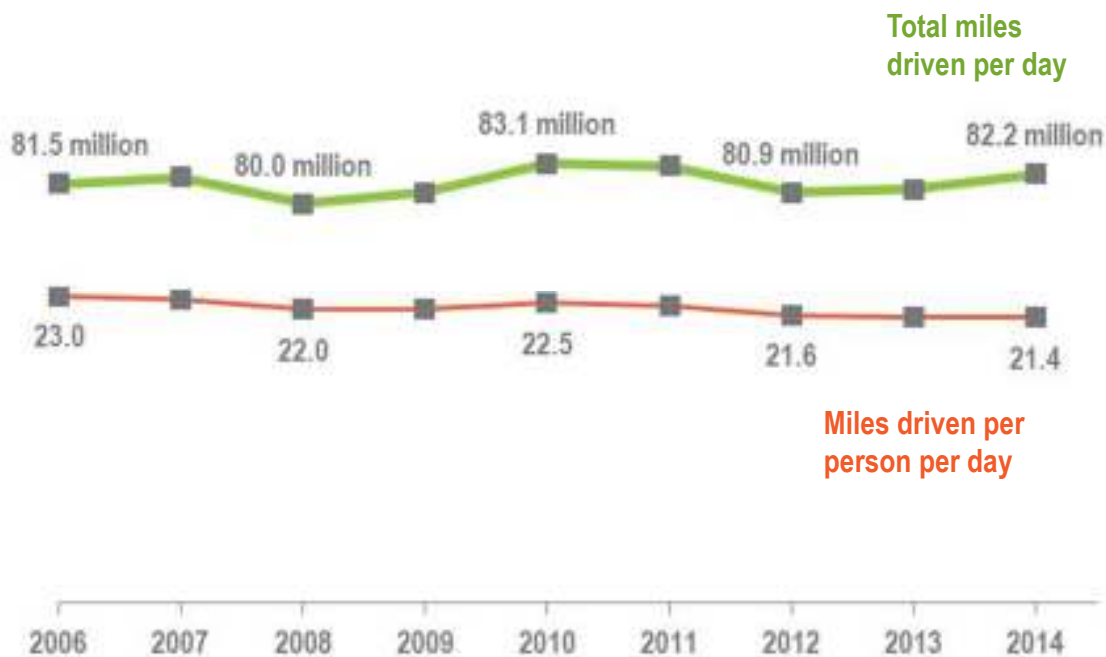
But the number of people per household is declining



Source: PSRC Regional Macroeconomic Forecast

- Smaller households with more people is likely to result in more daily activities.
- 5 single-person households generate ~23 trips per day compared to ~19 trips per day for 1 five-person household

Miles driven per person per day have decreased

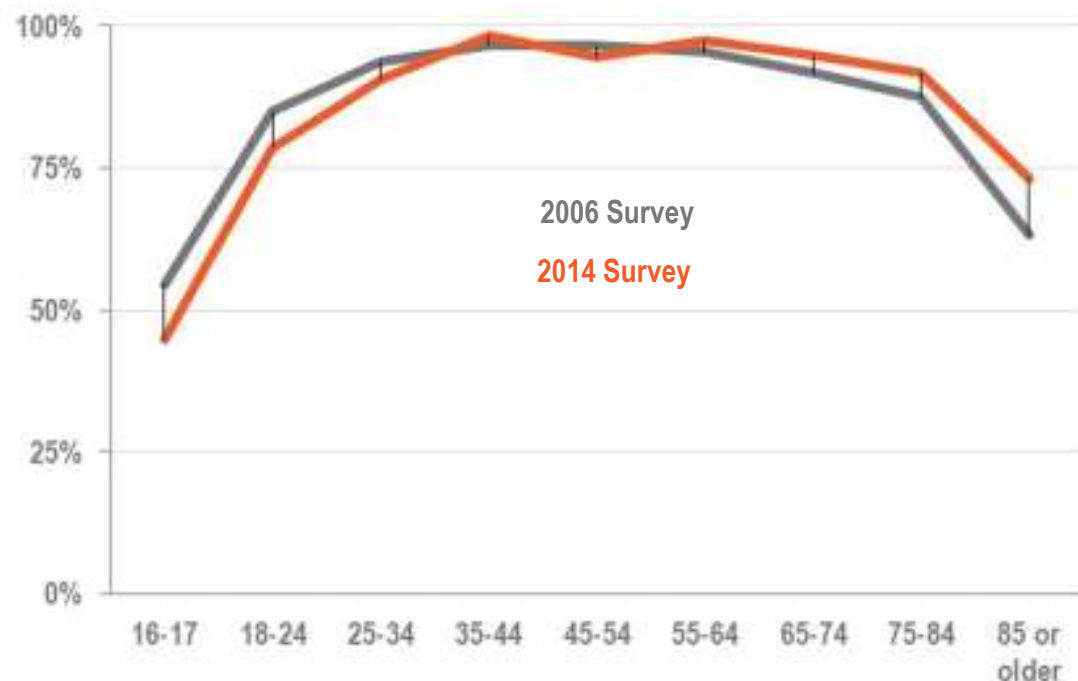


- Total miles driven per day have been flat since 2006 – even though the region has added over 300,000 residents.
- Miles driven per day per person have decreased by 1.5 miles per person in the last 9 years.



Source: Highway Performance Monitoring System (HPMS) – Washington State Department of Transportation

Fewer young people are getting their drivers license



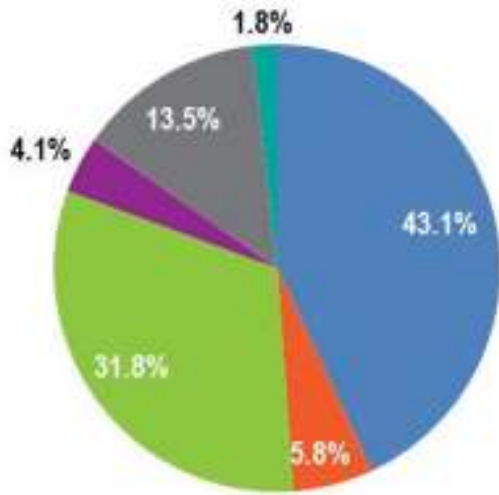
- Licenses for 16- to 17-year-olds dropped from 55% in 2006 to 45% in 2015.
- Licenses for people under age 35 were all slightly lower in 2015.
- A larger share of 65+ people have a drivers license today than they did in 2006.



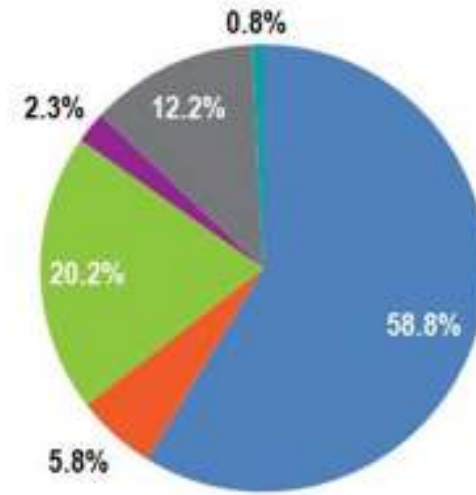
Source: PSRC Regional Household Travel Survey, 2006 and 2014

Millennials drive less than Gen-Xers and Boomers

All Trips - Millennials



All Trips – Gen X + Boomers



Drove Alone: 43% vs 59%
Walk: 32% vs 20%

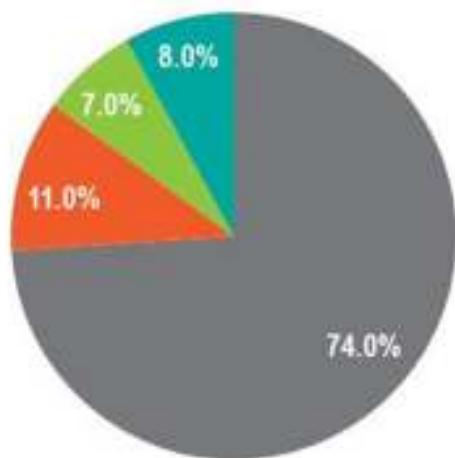
■ Drove Alone ■ Shared Ride ■ Walk ■ Bike ■ Transit ■ Other



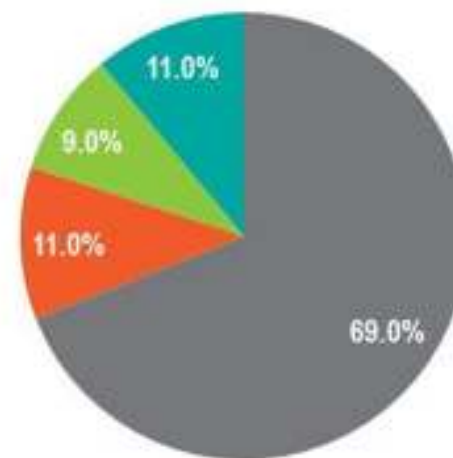
Source: PSRC Regional Household Travel Survey, 2014

A smaller percentage of people drive alone to work

2006



2014



Drove Alone: 74% vs 69%
Transit: 7% vs 9%

■ Drove Alone ■ Shared Ride ■ Transit ■ Walk & Bike



Source: PSRC Regional Household Travel Survey, 2006 and 2014

Drive Alone changes differ by place

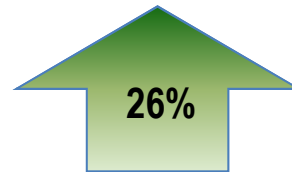
- Seattle, Bellevue and Redmond have all experienced noticeable reductions in drive alone shares to work
- Transit mode share to Seattle increased by 8% between 2006 and 2014 (15% to 23%).



Source: PSRC Regional Household Travel Survey, 2006 and 2014

Transit ridership is on the rise

2006 Annual Transit Boardings: 142 million
 2015 Annual Transit Boardings: 185 million



2006 Annual Ferry Boardings: 24 million
 2015 Annual Ferry Boardings: 25 million



- Transit boarding growth has outpaced both population and employment growth in the region.
- Ferry ridership has been steadily increasing since 2013 after several years of flat or declining ridership.



Source: National Transit Database (NTD), Federal Transit Administration

Transit ridership growth is the fastest in the nation

Annual transit growth

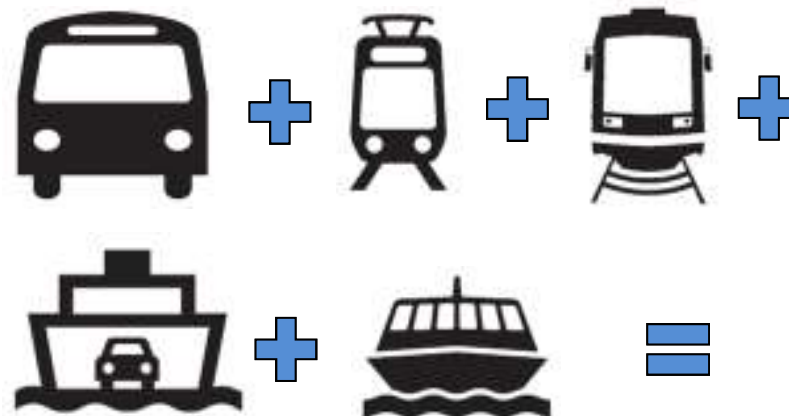
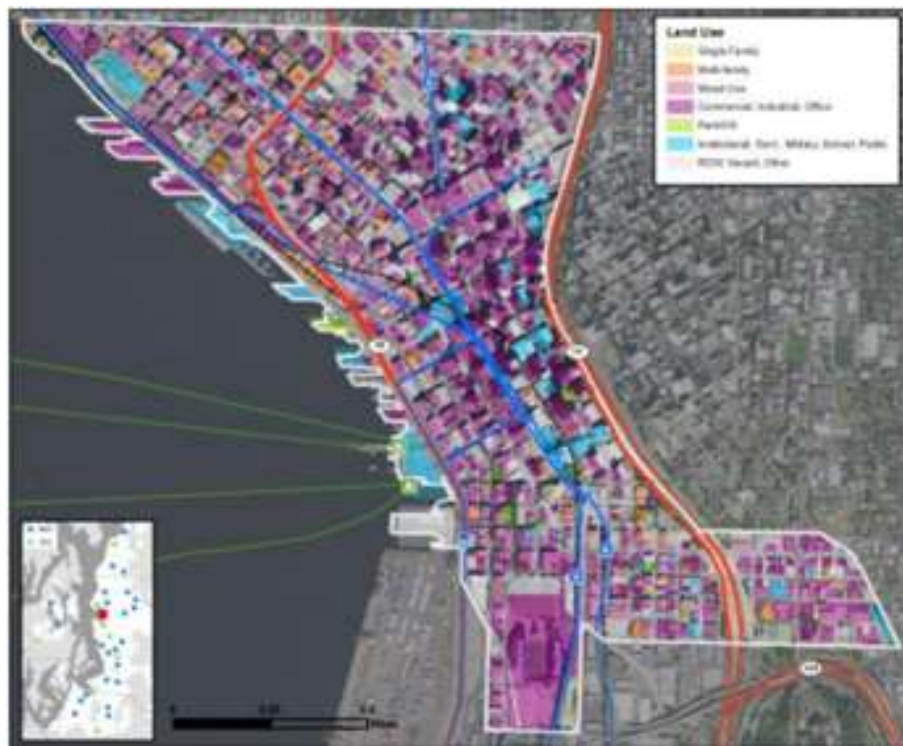
METRO AREA	2014 METRO AREA POPULATION	2015 ANNUAL BOARDINGS	2005 – 2015 ANNUAL GROWTH IN TRANSIT BOARDINGS
central Puget Sound region	3,671,478	185 million	3.6%
Tampa-St. Petersburg	2,915,582	30 million	3.1%
Las Vegas	2,069,681	72 million	2.9%
Phoenix	4,489,109	71 million	2.2%
San Diego	3,263,431	110 million	1.9%
Denver	2,754,258	101 million	1.9%
Minneapolis	3,495,176	88 million	1.3%
Dallas – Fort Worth	6,954,330	77 million	1.1%
Portland	2,348,247	113 million	1.1%
New York City	20,092,883	4.2 billion	0.9%
San Francisco	4,594,060	450 million	0.7%
Boston	4,732,161	401 million	0.5%
Chicago	9,554,598	626 million	0.4%
Philadelphia	6,051,170	355 million	0.3%
Miami	5,929,819	157 million	0.1%
Washington D.C.	6,033,737	447 million	0.1%
Baltimore	2,785,874	111 million	-0.2%
Los Angeles	13,262,220	629 million	-0.5%
Atlanta	5,614,323	142 million	-0.8%
Houston	6,490,180	86 million	-1.1%

- Transit ridership has grown faster than in any other large metro area in the country over the past 10 years.
- Annual transit boardings were the 8th highest in the country in 2015.



Source: National Transit Database (NTD), Federal Transit Administration

Transit Commute Mode Share: Downtown Seattle



54%



Source: PSRC Regional Household Travel Survey, 2014

Transit Commute Mode Share: Redmond/Overlake

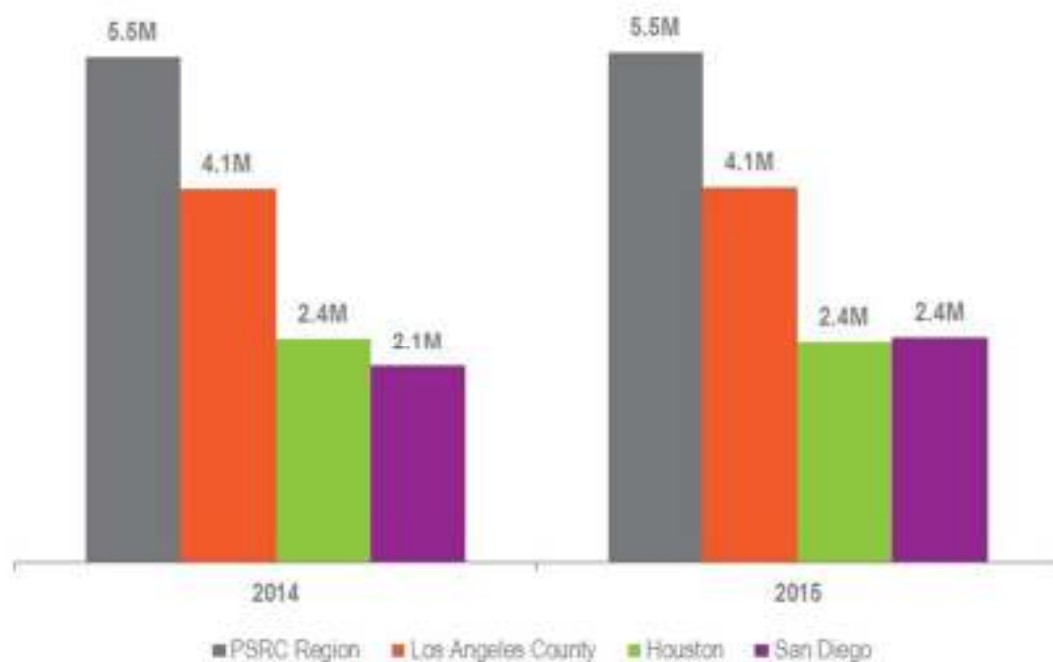


= 19%



Source: PSRC Regional Household Travel Survey, 2014

Vanpool capital of the world

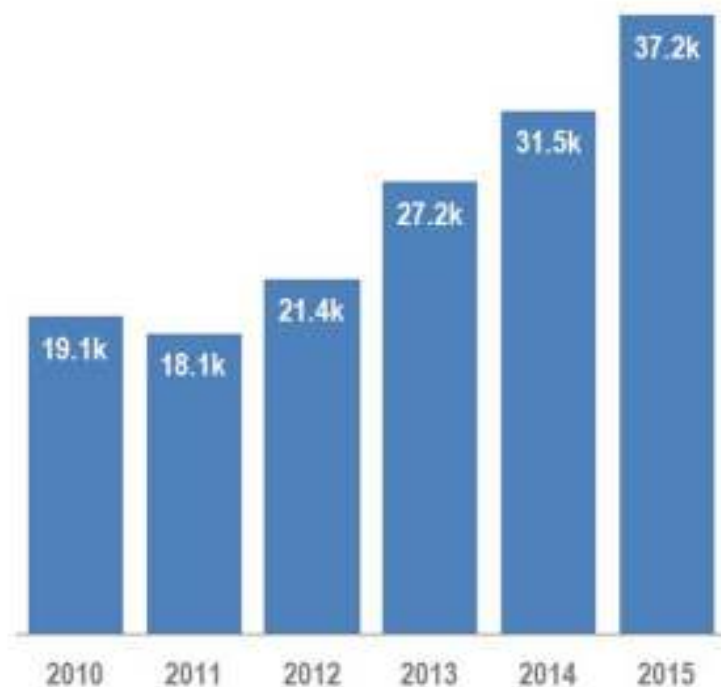


- The Puget Sound region moves more people via vanpool than any other place in the country.
- Vanpool ridership per person in our region is more than 3 times what it is in Los Angeles.



Source: National Transit Database (NTD), Federal Transit Administration

Despite all the other changes, freeway delay is still growing



- Delay on regional freeways increased 95% between 2010 and 2015.
- HOV lanes accounted for over 4% of the delay on the freeway system in 2015.

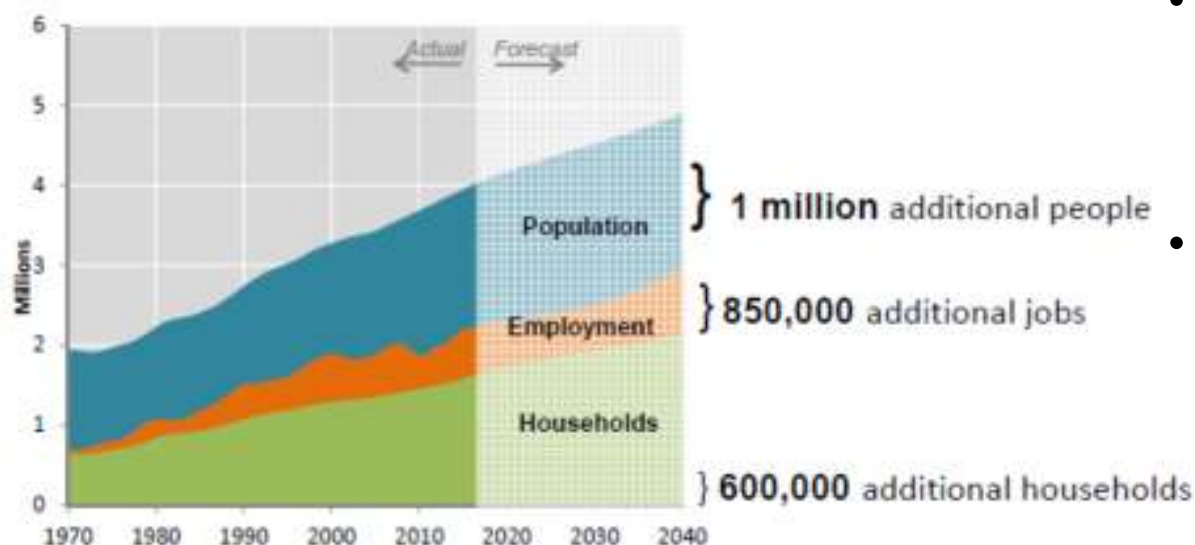


Source: Freeway Count Detectors, TRAC Flow, – Washington State Department of Transportation

How are we growing and how has that affected our travel patterns?



Population: 3.9 million in 2015



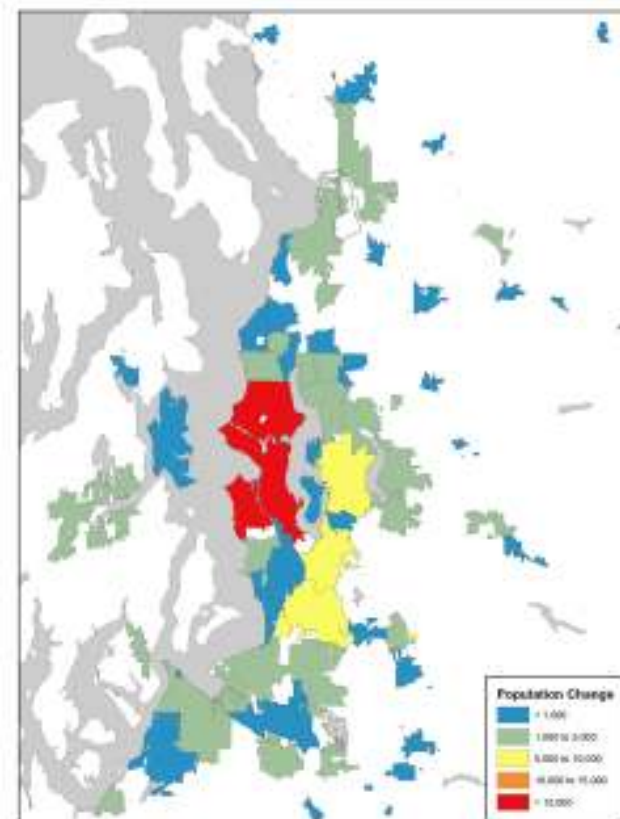
- Population is expected to eclipse 4 million people in early 2017.
- Region is on track to be almost 5 million people by 2040 – on track with VISION forecast.



Source: Office of Financial Management, Employment Securities Department, PSRC

Population: Growth has occurred in all cities

- Population change was greater with annexations in many cities.
- 80 out of the 82 jurisdictions in the region grew between 2010 and 2015.
- Overall, the region experienced 5.6% growth during this time. 27 out of 82 jurisdictions had a growth rate that surpassed that regional rate.

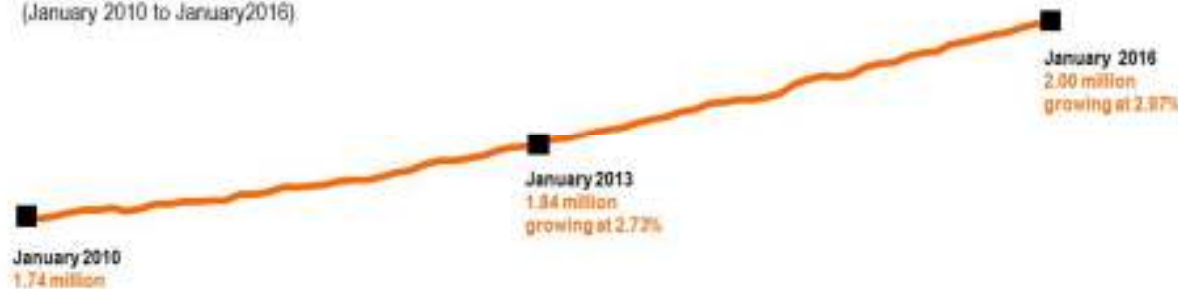


Source: April 1, 2015 Population of Cities, Towns and Counties, Washington State Office of Financial Management

Employment: Region exceeded 2 million jobs

- Region added over 260,000 jobs since 2010.
- Job growth is robust and grew at an annual growth rate of almost 3% in 2015.

Annual Wage and Salary Employment - Seasonally Adjusted
(January 2010 to January 2016)



Source: Employment Securities Department

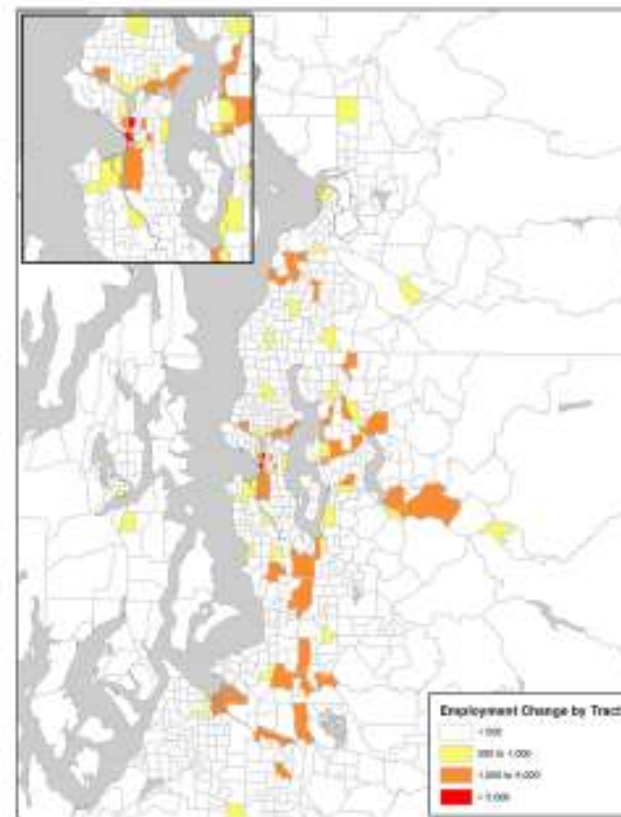
Employment: Growth has been focused

Employment grew all around the region but largest increases are:

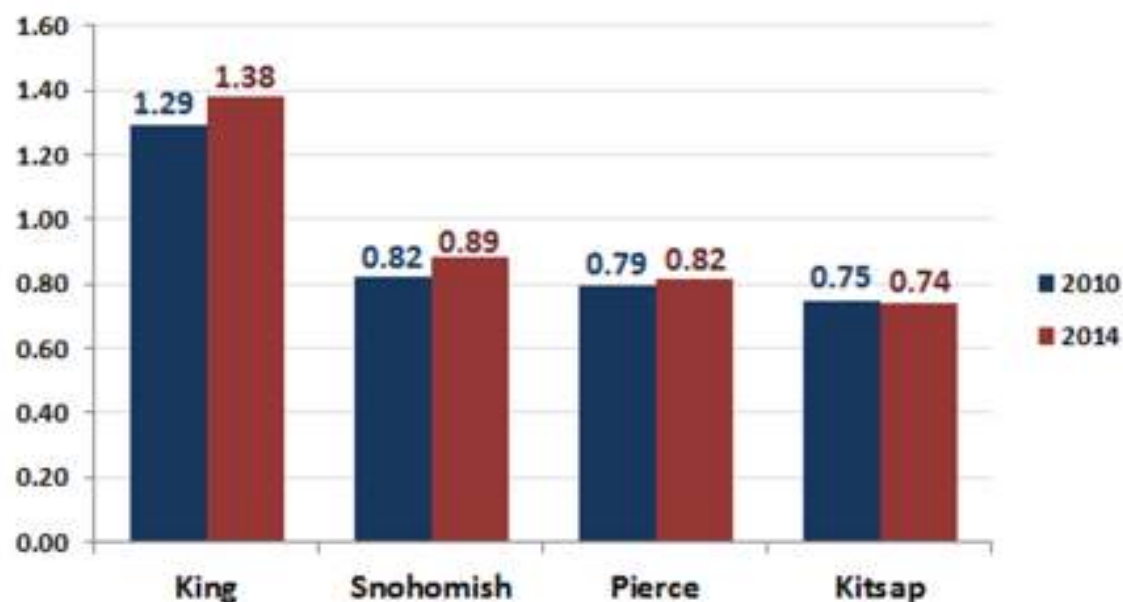
- Bellevue
- Everett
- Kent
- Issaquah
- Redmond
- Renton
- Tacoma
- Seattle



Source: PSRC Covered Employment by Census Tract



Jobs-Housing Fit: Region (2010 and 2014)

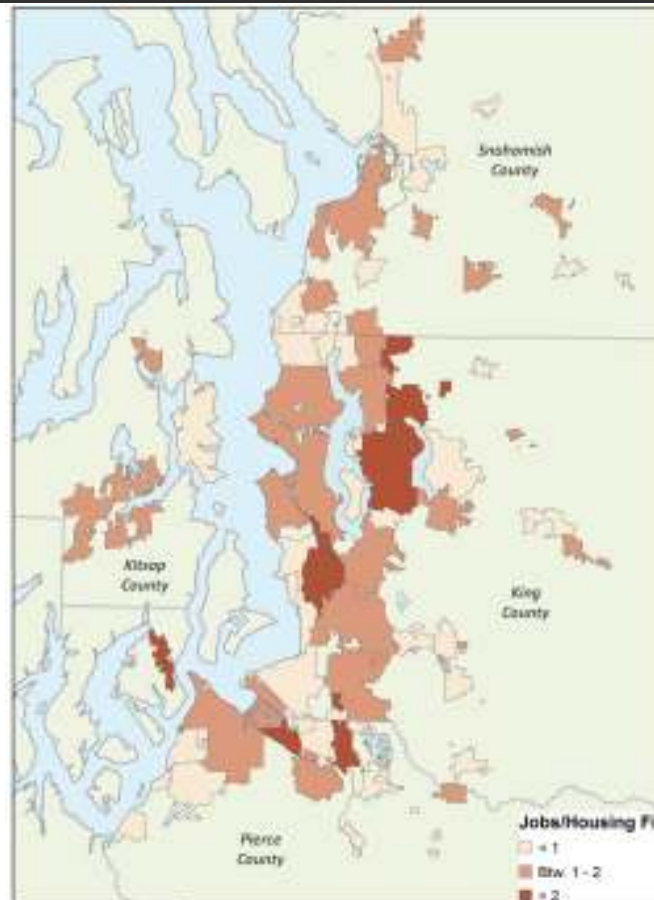


- King County has a lot more jobs than housing units.
- Snohomish, Pierce, and Kitsap counties all have more housing units than jobs.
- Between 2010 and 2014 all counties except Kitsap increased their ratio, with King and Snohomish seeing the largest increases.
- Regional JHF was 1.13 in 2014



Source: Office of Financial Management, Employment Securities Department, PSRC

Jobs-Housing Fit: Region (2014)

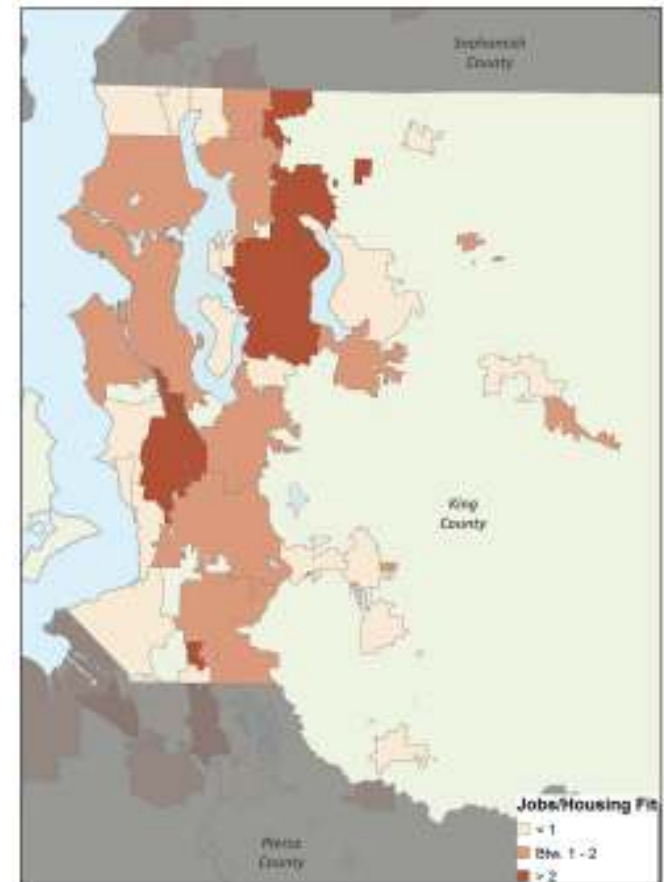


Source: Office of Financial Management,
Employment Securities Department, PSRC



Jobs-Housing Fit: King County (2014)

City	JHF Ratio	Jobs	Housing Units	Population
Tukwila	5.85	45,439	7,761	19,210
Redmond	3.31	84,547	25,549	57,700
SeaTac	2.72	28,595	10,504	27,620
Woodinville	2.49	12,463	5,006	11,240
Algona	2.24	2,319	1,037	3,090
Bellevue	2.20	129,064	58,620	134,400
Auburn	1.64	41,675	25,417	65,350
Issaquah	1.59	23,752	14,915	32,880
Seattle	1.59	514,710	323,339	640,500
Renton	1.50	61,721	41,014	97,130
Kent	1.41	65,499	46,339	121,400
Kirkland	1.11	41,605	37,450	82,590
Federal Way	0.88	31,307	35,626	90,150
Shoreline	0.69	16,164	23,290	53,990
Mercer Island	0.68	6,850	10,096	23,310
Burien	0.60	12,122	20,037	48,240
Des Moines	0.47	5,995	12,704	30,030
Maple Valley	0.44	3,723	8,473	24,230
Kenmore	0.42	3,693	8,835	21,370
Uninc. King	0.40	38,011	94,793	252,050
Sammamish	0.35	5,818	16,762	49,260
King Co. Total	1.38	1,214,476	879,744	2,017,250



Jobs-Housing Fit: Kitsap County (2014)

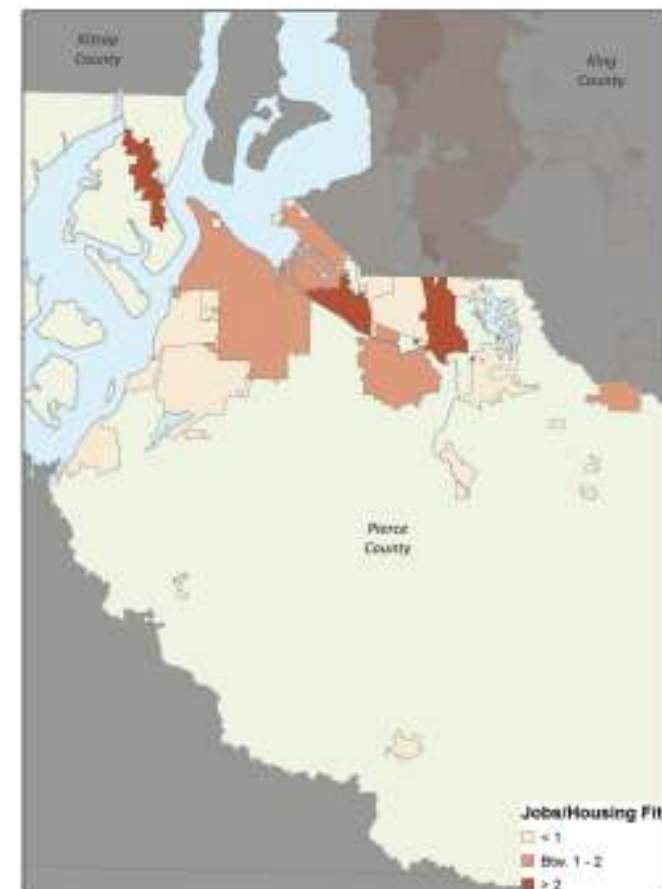
City	JHF Ratio	Jobs	Housing Units	Population
Bremerton	1.66	28,614	17,281	38,180
Port Orchard	1.33	7,336	5,527	13,150
Poulsbo	1.31	5,707	4,349	9,775
Bainbridge Island	0.64	6,845	10,735	23,360
Uninc. Kitsap	0.46	32,469	71,226	171,435
Kitsap Co. Total	0.74	80,971	109,118	255,900



Source: Office of Financial Management, Employment Securities Department, PSRC

Jobs-Housing Fit: Pierce County (2014)

City	JHF Ratio	Jobs	Housing Units	Population
Fife	3.31	13,098	3,957	9,405
Sumner	3.07	13,217	4,305	9,545
Gig Harbor	2.23	8,973	4,028	7,985
Puyallup	1.41	23,918	16,929	38,670
Tacoma	1.16	101,087	87,107	200,900
Lakewood	0.87	23,297	26,627	58,360
DuPont	0.83	3,109	3,735	9,175
Bonney Lake	0.64	4,347	6,759	18,520
Milton	0.62	1,741	2,821	6,350
Uninc. Pierce	0.44	64,379	144,779	381,970
University Place	0.43	5,870	13,681	31,420
Auburn	0.22	855	3,859	9,280
Pierce Co. Total	0.82	273,180	334,783	821,300



Source: Office of Financial Management, Employment Securities Department, PSRC

Jobs-Housing Fit: Snohomish County (2014)

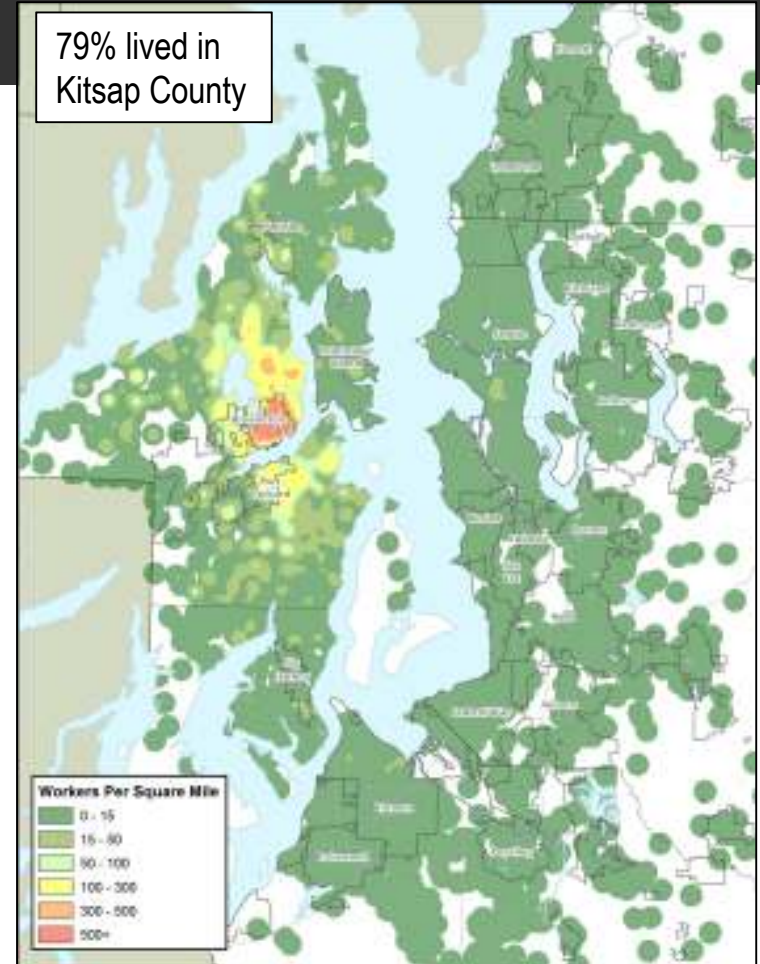
City	JHF Ratio	Jobs	Housing Units	Population
Everett	1.97	89,201	45,284	104,900
Bothell	1.95	13,446	6,907	17,020
Lynnwood	1.64	24,546	14,997	36,030
Monroe	1.57	8,491	5,392	17,660
Arlington	1.26	8,908	7,078	18,360
Snohomish	1.25	5,085	4,054	9,270
Mukilteo	1.22	10,506	8,641	20,540
Mountlake Terrace	0.84	7,420	8,883	20,530
Edmonds	0.65	12,078	18,520	39,950
Mill Creek	0.64	5,234	8,132	18,780
Marysville	0.57	13,365	23,264	62,600
Uninc. Snohomish	0.44	54,790	125,468	320,335
Lake Stevens	0.41	4,429	10,784	29,170
Snoh. Co. Total	0.89	263,710	297,598	741,000



Source: Office of Financial Management, Employment Securities Department, PSRC

Where Bremerton Workers Lived: 2006

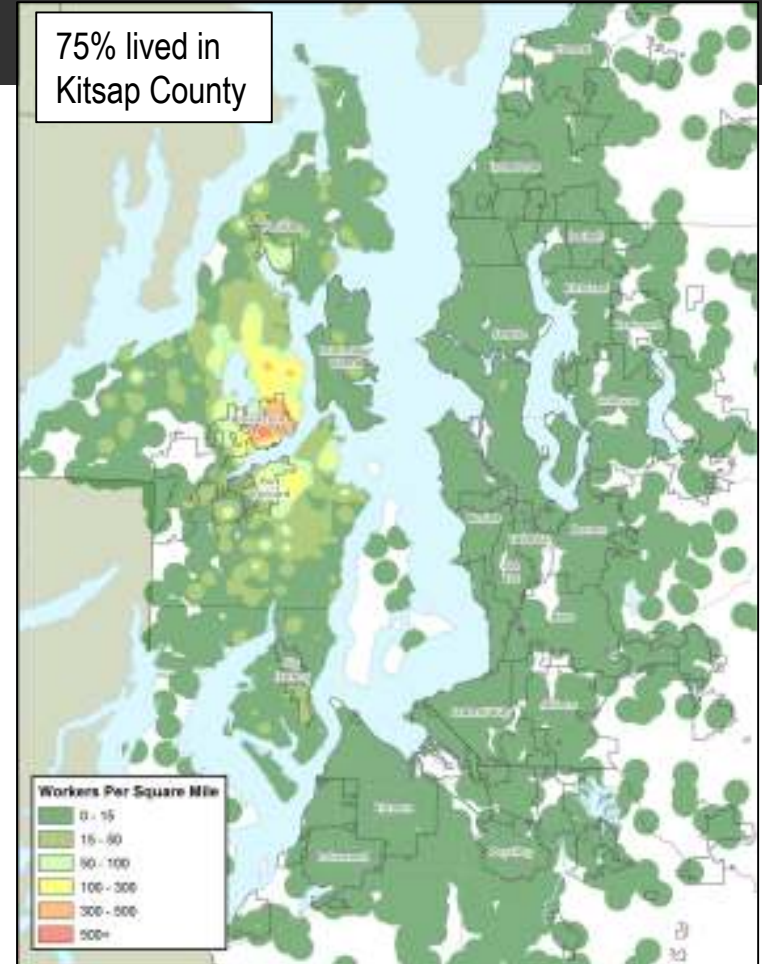
Area	County	# of Workers	% of Jobs
Central Kitsap	Kitsap	15,330	55%
South Kitsap	Kitsap	5,100	18%
King County	King	1,640	6%
North Kitsap	Kitsap	1,640	6%
Peninsula	Pierce	640	2%
Southeastern Pierce County	Pierce	520	2%
City of Tacoma	Pierce	430	2%
Southwest Snohomish County	Snohomish	310	1%
City of Everett	Snohomish	200	1%
Southwest Pierce County	Pierce	180	1%
Eastern Snohomish County	Snohomish	50	0%
Northwest Snohomish County	Snohomish	40	0%
Outside PSRC Region	-	1,930	7%
Total Jobs within the City of Bremerton		28,010	100%



Source: LEHD On The Map, US Census Bureau

Where Bremerton Workers Lived: 2010

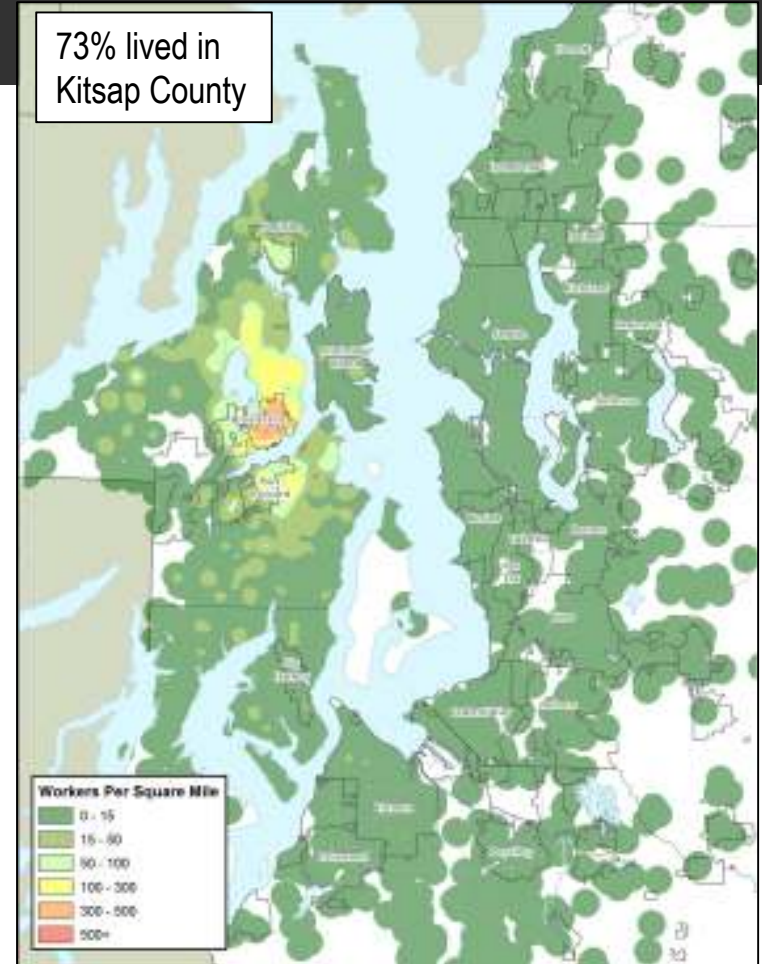
Area	County	# of Workers	% of Jobs
Central Kitsap	Kitsap	14,310	50%
South Kitsap	Kitsap	5,040	18%
North Kitsap	Kitsap	2,000	7%
King County	King	1,820	6%
Peninsula	Pierce	940	3%
Southeastern Pierce County	Pierce	550	2%
City of Tacoma	Pierce	480	2%
Southwest Pierce County	Pierce	250	1%
City of Everett	Snohomish	240	1%
Southwest Snohomish County	Snohomish	230	1%
Eastern Snohomish County	Snohomish	70	0%
Northwest Snohomish County	Snohomish	40	0%
Outside PSRC Region	-	2,470	9%
Total Jobs within the City of Bremerton		28,440	100%



Source: LEHD On The Map, US Census Bureau

Where Bremerton Workers Lived: 2014

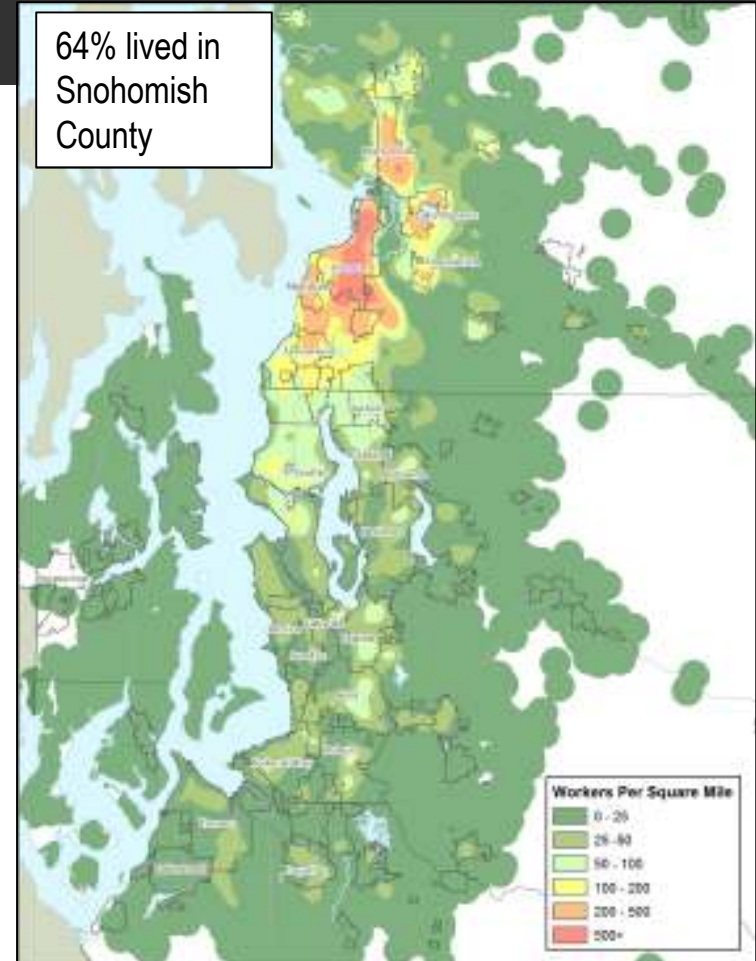
Area	County	# of Workers	% of Jobs
Central Kitsap	Kitsap	14,090	49%
South Kitsap	Kitsap	4,760	17%
North Kitsap	Kitsap	2,130	7%
King County	King	1,990	7%
Peninsula	Pierce	1,130	4%
Southeastern Pierce County	Pierce	660	2%
City of Tacoma	Pierce	440	2%
Southwest Snohomish County	Snohomish	300	1%
Southwest Pierce County	Pierce	260	1%
City of Everett	Snohomish	240	1%
Eastern Snohomish County	Snohomish	80	0%
Northwest Snohomish County	Snohomish	40	0%
Outside PSRC Region	-	2,510	9%
Total Jobs within the City of Bremerton		28,630	100%



Source: LEHD On The Map, US Census Bureau

Where Everett Workers Lived: 2006

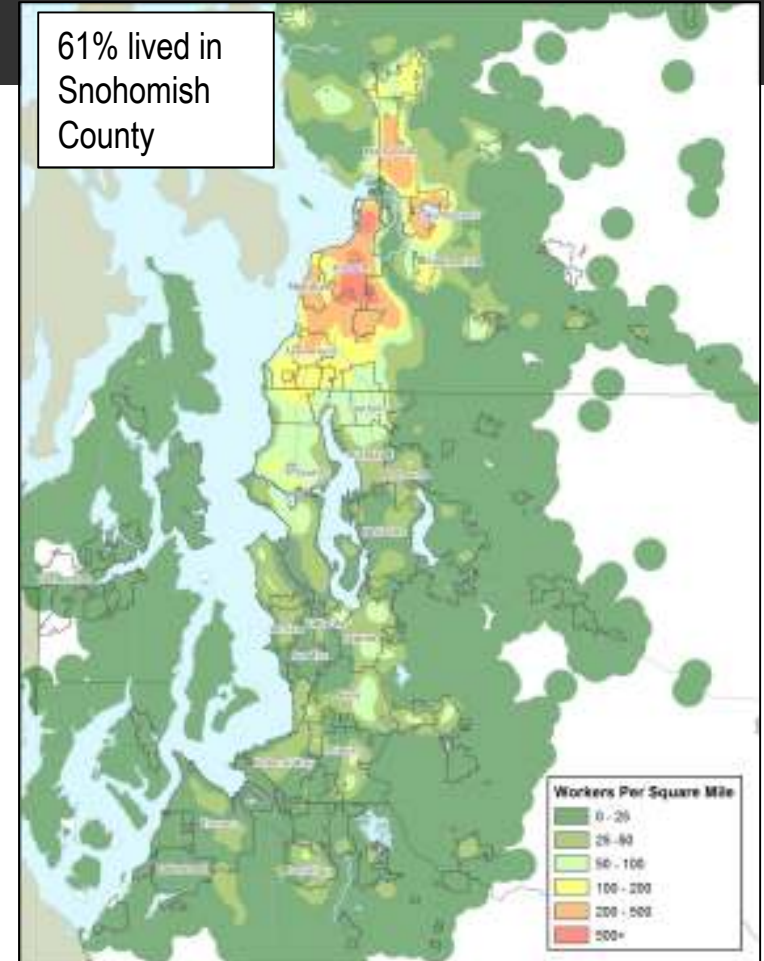
Area	County	# of Workers	% of Jobs
City of Everett	Snohomish	27,800	35%
Southwest Snohomish County	Snohomish	15,300	19%
Eastside	King	5,100	6%
City of Seattle	King	4,500	6%
Northwest Snohomish County	Snohomish	3,700	5%
Eastern Snohomish County	Snohomish	3,700	5%
Southeastern Pierce County	Pierce	2,600	3%
Southeastern King County	King	2,400	3%
Green River Valley	King	2,100	3%
Southwest King County	King	2,000	3%
City of Shoreline	King	1,200	2%
City of Tacoma	Pierce	1,000	1%
Kitsap County	Kitsap	800	1%
Eastern King County	King	600	1%
Southwest Pierce County	Pierce	500	1%
Outside PSRC Region	-	6,100	8%
Total Jobs within the City of Everett		79,400	100%



Source: LEHD On The Map, US Census Bureau

Where Everett Workers Lived: 2010

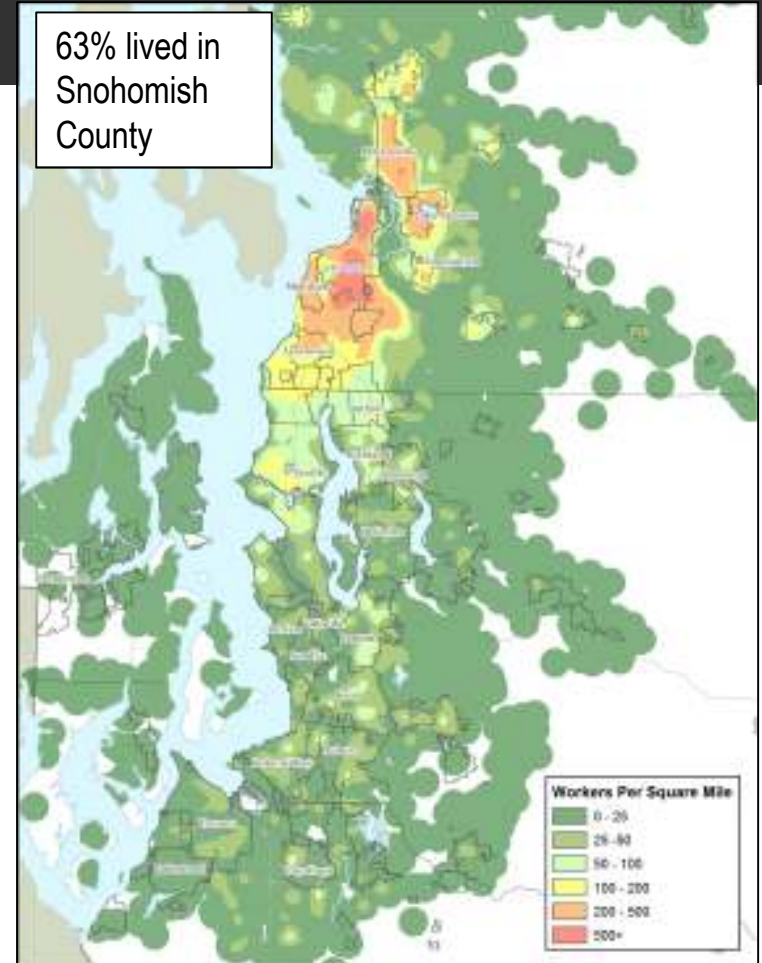
Area	County	# of Workers	% of Jobs
City of Everett	Snohomish	26,400	32%
Southwest Snohomish County	Snohomish	16,300	20%
Eastside	King	4,700	6%
City of Seattle	King	4,400	5%
Eastern Snohomish County	Snohomish	3,800	5%
Northwest Snohomish County	Snohomish	3,700	4%
Southeastern Pierce County	Pierce	3,200	4%
Southeastern King County	King	2,800	3%
Green River Valley	King	2,100	3%
Southwest King County	King	1,800	2%
City of Shoreline	King	1,300	2%
Kitsap County	Kitsap	1,100	1%
City of Tacoma	Pierce	1,000	1%
Eastern King County	King	600	1%
Southwest Pierce County	Pierce	500	1%
Outside PSRC Region	-	8,900	11%
Total Jobs within the City of Everett		82,600	100%



Source: LEHD On The Map, US Census Bureau

Where Everett Workers Lived: 2014

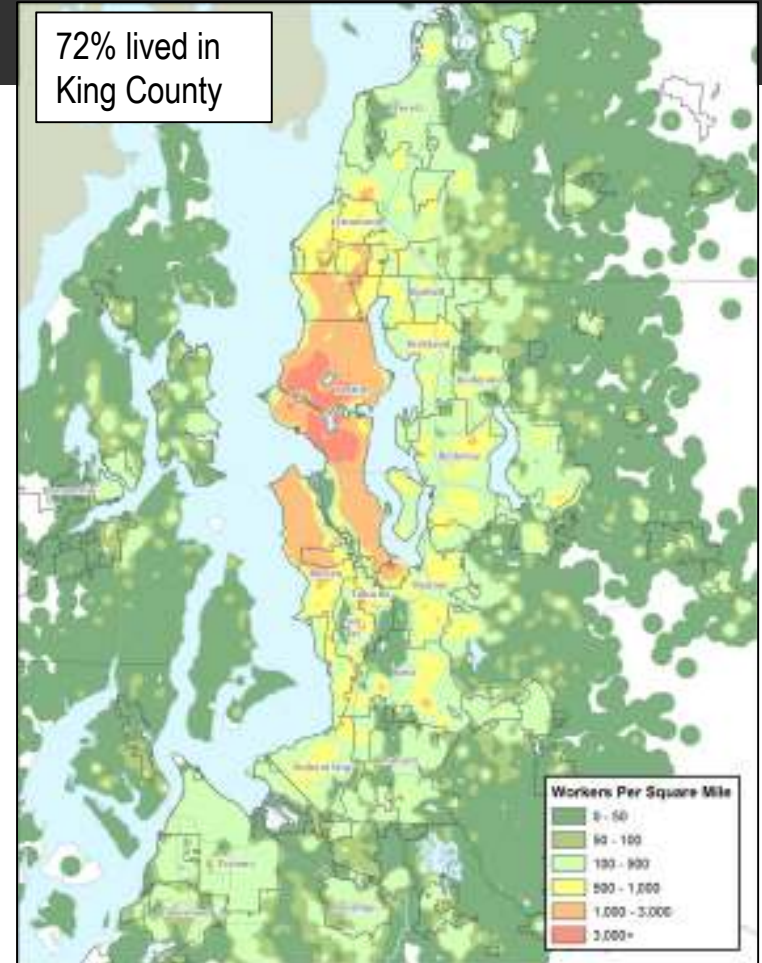
Area	County	# of Workers	% of Jobs
City of Everett	Snohomish	28,400	33%
Southwest Snohomish County	Snohomish	18,500	21%
Eastside	King	4,900	6%
City of Seattle	King	4,600	5%
Eastern Snohomish County	Snohomish	4,200	5%
Northwest Snohomish County	Snohomish	3,500	4%
Southeastern Pierce County	Pierce	2,800	3%
Southeastern King County	King	2,500	3%
Green River Valley	King	1,800	2%
Southwest King County	King	1,700	2%
City of Shoreline	King	1,300	1%
Kitsap County	Kitsap	1,100	1%
City of Tacoma	Pierce	1,000	1%
Eastern King County	King	700	1%
Southwest Pierce County	Pierce	500	1%
Outside PSRC Region	-	9,600	11%
Total Jobs within the City of Everett		87,100	100%



Source: LEHD On The Map, US Census Bureau

Where Seattle Workers Lived: 2006

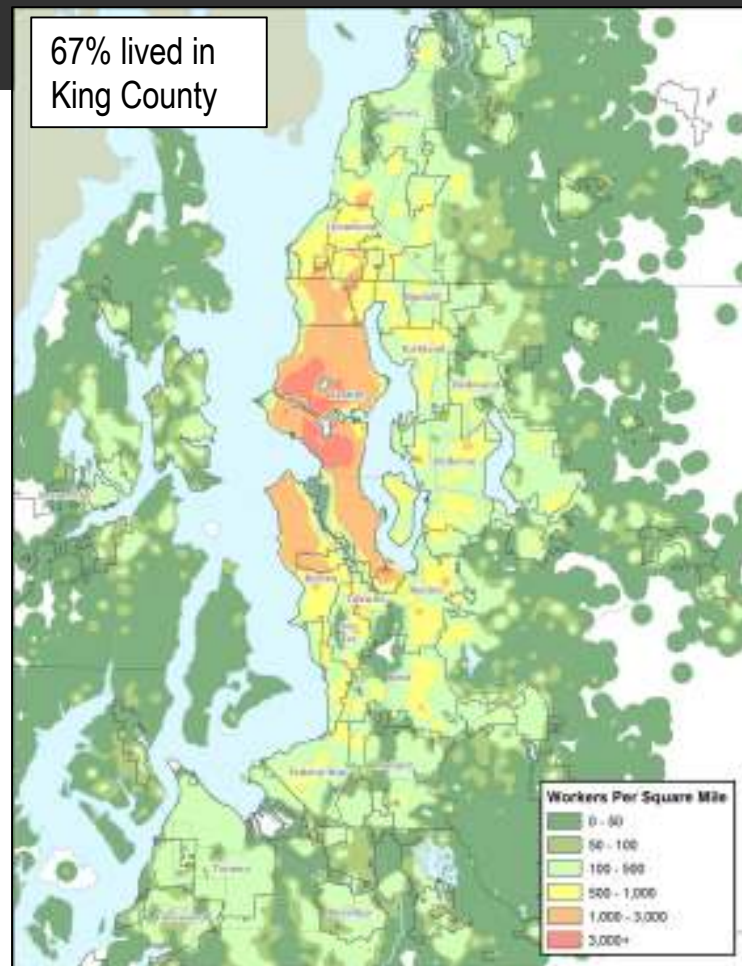
Area	County	# of Workers	% of Jobs
City of Seattle	King	183,500	39%
Eastside	King	54,800	12%
Southwest Snohomish County	Snohomish	37,800	8%
Southwest King County	King	32,600	7%
Green River Valley	King	24,300	5%
Southeastern King County	King	22,800	5%
City of Shoreline	King	15,400	3%
City of Everett	Snohomish	14,900	3%
Southeastern Pierce County	Pierce	14,500	3%
Kitsap County	Kitsap	12,200	3%
City of Tacoma	Pierce	9,100	2%
Eastern King County	King	4,000	1%
Southwest Pierce County	Pierce	3,800	1%
Eastern Snohomish County	Snohomish	3,200	1%
Northwest Snohomish County	Snohomish	1,800	0%
Outside PSRC Region	-	32,200	7%
Total Jobs within the City of Seattle		466,900	100%



Source: LEHD On The Map, US Census Bureau

Where Seattle Workers Lived: 2010

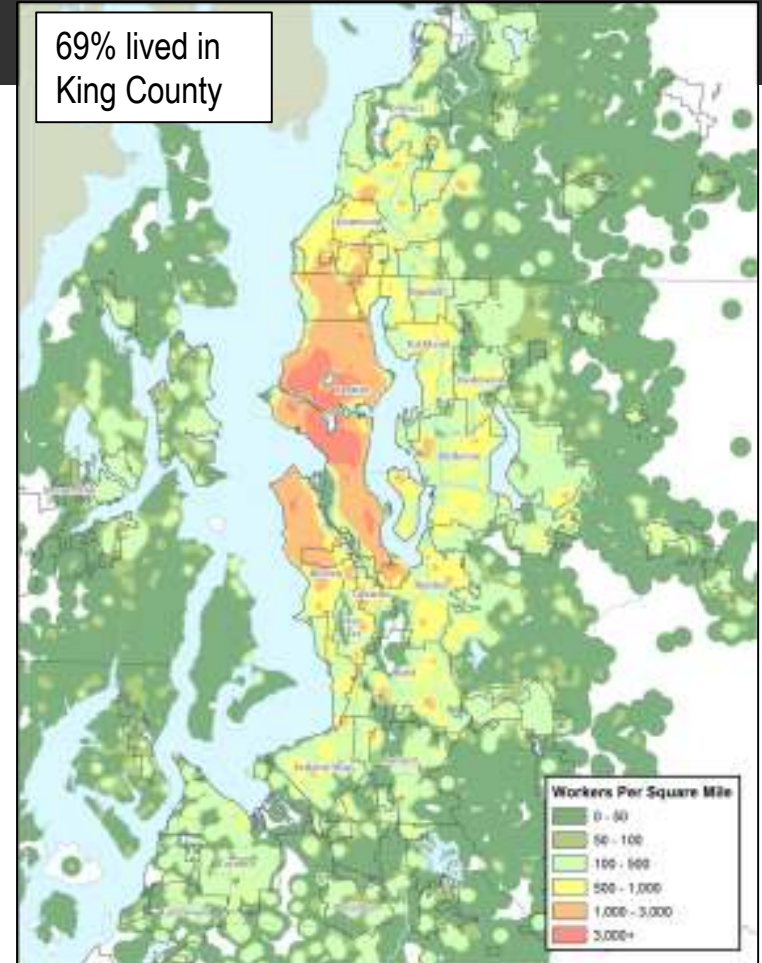
Area	County	# of Workers	% of Jobs
City of Seattle	King	183,000	36%
Eastside	King	57,700	11%
Southwest Snohomish County	Snohomish	39,300	8%
Southwest King County	King	30,100	6%
Green River Valley	King	24,200	5%
Southeastern King County	King	23,400	5%
City of Everett	Snohomish	17,300	3%
Southeastern Pierce County	Pierce	17,200	3%
Kitsap County	Kitsap	16,300	3%
City of Shoreline	King	15,100	3%
City of Tacoma	Pierce	9,200	2%
Eastern King County	King	4,600	1%
Southwest Pierce County	Pierce	3,900	1%
Eastern Snohomish County	Snohomish	3,900	1%
Northwest Snohomish County	Snohomish	2,300	0%
Outside PSRC Region	-	55,700	11%
Total Jobs within the City of Seattle		503,200	100%



Source: LEHD On The Map, US Census Bureau

Where Seattle Workers Lived: 2014

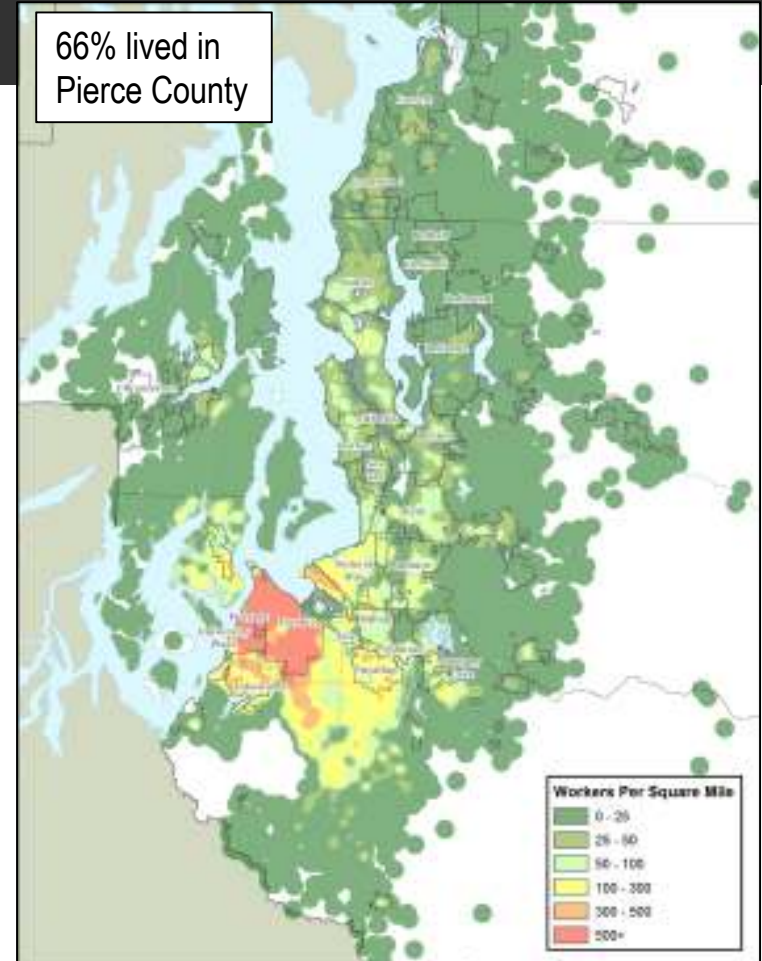
Area	County	# of Workers	% of Jobs
City of Seattle	King	204,400	38%
Eastside	King	63,600	12%
Southwest Snohomish County	Snohomish	42,400	8%
Southwest King County	King	32,100	6%
Green River Valley	King	25,400	5%
Southeastern King County	King	24,300	4%
City of Everett	Snohomish	17,500	3%
Kitsap County	Kitsap	17,100	3%
Southeastern Pierce County	Pierce	16,500	3%
City of Shoreline	King	16,300	3%
City of Tacoma	Pierce	9,800	2%
Eastern King County	King	5,300	1%
Eastern Snohomish County	Snohomish	4,300	1%
Southwest Pierce County	Pierce	3,900	1%
Northwest Snohomish County	Snohomish	2,200	0%
Outside PSRC Region	-	59,400	11%
Total Jobs within the City of Seattle		544,500	100%



Source: LEHD On The Map, US Census Bureau

Where Tacoma Workers Lived: 2006

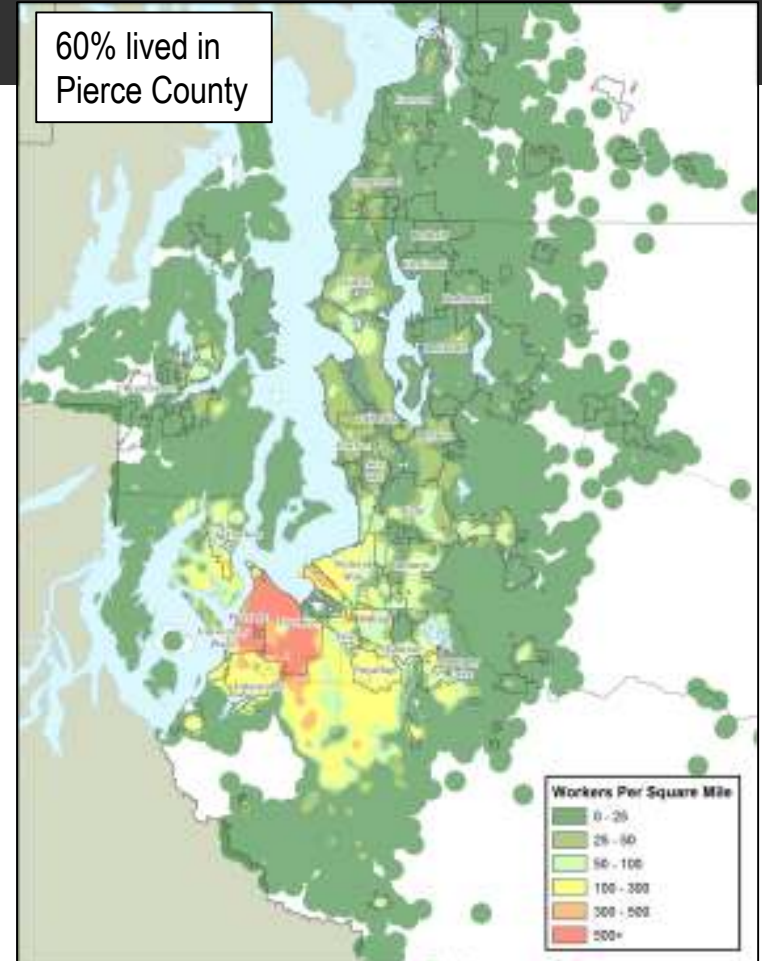
Area	County	# of Workers	% of Jobs
City of Tacoma	Pierce	32,400	31%
Southeastern Pierce County	Pierce	23,900	23%
Southwest Pierce County	Pierce	12,100	12%
Kitsap County	Kitsap	6,400	6%
Southwest King County	King	5,300	5%
City of Seattle	King	3,400	3%
Southeastern King County	King	2,700	3%
Green River Valley	King	2,500	2%
Eastside	King	2,100	2%
Southwest Snohomish County	Snohomish	1,500	1%
City of Everett	Snohomish	1,000	1%
Eastern King County	King	400	0%
City of Shoreline	King	300	0%
Eastern Snohomish County	Snohomish	300	0%
Northwest Snohomish County	Snohomish	200	0%
Outside PSRC Region	-	10,400	10%
Total Jobs within the City of Tacoma		104,900	100%



Source: LEHD On The Map, US Census Bureau

Where Tacoma Workers Lived: 2010

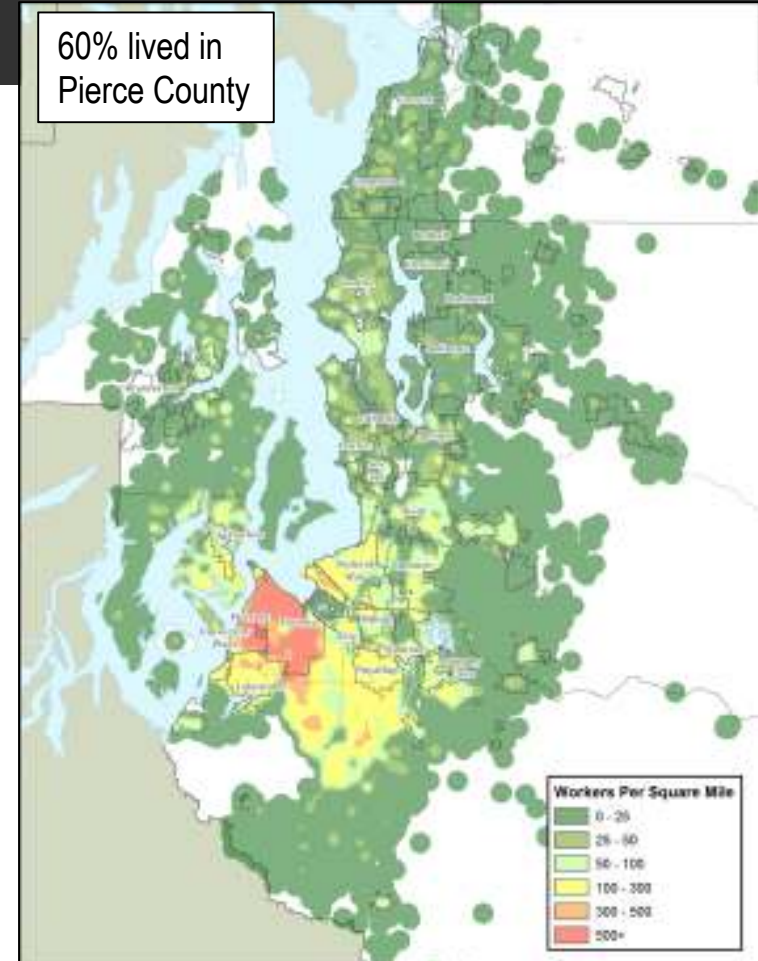
Area	County	# of Workers	% of Jobs
City of Tacoma	Pierce	27,000	27%
Southeastern Pierce County	Pierce	23,600	23%
Southwest Pierce County	Pierce	10,400	10%
Kitsap County	Kitsap	6,600	7%
Southwest King County	King	5,000	5%
Southeastern King County	King	3,000	3%
City of Seattle	King	3,000	3%
Green River Valley	King	2,400	2%
Eastside	King	2,100	2%
Southwest Snohomish County	Snohomish	1,300	1%
City of Everett	Snohomish	1,000	1%
Eastern King County	King	600	1%
City of Shoreline	King	300	0%
Northwest Snohomish County	Snohomish	200	0%
Eastern Snohomish County	Snohomish	200	0%
Outside PSRC Region	-	13,800	14%
Total Jobs within the City of Tacoma		100,500	100%



Source: LEHD On The Map, US Census Bureau

Where Tacoma Workers Lived: 2014

Area	County	# of Workers	% of Jobs
City of Tacoma	Pierce	26,900	26%
Southeastern Pierce County	Pierce	25,100	24%
Southwest Pierce County	Pierce	10,200	10%
Kitsap County	Kitsap	6,800	7%
Southwest King County	King	5,400	5%
Southeastern King County	King	3,500	3%
City of Seattle	King	2,800	3%
Green River Valley	King	2,700	3%
Eastside	King	2,000	2%
Southwest Snohomish County	Snohomish	1,300	1%
City of Everett	Snohomish	1,100	1%
Eastern King County	King	500	0%
City of Shoreline	King	300	0%
Eastern Snohomish County	Snohomish	300	0%
Northwest Snohomish County	Snohomish	200	0%
Outside PSRC Region	-	15,100	14%
Total Jobs within the City of Tacoma		104,200	100%



Source: LEHD On The Map, US Census Bureau

Workers from neighboring counties: 2006

In 2006, over 74,000 workers came from neighboring counties to work in our region (4.1% of the region’s workforce)

County	Workers in PSRC Region	Total Workers in County	% of County Workforce
Chelan County	2,600	29,600	9%
Island County	9,600	24,400	39%
Jefferson County	2,400	9,700	25%
Kittitas County	2,200	12,900	17%
Lewis County	4,500	25,100	18%
Mason County	5,900	19,200	31%
Skagit County	12,000	46,900	26%
Thurston County	30,500	101,400	30%
Yakima County	4,200	90,900	5%
Neighboring County Totals	73,900	360,100	21%



Source: LEHD On The Map, US Census Bureau

Workers from neighboring counties: 2010

In 2010, almost 95,000 workers came from neighboring counties to work in our region (5.4% of the region’s workforce)

County	Workers in PSRC Region	Total Workers in County	% of County Workforce
Chelan County	4,400	31,200	14%
Island County	12,000	26,800	45%
Jefferson County	3,600	10,900	33%
Kittitas County	3,100	15,200	20%
Lewis County	8,300	31,700	26%
Mason County	8,700	21,800	40%
Skagit County	15,300	48,800	31%
Thurston County	30,700	99,400	31%
Yakima County	8,600	92,500	9%
Neighboring County Totals	94,700	378,300	25%



Source: LEHD On The Map, US Census Bureau

Workers from neighboring counties: 2014

In 2014, over 101,000 workers came from neighboring counties to work in our region (5.3% of the region’s workforce)

County	Workers in PSRC Region	Total Workers in County	% of County Workforce
Chelan County	5,200	33,400	16%
Island County	13,200	28,200	47%
Jefferson County	4,200	11,100	38%
Kittitas County	3,500	15,700	23%
Lewis County	9,500	31,600	30%
Mason County	9,200	22,400	41%
Skagit County	17,400	52,200	33%
Thurston County	31,900	101,600	31%
Yakima County	7,400	95,300	8%
Neighboring County Totals	101,500	391,500	26%



Source: LEHD On The Map, US Census Bureau

Emerging Technology



Emerging Technologies: An Exciting but Uncertain Future...

Autonomous & Connected Vehicles



Shared Mobility



Traveler Information



Questions?

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