

THE SETTING

To identify future needs, WCOG has examined current and future forecasted demographics, land use, travel, congestion, and economic trends, and lifestyle choices of the region to better understand what challenges and opportunities the community will face in the next twenty years.

Socio-economic and demographic forecasts

Data from regional, statewide, and national agencies¹, and outputs from the Whatcom regional model show Whatcom County's population is expanding at a higher percentage than the statewide and national averages. By looking at population, employment (the location of work sites), labor force (the location where potential workers live), and household information (divided by income group), a map of current and future travel demand can be drawn to illustrate regional transportation needs.

Forecasting and the model

Forecasts for 2020 and 2032 were developed using the Whatcom County land capacity analysis methodology² and population and employment control total sets from WA State Office of Financial Management. Assumptions for the land use model, which are developed by the Whatcom County comprehensive planning team, include the amount of buildable land; zoning regulations; policies regarding density; and a variety of factors that make land more or



less attractive for residential and commercial development.

These data were fed into the regional travel demand model, which simulates and develops forecasts based on current conditions and projected changes in socio-economic variables, and planned changes in the regional transportation system. The model provides decision-makers in the region with a valuable tool for long-range planning of transportation improvements.

Details regarding the development of the travel demand model can be found in the *Updated Whatcom Model*³.

¹ Data Sources: Population from U.S. Census Bureau and the WA State Office of Financial Management; land use and household data from the Whatcom County Assessor's Office; employment data from InfoUSA employment database.

² *Whatcom County Land Capacity Analysis*, Whatcom County, August, 2009: http://www.co.whatcom.wa.us/pds/2031/pdf/LCA_Methodology_081409.pdf

³ *The Updated Whatcom Model*, prepared for Whatcom Council of Governments by Caliper Corporation, March, 2010: http://resources.wcog.org/planning/model_whatcomcounty-report.pdf

Table 1: Socio-economic and travel indicators for the Bellingham area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	36,475	42,717	49,734	36.4
Household Population	84,231	97,645	112,650	33.7
Employment	56,547	66,791	78,682	39.1
Household Size	2.31	2.29	2.27	-1.9
Daily Trips	273,862	316,119	361,544	32.0
Daily Auto Trips	262,717	303,400	347,291	32.2
Daily Transit Trips	11,145	12,719	14,253	27.9
Daily VMT	1,689,769	1,951,269	2,216,894	31.2
Daily VHT	45,368	55,892	68,339	50.6
Time to Work	9.25	9.47	9.76	5.5

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Table 3: Socio-economic and travel indicators for the Everson area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	818	1,036	1,286	57.2
Household Population	2,239	2,882	3,620	61.7
Employment	815	997	1,320	62.0
Household Size	2.74	2.78	2.81	2.8
Daily Trips	4,287	5,162	6,166	43.8
Daily Auto Trips	4,219	5,086	6,082	44.2
Daily Transit Trips	69	76	84	22.3
Daily VMT	35,990	33,122	39,787	10.5
Daily VHT	901	916	1,136	26.1
Time to Work	20.21	20.92	20.99	3.8

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Table 2: Socio-economic and travel indicators for the Blaine area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	1,968	2,761	4,001	103.3
Household Population	4,649	6,674	9,833	111.5
Employment	2,899	3,929	5,283	82.2
Household Size	2.36	2.42	2.46	4.0
Daily Trips	13,112	17,069	22,445	71.2
Daily Auto Trips	12,753	16,603	21,888	71.6
Daily Transit Trips	359	467	556	55.1
Daily VMT	78,953	106,963	133,505	69.1
Daily VHT	1,924	2,775	3,640	89.2
Time to Work	18.66	19.16	19.59	5.0

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Table 4: Socio-economic and travel indicators for the Ferndale area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	4,215	5,798	7,703	82.8
Household Population	11,512	15,761	21,162	83.8
Employment	5,413	7,563	10,470	93.4
Household Size	2.73	2.72	2.75	0.6
Daily Trips	26,208	34,030	43,816	67.2
Daily Auto Trips	25,444	33,102	42,614	67.5
Daily Transit Trips	764	928	1,201	57.2
Daily VMT	404,472	488,788	585,187	44.7
Daily VHT	8,172	10,696	13,856	69.6
Time to Work	13.45	13.78	14.21	5.7

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Table 5: Socio-economic and travel indicators for the Lynden area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	4,452	7,020	7,652	71.9
Household Population	11,456	17,167	19,009	65.9
Employment	5,801	7,596	9,821	69.3
Household Size	2.57	2.45	2.48	-3.5
Daily Trips	28,027	37,843	44,257	57.9
Daily Auto Trips	27,572	37,247	43,497	57.8
Daily Transit Trips	455	595	761	67.2
Daily VMT	121,610	155,042	176,578	45.2
Daily VHT	3,505	4,694	5,522	57.5
Time to Work	17.80	18.38	18.16	2.0

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Table 6: Socio-economic and travel indicators for the Nooksack area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	409	566	844	106.4
Household Population	1,227	1,723	2,584	110.6
Employment	271	356	495	82.7
Household Size	3.00	3.04	3.06	2.1
Daily Trips	2,310	2,937	3,991	72.8
Daily Auto Trips	2,274	2,893	3,930	72.8
Daily Transit Trips	36	44	61	68.6
Daily VMT	15,449	19,804	23,808	54.1
Daily VHT	410	540	672	64.0
Time to Work	21.11	21.69	21.68	2.7

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Table 7: Socio-economic and travel indicators for the Sumas area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	495	647	847	71.1
Household Population	1,298	1,696	2,219	71.0
Employment	417	596	901	116.1
Household Size	2.62	2.62	2.62	-0.1
Daily Trips	2,225	3,005	4,106	84.5
Daily Auto Trips	2,210	2,981	4,068	84.1
Daily Transit Trips	15	24	38	152.9
Daily VMT	19,299	24,818	30,785	59.5
Daily VHT	490	641	879	79.3
Time to Work	24.86	25.14	24.58	-1.1

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Table 8: Socio-economic and travel indicators for the unincorporated area

Indicator	2008	2020	2032	Percent Change 2008 to 2032
Households	26,216	28,781	31,796	21.3
Household Population	69,192	75,936	83,854	21.2
Employment	15,881	18,030	20,932	31.8
Household Size	2.64	2.64	2.64	-0.1
Daily Trips	88,235	97,275	108,292	22.7
Daily Auto Trips	86,953	95,856	106,687	22.7
Daily Transit Trips	1,282	1,419	1,605	25.3
Daily VMT	1,781,193	2,147,799	2,540,351	42.6
Daily VHT	41,961	50,990	61,187	45.8
Time to Work	18.43	18.84	18.95	2.8

Source: WCOG, OFM, 2008 North Sound Travel Survey

Note: Jurisdiction boundaries are based on traffic analysis zones that approximate urban growth areas.

Population

Population in Whatcom County is expected to increase by 36 percent from 191,164 in 2008 to approximately 260,584 in 2032, a growth rate of approximately 1.6 percent annually. Other sub-regions vary in percentage increases over the next twenty years, from a projected 34 percent increase in Bellingham to a forecasted 111 percent growth rate in the Blaine community. These predicted growth rates have been developed based on land use assumptions developed by Whatcom County. Figure 2 depicts the population growth forecasted for the Whatcom region.

Number and size of households

The number of households in the region is projected to increase at generally the same rate as population, while household size is expected to remain steady.

Table 9: Population trend and forecast by jurisdiction

Jurisdiction	1990	2000	2010	2020	2032
Whatcom County	127,780	166,814	201,140	224,980	260,584
Bellingham	52,179	67,171	80,885	103,030	118,188
Blaine	2,489	3,770	4,684	6,722	9,883
Everson	1,490	2,035	2,483	2,887	3,625
Ferndale	5,398	8,758	11,415	15,761	21,162
Lynden	5,709	9,020	11,951	17,167	19,009
Nooksack	584	851	1,338	1,723	2,584
Sumas	744	978	1,319	1,696	2,219

Source: WCOG, OFM, US Census

Note: Population includes both people living in households and group quarters.

Table 10: Household trend and forecast by jurisdiction

Jurisdiction	1990	2000	2010	2020	2032
Whatcom County	48,543	64,450	80,370	89,326	103,863
Bellingham	21,189	27,999	34,671	42,717	49,734
Blaine	1,034	1,496	1,994	2,761	4,001
Everson	540	684	820	1,036	1,286
Ferndale	1,985	3,147	4,210	5,798	7,703
Lynden	2,126	3,426	4,594	7,020	7,652
Nooksack	174	280	434	566	844
Sumas	304	355	504	647	847

Source: WCOG, OFM, US Census



Figure 2: Forecast population growth in the Whatcom region, 2008-2032

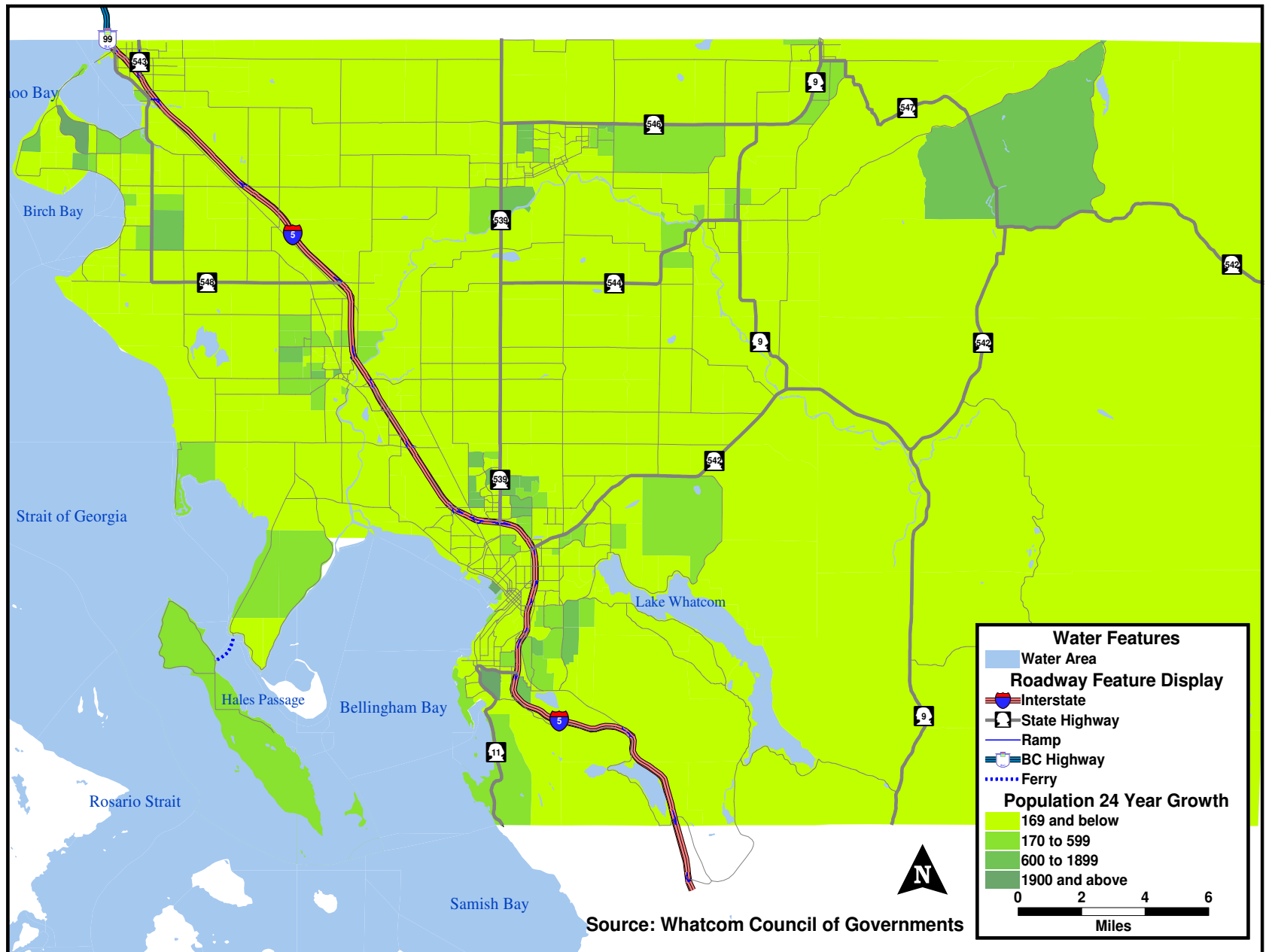
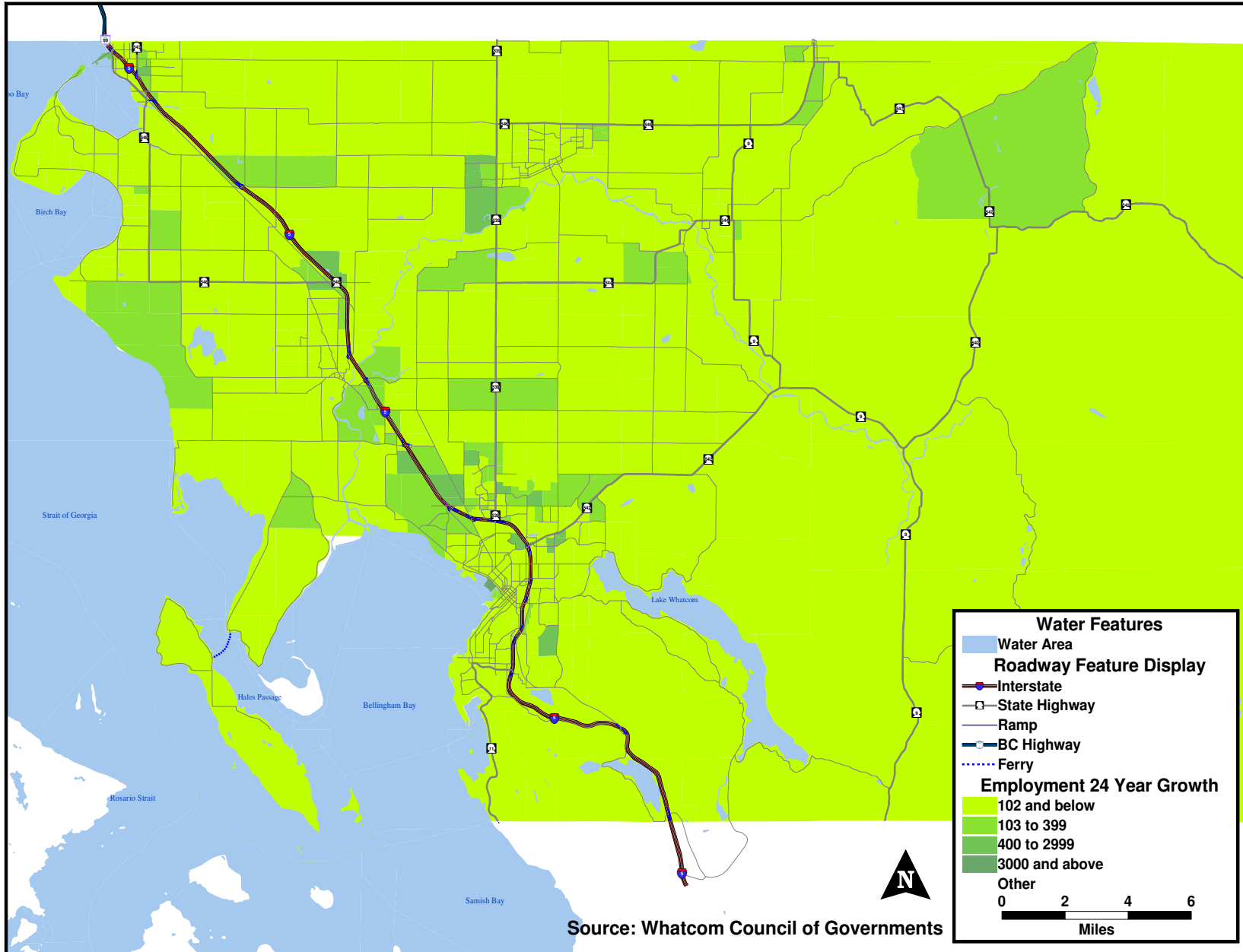


Figure 3: Forecast employment growth in the Whatcom region, 2008-2032



Employment and labor force

The number of jobs in the region increased 47 percent, or about 25,000 from 1990 to 2010. Employment is expected to continue to grow over the next twenty years at that same rate of 4.7% per year.

The number of eligible workers increased at a higher rate than the number of jobs, growing from 68,185 to 106,627 workers, or 56 percent, between 1990 and 2010. Over the next twenty years the labor force is expected to increase by about 38 percent.

Table 11: Employment and labor force trends

Year	Whatcom Residence Labor Force	Whatcom Residence Employed	Whatcom Residence Unemployed	Whatcom Residence Unemployment Rate	Employment in Whatcom County
1990	68,185	64,721	3,464	5.1%	52,770
1991	69,308	64,818	4,489	6.5%	53,829
1992	72,539	67,173	5,367	7.4%	56,054
1993	74,345	68,896	5,449	7.3%	57,532
1994	74,864	69,196	5,668	7.6%	58,997
1995	78,812	73,332	5,480	7.0%	59,933
1996	79,309	74,161	5,149	6.5%	61,807
1997	79,841	75,487	4,354	5.5%	63,640
1998	81,323	77,254	4,070	5.0%	64,851
1999	85,477	81,359	4,118	4.8%	65,877
2000	88,022	83,508	4,514	5.1%	67,266
2001	87,723	82,027	5,696	6.5%	68,918
2002	91,823	85,483	6,340	6.9%	70,307
2003	95,372	88,924	6,447	6.8%	72,409
2004	99,060	93,277	5,783	5.8%	74,987
2005	102,045	96,931	5,113	5.0%	78,491
2006	102,264	97,667	4,597	4.5%	80,180
2007	105,553	101,183	4,369	4.1%	82,551
2008	108,518	103,136	5,383	5.0%	83,167
2009	107,824	98,693	9,131	8.5%	79,164
2010	106,627	97,248	9,379	8.8%	77,779

Source: Washington State Employment Security Department

Travel demand forecasts

Given the socio-economic forecasts above, there will be increased demand on the region's transportation system. Origin-destination and frequency of travel are key factors in planning a future system with enough capacity to meet regional goals.

Travel demand forecasts listed here are based on no-build scenarios. A no-build scenario assumes certain future development actions with but no accompanying modeled transportation system improvements and uses the current system's capacity.

Travel time

Travel times to and from work are expected to increase across all Whatcom County cities with the exception of Sumas, which is expected to remain the same. The amount of travel time for residents of Bellingham is expected to increase more than those living in smaller cities. Figure 4 shows forecasted mean travel times for all regional cities.

Inter- and intra-city travel

The majority of travel in Whatcom County consists of trips to and within the City of Bellingham. This number is expected to increase over the next twenty years. Cars are the dominant mode of transportation both within and between cities, and this is assumed to remain true in the 2032 forecast year.

Figure 4: Average time to work in the Whatcom region

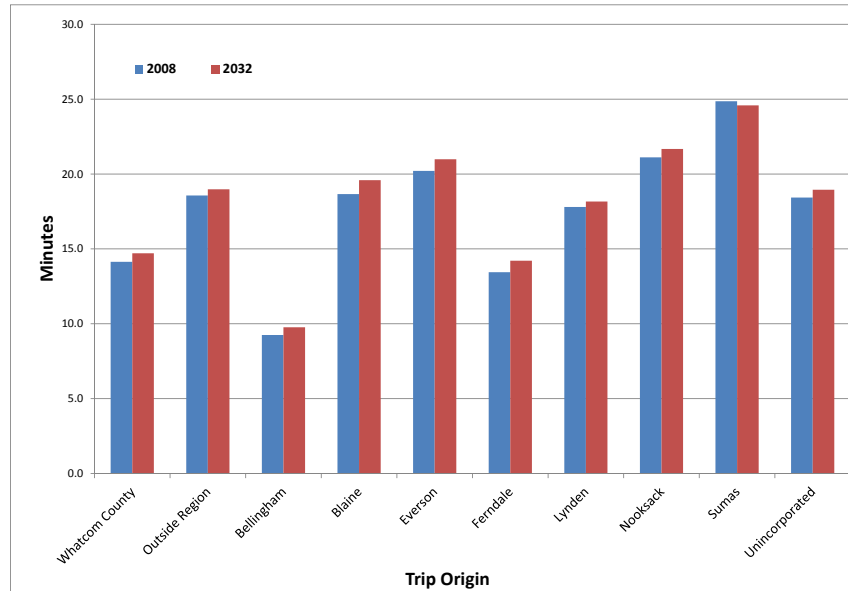


Table 12: Average time to work in the Whatcom region

Home/ Origin Zone	2008 Average Travel Time	2032 Average Travel Time	Percent Change
Whatcom County	14.1	14.7	4.01
Outside Region	18.6	19.0	2.23
Bellingham	9.3	9.8	5.54
Blaine	18.7	19.6	5.00
Everson	20.2	21.0	3.85
Ferndale	13.4	14.2	5.68
Lynden	17.8	18.2	2.03
Nooksack	21.1	21.7	2.66
Sumas	24.9	24.6	-1.12
Unincorporated	18.4	19.0	2.84

Source: WCOG and 2008 North Sound Travel Survey

Table 13: Auto daily city to city trips (2008)

Jurisdiction	Bellingham	Blaine	Everson	Ferndale	Lynden	Nooksack	Sumas	Uninc.	External	Total
Bellingham	189,067	2,620	997	10,755	5,413	456	304	34,958	18,146	262,717
Blaine	2,620	2,769	45	984	667	21	25	3,334	2,288	12,753
Everson	997	45	389	112	694	260	105	1,288	329	4,219
Ferndale	10,755	984	112	4,660	981	47	36	6,501	1,368	25,444
Lynden	5,413	667	694	981	10,348	356	337	6,546	2,229	27,572
Nooksack	456	21	260	47	356	106	83	733	212	2,274
Sumas	304	25	105	36	337	83	144	628	547	2,210
Unincorporated	34,958	3,334	1,288	6,501	6,546	733	628	24,392	8,572	86,953
External	14,171	1,927	271	1,091	1,682	159	462	5,074	2,533	27,370
Total	258,742	12,392	4,161	25,167	27,024	2,221	2,125	83,455	36,224	451,512

Note: Shaded cells indicate number of trips within each city.

Source: WCOG and 2008 North Sound Travel Survey

Table 14: Auto daily city to city trips (2032)

Jurisdiction	Bellingham	Blaine	Everson	Ferndale	Lynden	Nooksack	Sumas	Unincorporated	External	Total
Bellingham	248,939	3,660	1,311	15,828	7,005	711	441	38,292	31,067	347,255
Blaine	3,660	5,419	77	2,003	1,213	45	50	5,317	4,101	21,886
Everson	1,311	77	559	199	1,141	410	175	1,652	557	6,081
Ferndale	15,828	2,003	199	9,823	1,926	100	74	9,852	2,808	42,614
Lynden	7,005	1,213	1,141	1,926	17,924	720	682	8,792	4,093	43,496
Nooksack	711	45	410	100	720	205	181	1,105	451	3,930
Sumas	441	50	175	74	682	181	336	1,038	1,091	4,068
Unincorporated	38,292	5,317	1,652	9,852	8,792	1,105	1,038	28,479	12,158	106,685
External	23,534	3,610	401	2,134	2,927	268	956	7,595	4,223	45,649
Total	339,721	21,395	5,925	41,939	42,330	3,747	3,933	102,121	60,551	621,663

Note: Shaded cells indicate number of trips within each city.

Source: WCOG and 2008 North Sound Travel Survey

Table 15: Transit daily city to city trips (2008)

Jurisdiction	Bellingham	Blaine	Everson	Ferndale	Lynden	Nooksack	Sumas	Uninc.	Total
Bellingham	10,219	31	9	324	55	2	4	502	11,145
Blaine	31	208	0	28	8	0	0	83	359
Everson	9	0	12	1	13	14	1	19	69
Ferndale	324	28	1	229	14	0	1	168	764
Lynden	55	8	13	14	297	4	1	61	455
Nooksack	2	0	14	0	4	5	1	10	36
Sumas	4	0	1	1	1	1	1	6	15
Unincorporated	502	83	19	168	61	10	6	431	1,282
Total	11,145	359	69	764	455	36	15	1,282	14,124

Note: Shaded cells indicate number of trips within each city.

Source: WCOG and 2008 North Sound Travel Survey

Table 16: Transit daily city to city trips (2032)

Jurisdiction	Bellingham	Blaine	Everson	Ferndale	Lynden	Nooksack	Sumas	Uninc.	Total
Bellingham	13,159	39	10	455	62	4	5	579	14,313
Blaine	39	341	1	52	15	0	1	112	560
Everson	10	1	12	2	18	17	2	24	86
Ferndale	455	52	2	417	30	1	1	244	1,202
Lynden	62	15	18	30	529	7	6	94	762
Nooksack	4	0	17	1	7	14	4	15	61
Sumas	5	1	2	1	6	4	5	13	38
Unincorporated	579	112	24	244	94	15	13	528	1,608
Total	14,313	560	86	1,202	762	61	38	1,608	18,630

Note: Shaded cells indicate number of trips within each city.

Source: WCOG and 2008 North Sound Travel Survey

Vehicle miles and hours traveled

Vehicle miles traveled (VMT) is a common measurement to describe the extent of automobile use on a daily or annual basis, and is an indicator of changes in travel demand across the region.

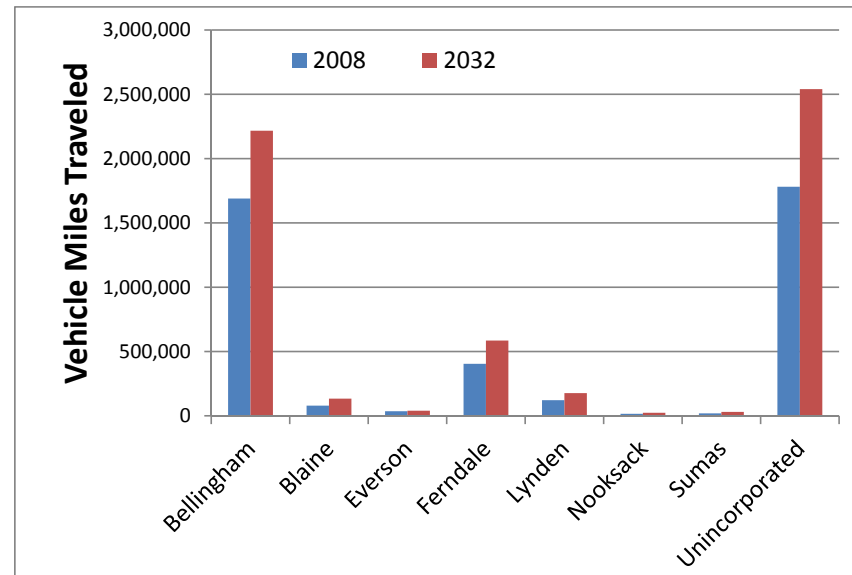
Because job growth can increase VMT, the region’s VMT is expected to rise by approximately 1.43 percent annually between 2008 and 2032, or about 32 percent over a twenty-four year period. The City of Blaine is expected to have the highest increase in VMT at 69 percent.

Table 17: Daily vehicle miles traveled by jurisdiction

Jurisdiction	2008	2032
Bellingham	1,689,769	2,216,894
Blaine	78,953	133,505
Everson	35,990	39,787
Ferndale	404,472	585,187
Lynden	121,610	176,578
Nooksack	15,449	23,808
Sumas	19,299	30,785
Unincorporated	1,781,193	2,540,351

Source: WCOG & 2008 N. Sound Travel Survey

Figure 5: Daily vehicle miles traveled by jurisdiction



Vehicle hours traveled (VHT) reflects the efficiency of travel in terms of the average speed of travel when compared with VMT. As a corollary measure, VMT divided by VHT produces an overall transportation system average vehicle speed for non-transit vehicles region-wide.

VHT is expected to rise by 2 percent annually in this region, or 51 percent by 2032. As with VMT, the City of Blaine should see the greatest increases, with an 89 percent increase.

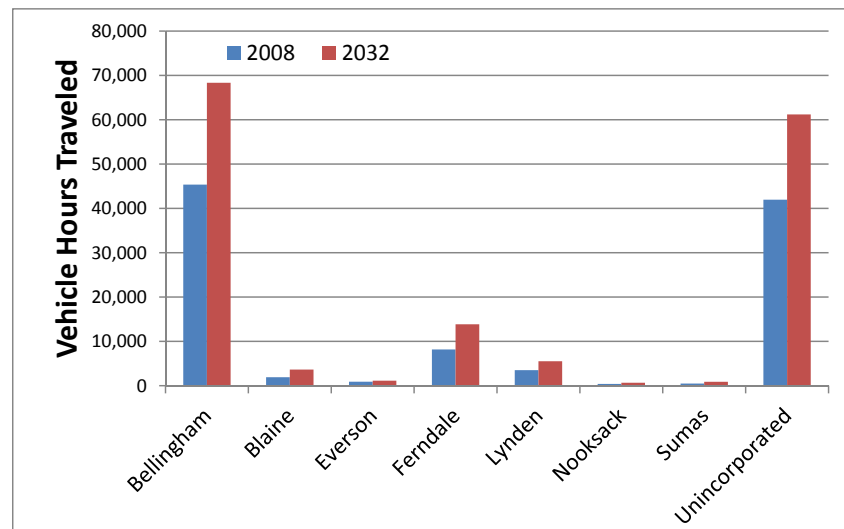
Table 18: Daily vehicle hours traveled by jurisdiction

Jurisdiction	2008	2032
Bellingham	45,368	68,339
Blaine	1,924	3,640
Everson	901	1,136
Ferndale	8,172	13,856
Lynden	3,505	5,522
Nooksack	410	672
Sumas	490	879
Unincorporated	41,961	61,187

Source: WCOG & 2008 N. Sound Travel Survey



Figure 6: Daily vehicle hours traveled by jurisdiction



Volume over capacity

The volume of traffic on a particular roadway, when divided by the capacity of that roadway, provides a means to analyze network performance and the operating conditions a driver will experience when traveling at a specific time. The volume-to-capacity ratio (V/C) is used to determine a roadway link’s level of service (LOS) and given a related grade. If travelers experience little or no delay, that roadway is experiencing LOS A. However if the V/C shows the potential for long delays and congestion (e.g. v/c>.9), the roadway is performing at LOS F.

By analyzing roadway intersections at peak hour traffic conditions, planners and engineers can determine which areas require additional analysis or future improvements.

Figures 7, 8, and 9 depict the volume-to-capacity for existing conditions (2008) and forecasted demand (2032).

Figure 7: 2008 volume over capacity during the 4 PM to 6 PM time period

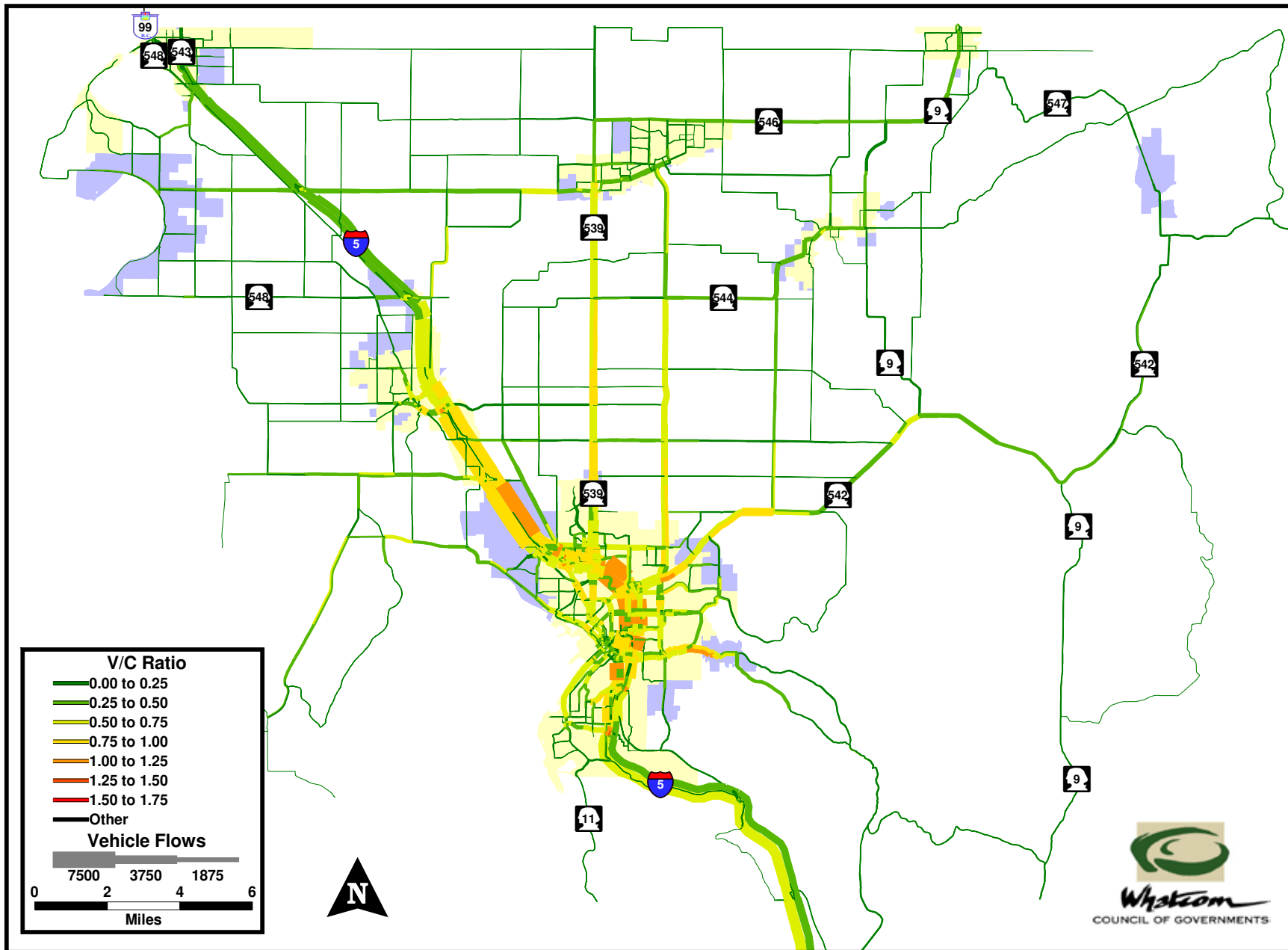


Figure 8: 2032 volume over capacity during the 4 PM to 6 PM time period with no improvements

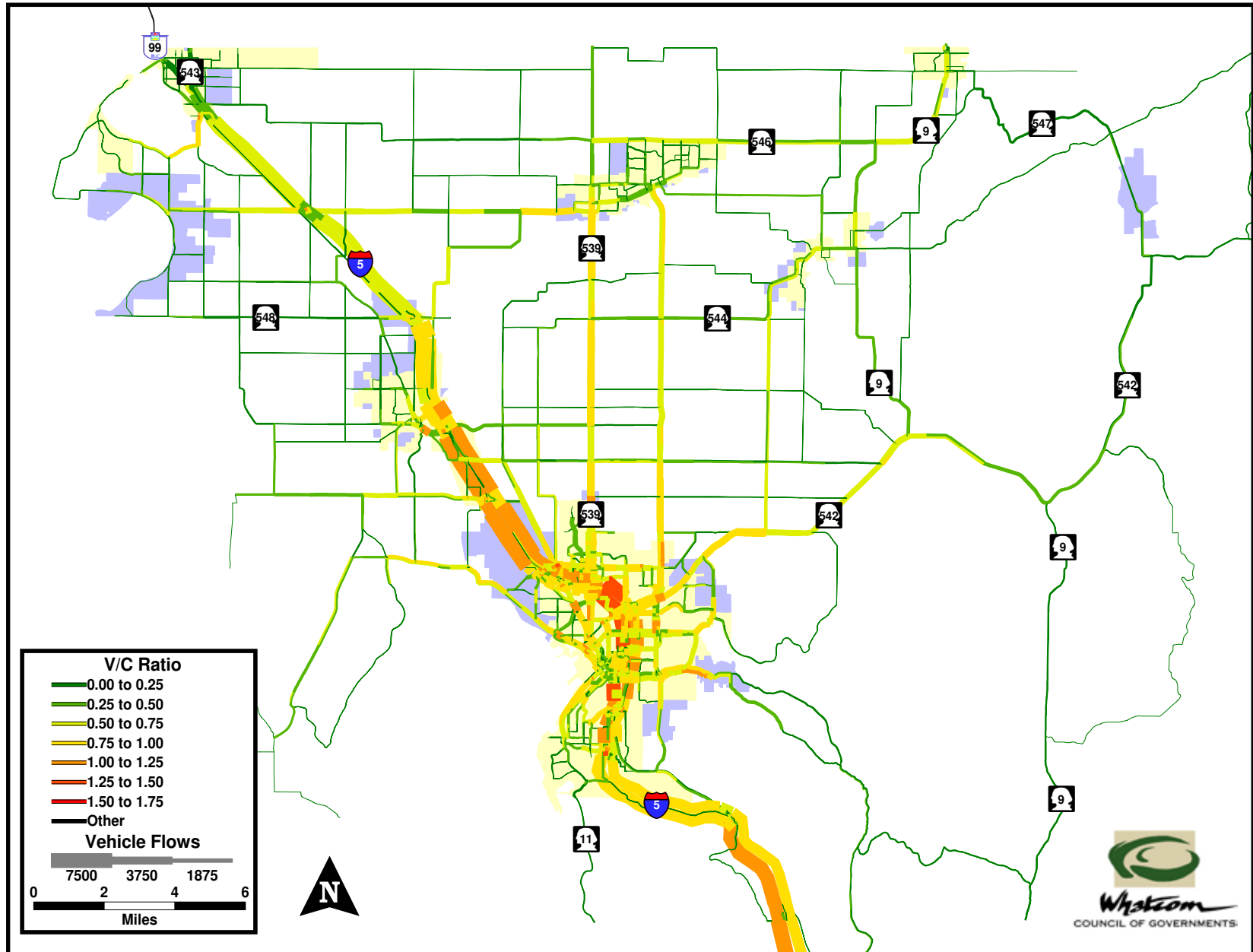
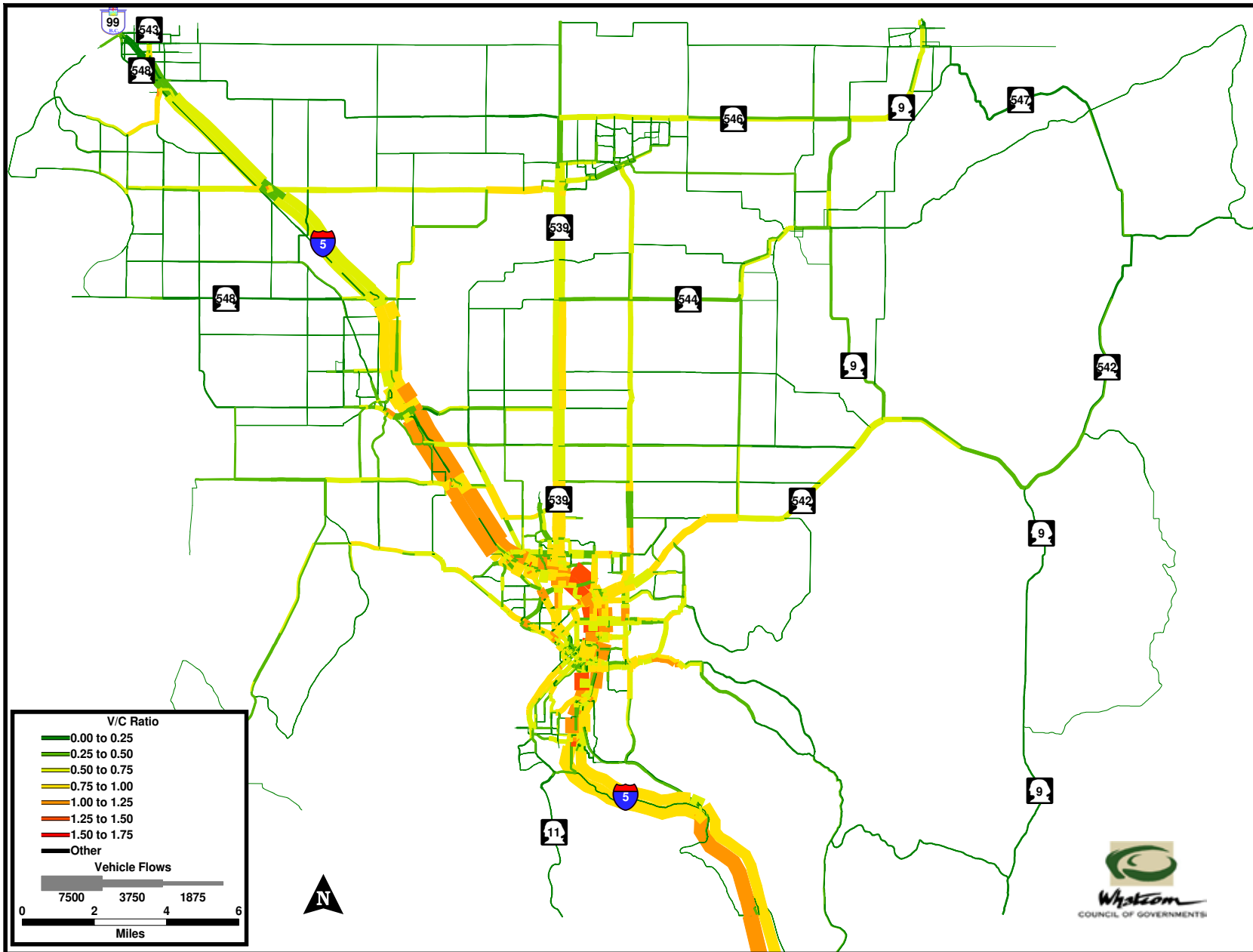


Figure 9: 2032 volume over capacity during the 4 PM to 6 PM time period with planned improvements



Transit demands

The regional transportation model provides current and forecasted flows of transit vehicles as expressed by the number of persons making trips on transit. These flows are developed for mid-day (MD) and evening (PM) time periods. Bellingham has the highest volumes of transit trips, focusing around Western Washington University during the MD period and downtown in the PM period. A noticeable increase in transit ridership is forecasted for travelers between the cities of Bellingham and Ferndale.

Commercial vehicle demands

Since Whatcom County includes five border crossings with Canada that serve over \$40 million in trade each day⁴, the movement of commercial goods is a critical component of the regional transportation network.

To better understand the impacts of freight movements on the region, WCOG worked with Transport Canada and through the IMTC forum to develop a cross-border truck model to depict future scenarios of commercial movements and the impacts on the region’s transportation system.

The 2020 and 2032 base case scenarios depicted in the following tables illustrate where commercial travel demand is expected to increase and the possible impacts to these flows based on border-related initiatives, including such programs as the Free and Secure Trade (FAST) program for pre-approved carriers, drivers, and shippers, and other initiatives to expedite commercial movements.

It is important to note that these predictions show a growth in truck trips which is in contrast to recent trends. Regional cross-border truck volumes have been steadily decreasing since 2001, and only in 2010 showed an increase from the previous year. Therefore

⁴ Transborder Surface Freight Database, U.S. Bureau of Transportation Statistics: <http://www.bts.gov/programs/international/transborder/>

Table 19: Daily border crossing statistics and changes from 2010 to 2020

Truck Type/ Crossing	2009 rebase Scenario			2020 Future Scenario			% Change (vs. 09 Base)		
	NB	SB	Both NB & SB	NB	SB	Both NB & SB	NB	SB	Both NB & SB
FAST Trucks-Pacific Highway	20	300	320	30	400	430	49%	33%	34%
FAST Trucks - Lynden/ Aldergrove									
FAST Trucks-Sumas/ Huntingdon									
FAST Trucks-All Crossings	20	300	320	30	400	430	49%	33%	34%
GP Truck-Pacific Highway	1,460	990	2,450	2,340	1,350	3,690	60%	36%	50%
GP Lynden/ Aldergrove	50	60	110	80	80	160	69%	34%	50%
GP Trucks-Sumas/ Huntingdon	200	630	830	360	880	1,240	77%	40%	49%
GP Trucks-All Crossings	1,720	1,680	3,390	2,790	2,300	5,090	62%	37%	50%
Total (FAST + GP Trucks)	1,740	1,980	3,710	2,820	2,700	5,520	62%	37%	49%

Source: Transport Canada

Table 20: Daily border crossing statistics and changes from 2010 to 2030

Truck Type/ Crossing	2009 rebase Scenario			2020 Future Scenario			% Change (vs. 09 Base)		
	NB	SB	Both NB & SB	NB	SB	Both NB & SB	NB	SB	Both NB & SB
FAST Trucks-Pacific Highway	20	300	320	30	460	490	64%	52%	53%
FAST Trucks-Lynden/ Aldergrove									
FAST Trucks-Sumas/ Huntingdon									
FAST Trucks-All Crossings	20	300	320	30	460	490	64%	52%	53%
GP Truck-Pacific Highway	1,460	990	2,450	2,620	1,550	4,170	79%	57%	70%
GP Lynden/ Aldergrove	50	60	110	100	90	190	93%	57%	74%
GP Trucks-Sumas/ Huntingdon	200	630	830	410	1,040	1,450	103%	65%	74%
GP Trucks-All Crossings	1,720	1,680	3,390	3,130	2,680	5,810	82%	60%	71%
Total (FAST + GP Trucks)	1,740	1,980	3,710	3,160	3,140	6,300	82%	59%	70%

Source: Transport Canada

Figure 10: 2008 mid-day transit flows

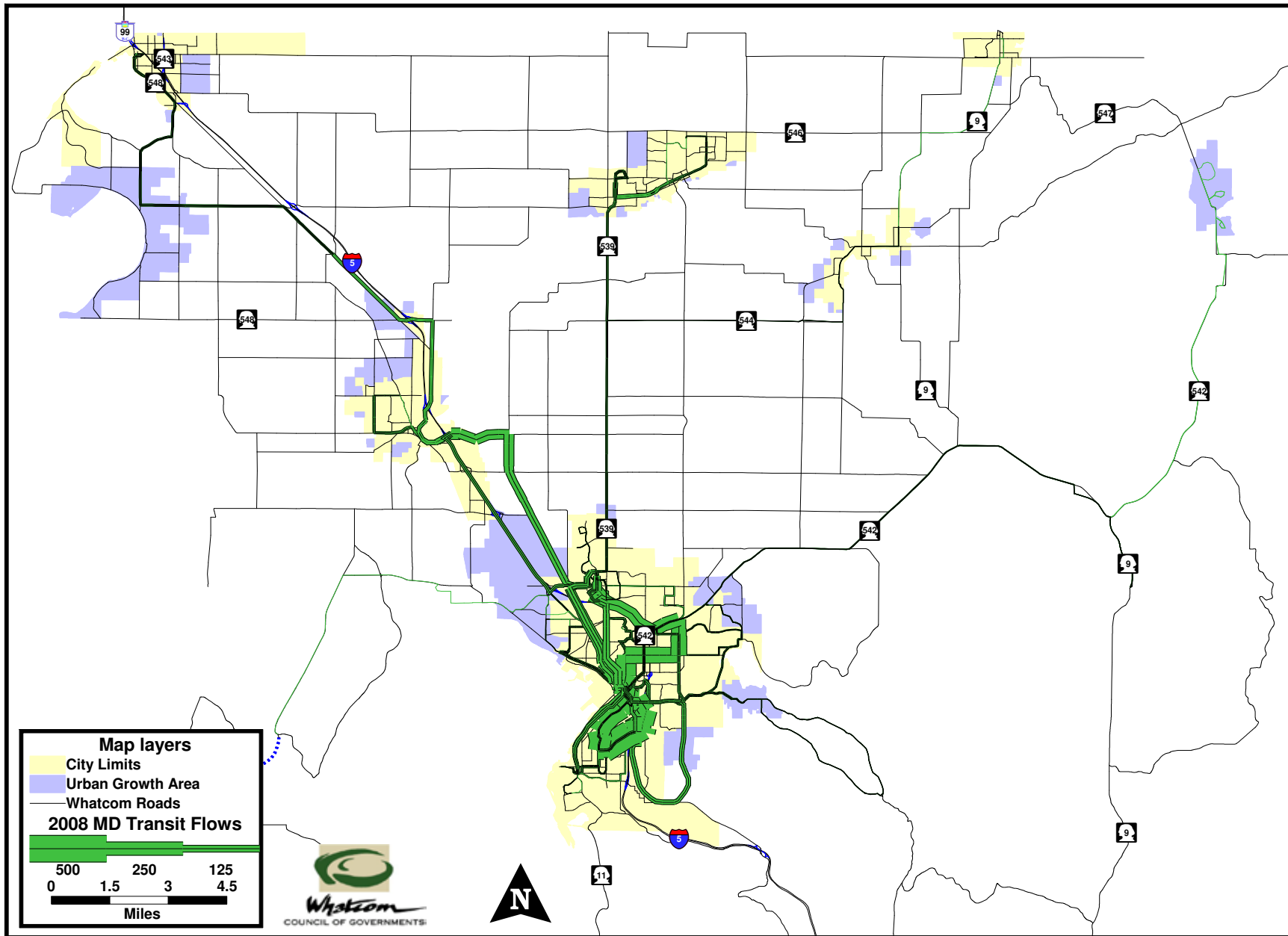


Figure 11: 2008 evening transit flows

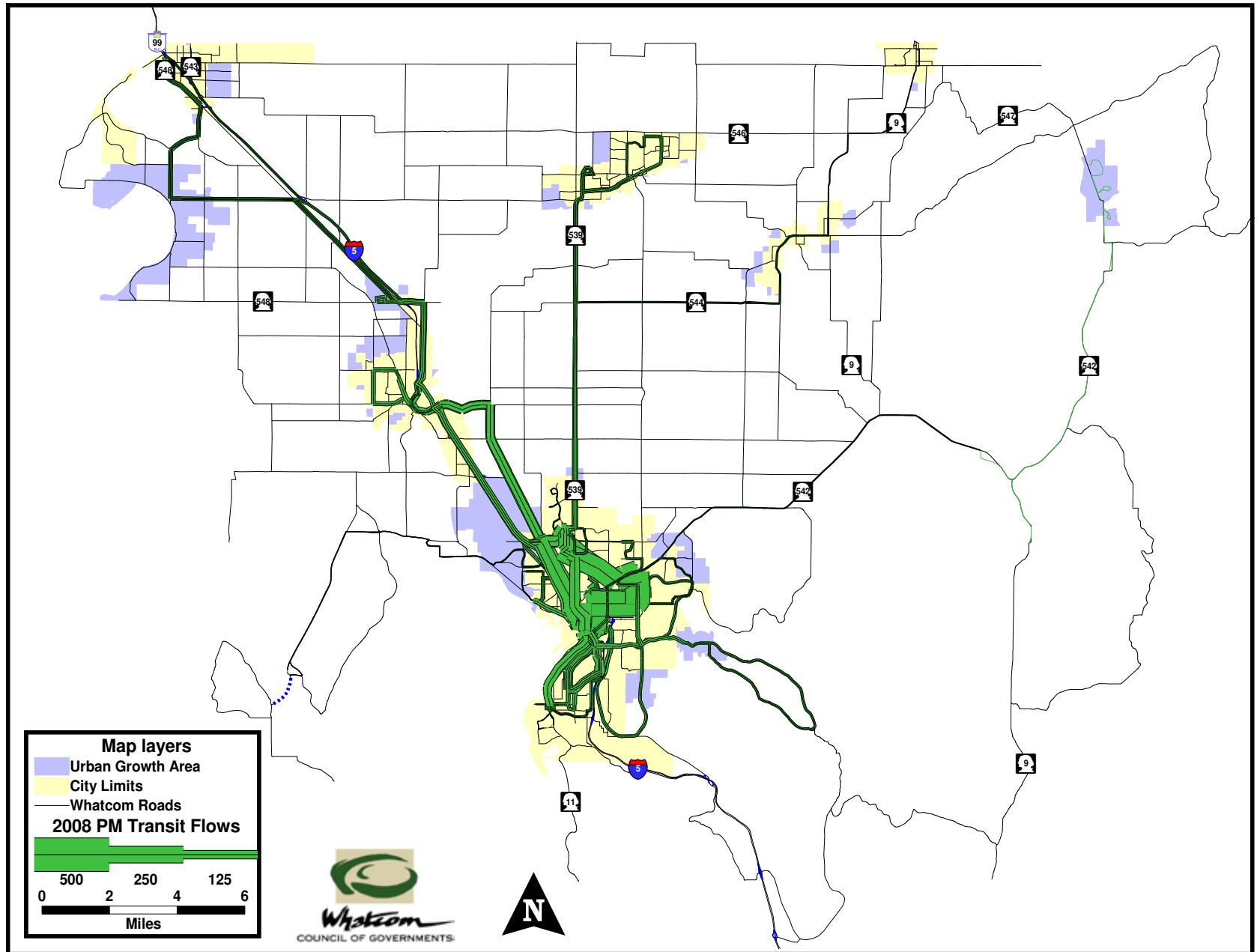


Figure 12: 2032 mid-day transit flows

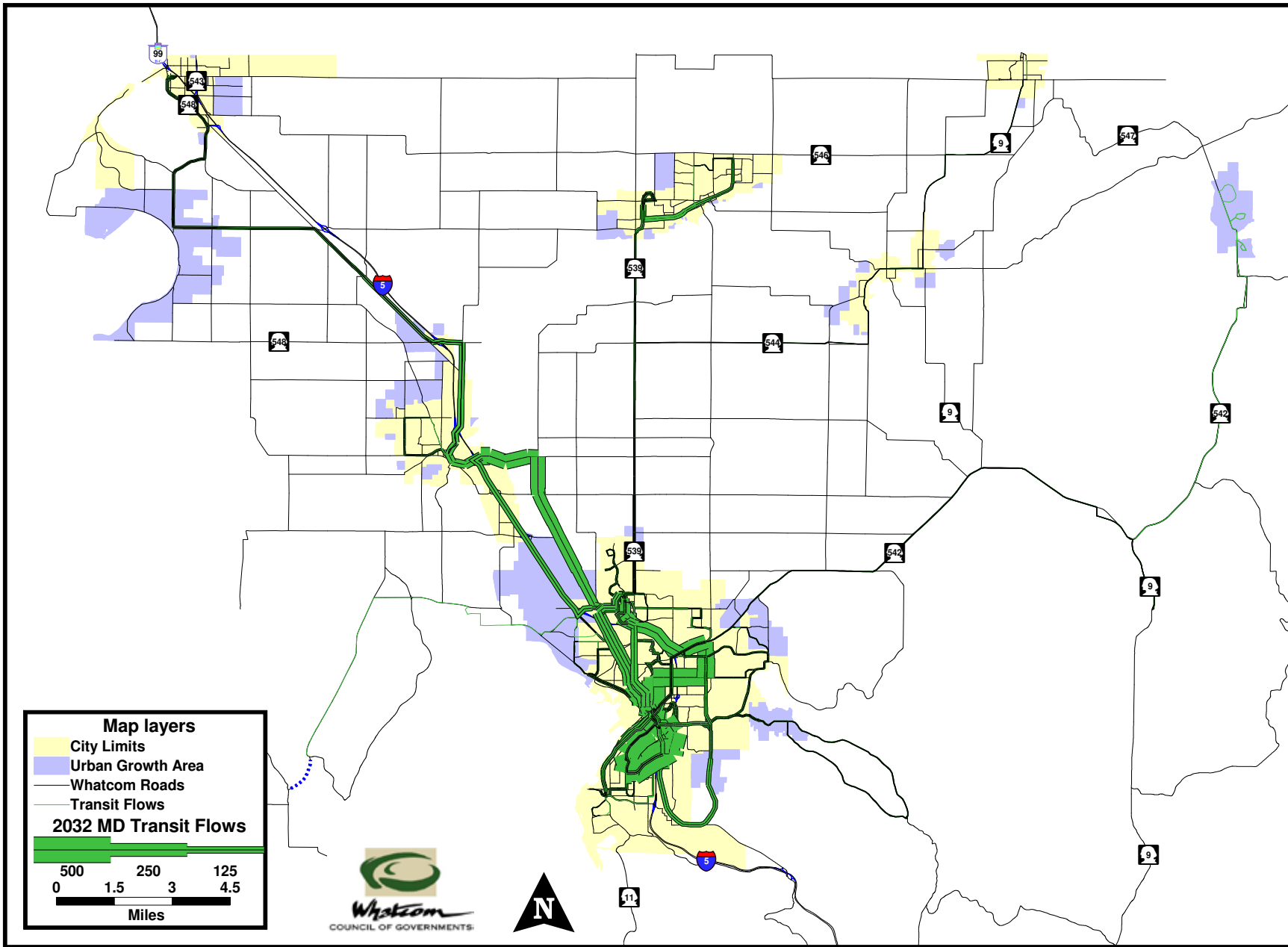
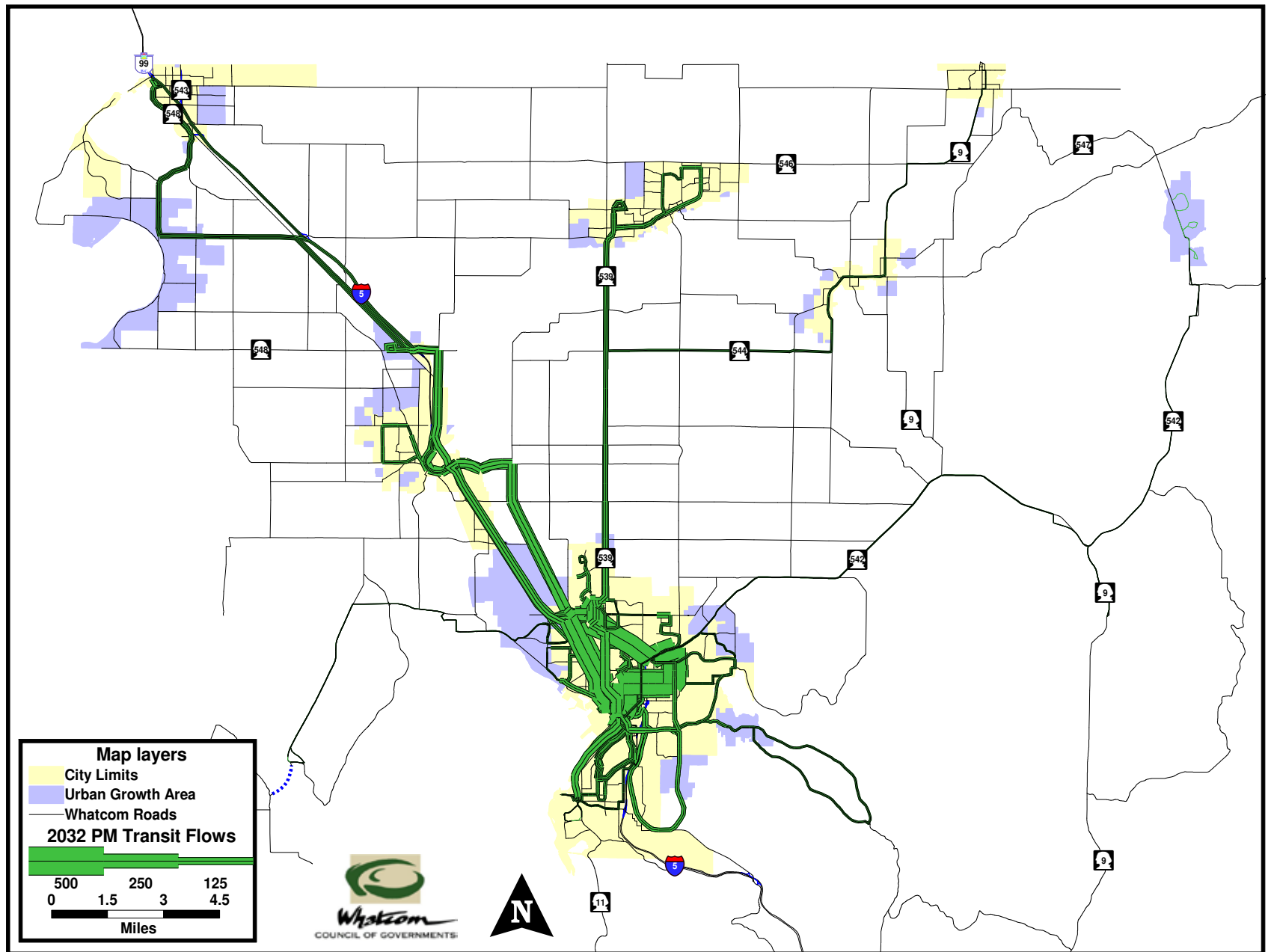


Figure 13: 2032 evening transit flows



the scenarios described here are based on the assumption that commercial demand will increase, rather than historic trends over the last decade.



Regional lifestyle trends

A number of demographic and socioeconomic trends will influence people's lifestyle choices and their demand for transportation that are not accounted for in the travel demand model.

The region's population is aging, which effects household size, income and employment⁵. Given the proportion of the Whatcom County population over age 65 it is important to consider how people in this demographic might travel, and what possible allowances for such modes should be considered.

Rising gas prices are also likely to have a large impact on travel demand for the foreseeable future. Denser residential areas that are closer to jobs and other regional activities centers may become more attractive relative to outlying areas that are more car-dependent⁶.

⁵ US Census: <http://www.census.gov>

⁶ *The Future Isn't What It Used To Be: Changing Trends And Their Implications for Transport Planning*, Victoria Transport Policy Institute, 2012: <http://www.vtppi.org/future.pdf>

Community health preferences will also impact travel demand and predictions of how it will change in the future. As an example, there is increasing concern about obesity rates and links with over reliance on automobile travel. In Whatcom County, there is evidence that public awareness of the problem is beginning to influence individual transportation choices. Refer to *Appendix G: Transportation and health* for additional information about the health benefits using non-motorized modes.

Future needs

Given Whatcom County's population growth, diminishing levels of service and increased VMT predictions, continuing levels of nationally-significant commercial vehicle traffic from the fourth busiest U.S. – Canada border crossing, and lifestyle changes of an aging population, the region must prepare for numerous challenges to the existing transportation system while working with, most likely, reduced resources.

