Chapter 2: Bellingham's Multimodal Transportation Planning Approach

Complete Networks Policies

In 2004-2005, just as the national "Complete Streets" movement rose to popularity, Bellingham created its local prototype of a complete-streets approach to transportation planning by expanding the focus of citywide transportation planning to include multiple modes of transportation (multimodal) with goals, policies, and project recommendations to accommodate pedestrians, bicyclists, and transit riders, as well as vehicle drivers on public streets. Bellingham worked directly with Whatcom Transportation Authority (WTA) in the development of the 2004 WTA Strategic Plan and adopted the WTA Primary Transit Network into the 2006 Bellingham Transportation Element. In addition to the citywide arterial street network, Bellingham created a citywide Freight Truck Route Network in 2007, a Primary Pedestrian Network in 2012, and a Primary Bicycle Network in 2014. From 2004-2016, Bellingham's prototypical complete-streets approach has evolved into "Complete Networks" policies for citywide multimodal transportation planning. The ultimate goal of Bellingham's Complete Networks Program is to complete, maintain, and enhance each modal network over time.

Figure 2.1. - Bellingham's "Complete Networks" Policies for Transportation Planning

Transportation Modal Hierarchy

A fundamental component of Bellingham's Complete Networks approach to transportation planning is a transportation modal hierarchy, which prioritizes the needs of the most vulnerable users (pedestrians and bicyclists) above the needs of less vulnerable (motorized) users. Bellingham has adopted a transportation policy for modal priority in the Transportation Chapter of the 2016 Bellingham Comprehensive Plan to:

Policy T-6: Design multimodal transportation improvements on existing and new streets with the safety and mobility needs of all user groups considered and with priority emphasis placed on the most vulnerable user groups", as illustrated in Figure 2., below.

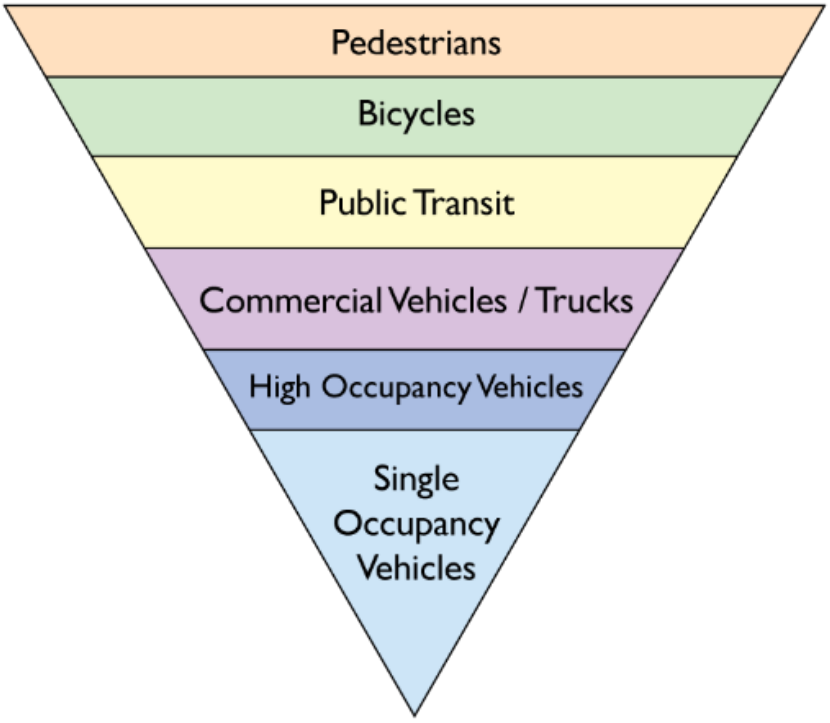

Figure 2.2. - Bellingham's Transportation Modal Priorities

Bellingham's 2012 Pedestrian Master Plan and 2014 Bicycle Master Plan each include extensive sidewalk, pedestrian crossing, bikeway, and bicycle crossing project lists, which are prioritized to maximize connectivity benefit for these most vulnerable user groups. In addition, Bellingham requires private developers to fund and construct sidewalks and bike lanes on all new or reconstructed arterial streets. When Bellingham Public Works engages in maintenance or repair of arterial streets, opportunities to include improvements identified in the Pedestrian and Bicycle Master Plans are always considered. Bellingham transportation planners also prioritize improvements identified in the Pedestrian and Bicycle Master Plans when seeking state or federal grants for transportation improvements. Lists of sidewalk, crossing improvements, and bikeway projects completed with local street and TBD funds, state and federal grant funds, as well as private and partnership funds, are included in Chapters 4, 5, and 6.

Transportation Mode Share Trends and Long-Term Mode Shift Goals

In 2006, Bellingham adopted long-term transportation mode shift goals, which were updated and readopted in the 2016 Bellingham Comprehensive Plan. The long-term aspirational goals for transportation mode shift are consistent with City Council Legacies and Strategic Commitments and are designed to increase the mode shares for people walking, biking, riding transit, and sharing rides to work, while decreasing the number of people driving single occupant vehicles to work. Advancements in technology may allow an increase in the number of people working from home, which may reduce single occupant vehicle trips to work. Bellingham expects walking and bicycling for short, local, and non-work trips to increase in tandem with sidewalk and bicycle network completeness as well as increases in density of land use throughout the city.

Figure 2.3, below, illustrates transportation mode share trends for work trips from 2000 through 2017 based on American Community Survey data published by the U.S. Census Bureau. The long-term trends establish Bellingham's baseline and the aspirational targets are goals to aim for in the future based on City plans. However, many factors that affect individual transportation mode choice are beyond the control of Bellingham city government policies and some of the aspirational goals may not be achievable without significant changes to how the local economy generates sales tax revenue for transportation funding.

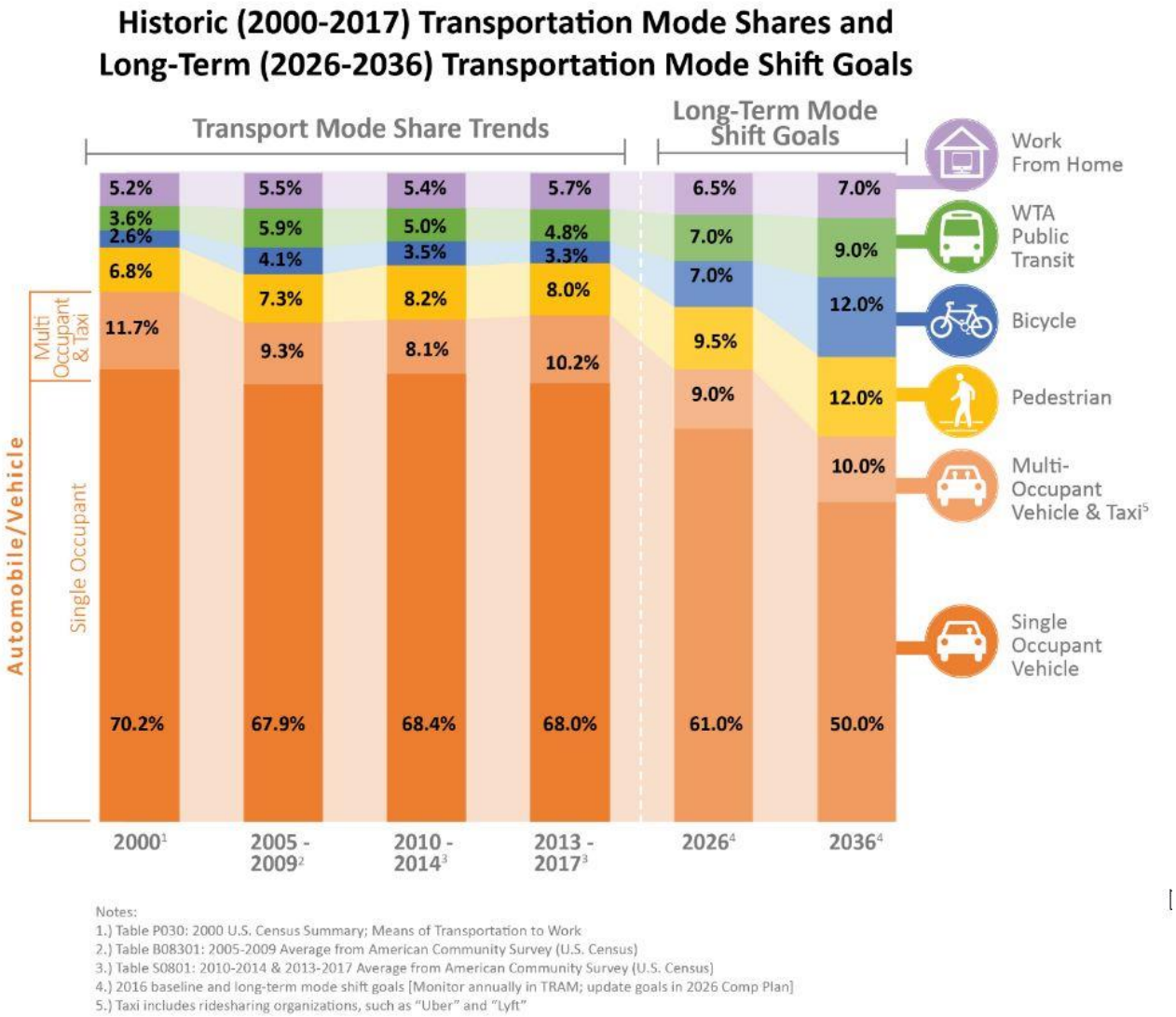

Figure 2.3. - Bellingham's Aspirational Long-Term Transportation Mode Shift Goals

Observations of Transportation Mode Share and Local Economic Trends in 2020 *(Prior to mid-March 2020)*

Public Works tracks and monitors annual progress toward achieving the long term aspirational goals, which allows Bellingham to make strategic transportation planning adjustments if trends indicate that the City is not making progress toward its long-term transportation mode shift goals. Any transportation policy or funding adjustments need to be weighed carefully against some very important realities about Bellingham's role in the regional transportation system, including but not limited to:

- **Bellingham's economy and transportation funding is heavily reliant on sales tax revenue, including:**
  - City of Bellingham General Fund, Street Fund, and Transportation Benefit District (2/10th of 1%);
  - Whatcom Transportation Authority Public Transit Benefit Area Levy (6/10th of 1%)

- **Bellingham is the regional center** for employment, shopping, medical, education, and entertainment services. Regional trips made for all of these purposes are primarily vehicle trips due to the distances traveled and the convenience of the private automobile compared to fixed route transit.

- **Lower consumer costs and lower taxes attract automobile trips by Canadian shoppers to Bellingham.** The primary example is gasoline, which in lower mainland B.C. after adjusting for taxes, metric conversion, and currency exchange currently costs $5.00 U.S. dollars per gallon. This is more than twice as expensive than gas purchased at Costco or Fred Meyer in Bellingham for less than $2.50 per gallon. Other major cost differentials include dairy and meat (due to U.S. subsidies for agricultural products).

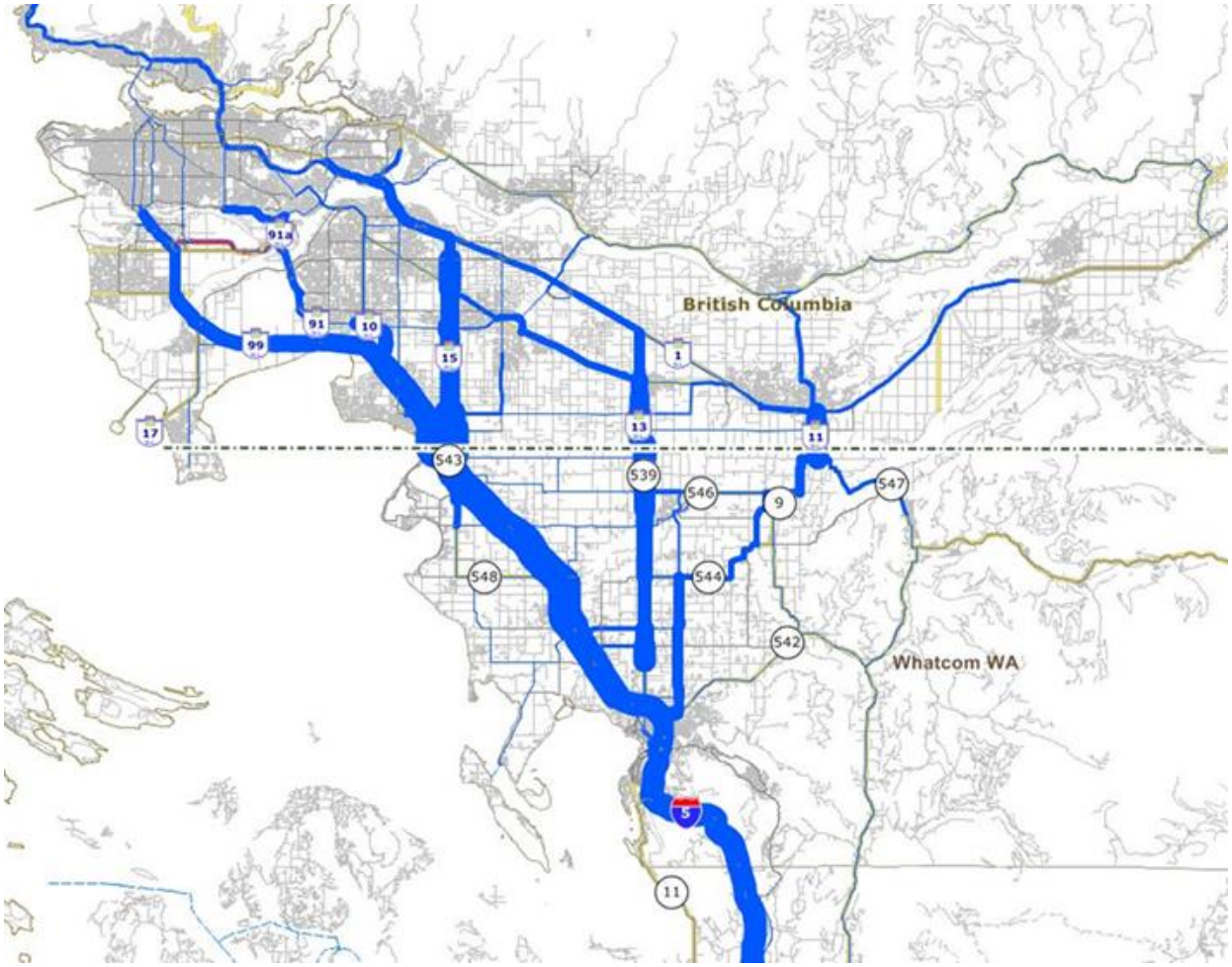

Figure 2.4. Vehicle Traffic Flow from lower mainland B.C., Canada into Whatcom County and Bellingham

- **Bellingham's population (City limits + unincorporated UGA) has grown by over 30% in the past 20 years** from 77,000 in 2000 to 100,500 in 2019 (Source: OFM, April 1, 2019). Demographic data also indicates that the local population is aging as the Baby Boomers choose places like Bellingham for their retirement.

- **Bellingham housing has become much less affordable** for wage workers, which has resulted in home sales in Ferndale, Birch Bay, Blaine, Lynden, and Everson as well as rural Whatcom County. For those whose employment is in Bellingham, this translates to increased regional vehicle-based trip making.

Transportation Mode Shares 2014-2018

Up until mid-March 2020, the national and regional economies were very strong and had been for many years. Historically, individuals with more disposable income purchase more automobiles, which translates to higher vehicle miles traveled. This has been the trend for many years now and, coupled with historically low gasoline prices, has translated into more reliance on automobiles. Figures 2.5 and 2.6 below provide a closer look at all rolling 5-year averages and illustrate that compared to 2013-2017, the 2014-2018 5-year averages show that:

- Single Occupant Vehicle (SOV) mode share increased (+2.1%) to 70.1%
- Multi-Occupant Vehicle (MOV) mode share decreased (-1.2%) to 8.9%
- WTA Public Transit mode share held steady at 4.8%
- Bicycle mode share increased (+0.3%) to 3.6%
- Pedestrian mode share decreased significantly (-0.9%) to 7.1%, and
- Work at home mode shares decreased (-0.2%) to 5.5%.

Decreases in mode shares for walking and carpooling are consistent with the national trend of increased vehicle miles traveled and are the result of factors that are out of Bellingham's local control, including, but not limited to:

- The increased availability of rideshare services, such as Uber and Lyft;
- A strong market economy allowing more disposable income;
- Low interest rates for automobile loans; and
- Historically cheap fuel prices (locally $2.50/gallon).

The U.S. Census American Community Survey (ACS) data is reported as a rolling 5-year average, which allows consideration of data trends from a standardized source, rather than isolated point-in-time data collected in a variety of methods and contexts, but the down-side of the ACS 5-year averages are the lag time of the data. For example, the 2014-2018 ACS mode share data is reported in 2020, but does not yet reflect the known current decreases in WTA transit ridership in 2019 and 2020 (Shown and discussed in TRAM chapter 8), or the anticipated increase in bicycle ridership due to the significant expansion of the citywide bicycle network in 2019-2020.
See discussion below of issues emerging in March 2020 as a result COVID-19 global pandemic

Since the Bicycle Master Plan (BMP) was adopted in October 2014, Bellingham has completed over half (52%) of the 215 recommended bicycle link and crossing improvements in the BMP**. This is a direct result of having dedicated local funding for both street resurfacing and non-motorized transportation improvements from the Bellingham Transportation Benefit District (TBD).** See TRAM Chapter 6 for more information on TBD. Citywide bicycle network improvements constructed from 2015-2020 are illustrated in Bikeway Connectivity Graphics available on the Bellingham Complete Networks web page.

Bellingham's rapid implementation of the Bicycle Master Plan from 2015 – 2020 garnered positive attention and recognition both statewide and nationally with the following:

- 2019 Washington Governor's Smart Communities Award;
- 2019 American Planning Association Washington Award for Transportation Plan Implementation;
- 2020 Association of Pedestrian & Bicycle Professionals national webinar (March 18, 2020);
- 2020 APA national Transportation Planning Division featured article in "State of Transportation Planning."

Table 2.1. Transport Mode Share Trends 2000 - 2018 and Long-Term Mode Shift Goals (2026 & 2036)													
Transport Mode to Work	**2000**	**2005 to 2009**	**2006 to 2010**	**2007 to 2011**	**2008 to 2012**	**2009 to 2013**	**2010 to 2014**	**2011 to 2015**	**2012 to 2016**	**2013 to 2017**	**2014 to 2018**	**2026 Goal**	**2036 Goal**
Pedestrian	**6.8%**	**7.3%**	**7.4%**	**8.2%**	**8.2%**	**8.3%**	**8.2%**	**8.3%**	**8.3%**	**8.0%**	**7.1%**	**9.5%**	**12.0%**
Bicycle	**2.6%**	**4.1%**	**4.2%**	**4.3%**	**4.0%**	**3.4%**	**3.5%**	**3.7%**	**3.3%**	**3.3%**	**3.6%**	**7.0%**	**12.0%**
WTA Public Transit	**3.6%**	**5.9%**	**5.6%**	**5.8%**	**5.8%**	**5.8%**	**5.0%**	**5.2%**	**5.5%**	**4.8%**	**4.8%**	**7.0%**	**9.0%**
Automobile/Vehicle	**81.9%**	**76.9%**	**76.8%**	**75.6%**	**75.9%**	**75.7%**	**74.7%**	**74.9%**	**75.3%**	**75.9%**	**79.0%**	**70.0%**	**60.0%**
Single Occupant	*70.2%*	*67.6%*	*69.1%*	*67.6%*	*68.6%*	*68.7%*	*69.8%*	*67.1%*	*66.9%*	*68.0%*	*70.1%*	*61.0%*	*50.0%*
Multi-Occupant + Taxi	*11.7%*	*10.0%*	*9.1%*	*9.2%*	*8.3%*	*8.5%*	*8.1%*	*9.0%*	*9.8%*	*10.1%*	*8.9%*	*9.0%*	*10.0%*
Work Home or Remote	**5.2%**	**5.0%**	**4.6%**	**4.9%**	**5.0%**	**5.3%**	**5.4%**	**6.7%**	**6.1%**	**5.7%**	**5.5%**	**6.5%**	**7.0%**
Bellingham + UGA Total Population	**76,937**	**90,741**	**91,251**	**91,403**	**91,715**	**92,661**	**93,092**	**95,015**	**96,952**	**98,816**	**100,500**	**109,726**	**124,107**
Workers 16 Years +	**~**	**39,326**	**39,090**	**40,585**	**39,549**	**39,726**	**40,660**	**41,568**	**41,865**	**43,049**	**44,493**	**~**	**~**

NOTES:

1.) Year 2000 = Table P030 2000 U.S. Census Summary: Means of Transportation to Work

2.) Years 2005-2017 = Table S0801 U.S. Census American Community Survey 5-Year Averages Means of Transportation to Work

3.) Years 2026 and 2036 = Adopted Long-Term Mode Shift Goals *[Monitor annually in TRAM; Update goals in 2026 Comp Plan]*

4.) "Multi-Occupant + Taxi includes ridesharing companies, such as "Uber" and "Lyft"

5.) "Bellingham + UGA Total Population = Washington Office of Financial Management "Small Area Estimates, 2014-2017"

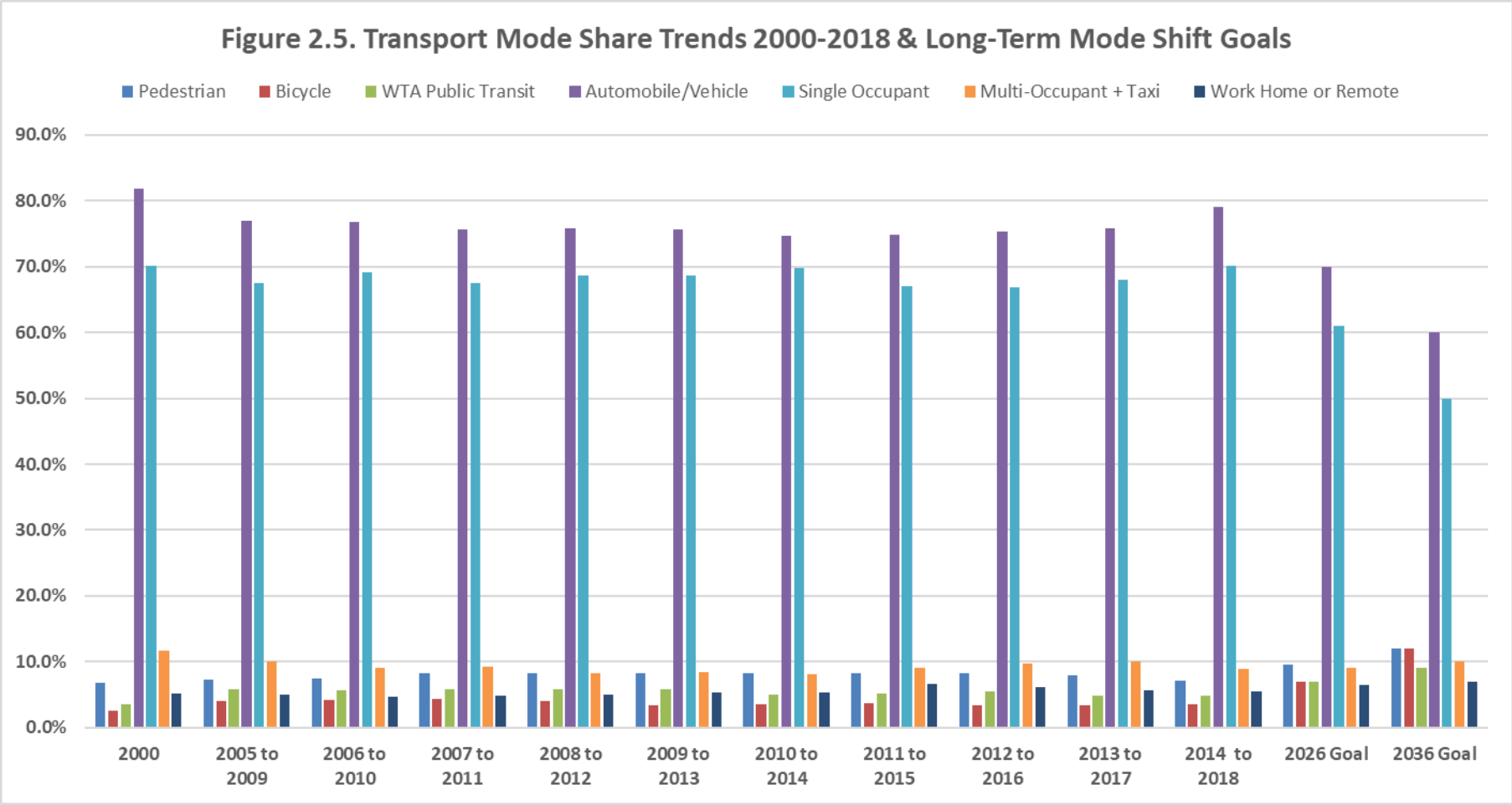
Figure 2.5. Transport Mode Share Trends 2000-2018 & Long-Term Mode Shift Goals
Pedestrian
Bicycle
WTA Public Transit
Automobile/Vehicle
Single Occupant
Multi-Occupant + Taxi
Work Home or Remote
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
2000
2005 to 2009
2006 to 2010
2007 to 2011
2008 to 2012
2009 to 2013
2010 to 2014
2011 to 2015
2012 to 2016
2013 to 2017
2014 to 2018
2026 Goal
2036 Goal

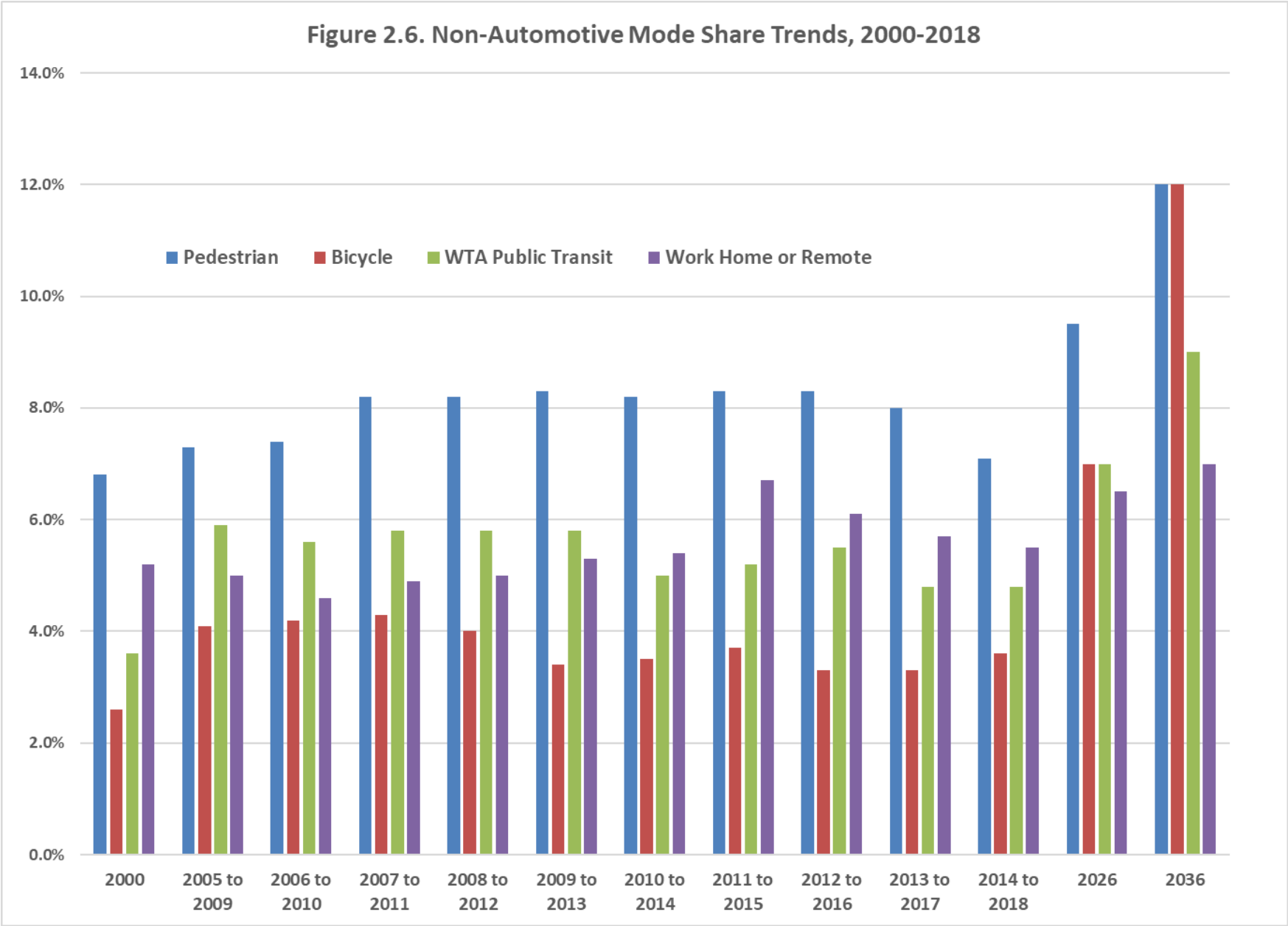
Figure 2.6. Non-Automotive Mode Share Trends, 2000-2018
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
Pedestrian
Bicycle
WTA Public Transit
Work Home or Remote
2000
2005 to 2009
2006 to 2010
2007 to 2011
2008 to 2012
2009 to 2013
2010 to 2014
2011 to 2015
2012 to 2016
2013 to 2017
2014 to 2018
2026
2036

Strategic Policy Measures to Encourage Transportation Mode Shift

While there are many factors affecting transportation mode-choice that are out of the City of Bellingham's local control, there are several local policy measures that could be enacted by the City Council, which would be likely to help support Bellingham's transportation mode shift goals and the Climate Action Plan.

- City Council can ask local voters to re-approve the Bellingham TBD by placing it on the November 2020 general election ballot. This would provide the dedicated funding needed to allow the City to continue progress building pedestrian, bicycle, and transit-supportive infrastructure, promote walking and bicycling for transportation, and work with bike share organizations to begin service. Without this dedicated local funding, Public Works will not be able to continue the rapid implementation of the Pedestrian and Bicycle Master Plans, nor the soon to be completed ADA Transition Plan.

- City Council can raise metered parking rates. Bellingham has always had very low parking meter rates and has not raised rates in over 10 years. The average metered parking space costs a driver $0.75 per hour. Abundant research clearly shows that underpriced parking meter rates:
  - Influence people to drive rather than consider other choices, such as walking, biking, or transit;
  - Influence employees to use on-street parking spaces meant for customers, clients, and visitors;
  - Do not generate parking turn-over, which is desirable to attract customers to businesses;
  - Do not cover the cost of parking enforcement, administration, court hearings, parking facility maintenance and repair over time, or the possible funding of additional future parking structures.

- City Council can expand parking management areas beyond Downtown and Fairhaven to more Urban Villages (Old Town, Waterfront, Fountain District, N. Samish, Barkley)

- City Council can direct Public Works to implement variable, market-based parking prices to maintain parking turn-over in high-demand, higher-priced parking locations and to attract drivers to park in low-demand, lower-priced parking locations.

- City Council can direct the Planning Department to change parking requirements for new development. Bellingham land use regulations require new development to provide a minimum number of on-site parking spaces, which may be creating an over-supply of on-site parking spaces. While the cost of providing on-site parking is born by the developer and then passed along to the occupants of the development via the built-in cost of rent or lease, the general perception is that on-site parking is free. The more convenient it is to park a vehicle, the more likely people will be to drive rather than consider other mobility choices, such as walking, biking, or transit.

- City Council can work with Whatcom Transportation Authority (WTA) Board of Directors to study the feasibility of increasing public transit ridership by permanently eliminating the fare box in Bellingham and/or Whatcom County. For well over a century, citizens have been willing to tax themselves to help provide the social benefit of public education and, in similar fashion, the City and WTA could ask taxpayers to further subsidize transit fares, which currently only contribute 13% of overall WTA revenue, to make public transit a free social benefit. Other transit agencies in the U.S. have begun to implement free transit by eliminating the fare box, including Capitol Transit serving Olympia-Lacey-Tumwater, WA.

See discussion below of issues emerging in March 2020 as a result COVID-19 global pandemic

Notes About the COVID-19 Global Pandemic Effects on Transportation

It is far too early to know the outcome, but at this writing in late March 2020, there are rapid and unprecedented changes occurring on the local, state, and national transportation system as a result of the COVID-19 global virus pandemic. Governmental closures of activities that attract large and small groups of people together, such as employment centers, shopping centers, sports and entertainment venues, restaurants and bars, etc. have significantly altered human social activity and mobility patterns.

There have been rapid and severe disruptions to local transportation systems, including but not limited to:

- Shipment of freight and goods has been affected with consumer demand out-stripping supply leading to unavailability or delays in delivery time, but less traffic congestion has been a positive for freight;
- WSDOT has documented significant reductions in commuter vehicle traffic on Interstate 5 in/out of Seattle as many employees work from home with the same effects experienced on I-5, SR 539, SR 542, and SR 11 in/out of Bellingham, Whatcom's regional employment, shopping, & entertainment center;
- Federal closure of the U.S-Canada border except for "essential" trips has significantly decreased Canadian travel and consumer spending activity in Whatcom County and Bellingham; and
- WTA has seen an 85% decrease in local transit ridership compared to the same time period from last year and is now working to decrease group-oriented transit service to only essential routes for vulnerable populations in Bellingham and Whatcom County.

COVID-19 outcomes on human behavior and vehicle traffic volumes are uncertain, but it is possible that there could be significant long-term changes to individual transportation mode choices as a result of the pandemic as discussed in a Forbes magazine article titled *Is the Coronavirus the Transportation Industry's Opportunity?*

Outcomes that could lead to decreased reliance on single occupant vehicles for local trips may include:

- A possible increase in people telecommuting and working from home as employers embrace technological improvements in group communication methods;
- A possible increase in people biking as a good social distancing form of transportation and as electric bike battery technology improves and leads to reduced prices for e-bikes;
- Assuming that economic development resumes and that people are willing to live in higher density communities after the COVID-19 pandemic subsides, a possible increase in walking as a result of infill development close to work, shopping, and entertainment.

Outcomes that could lead to increased reliance on single occupant vehicles for local trips may include:

- Low global oil prices have reduced gasoline costs below the already cheap $2.50 per gallon;
- Low interest rates allow people to borrow money for purchases, such as new vehicles; and
- Societal wariness of large groups may result in less ridership on fixed route group transit bus service.

In addition to the negative funding implications of Initiative 976, COVID-19 outcomes that could lead to decreased transportation funding may include:

- Closure of normal activities has reduced vehicle traffic and vehicle miles traveled, which will reduce State gas tax revenue and subsequent State transportation grant funding programs;
- Reduced consumer spending activity by local and Canadian shoppers will generate less sales tax revenue, which funds Bellingham's General Fund, Street Fund, Transportation Benefit District, and county-wide WTA transit service;
- Depending on recovery time and local economic circumstances, voters may not be willing to support a renewal of the sales tax-based Bellingham Transportation Benefit District (TBD).

The City of Bellingham will continue to monitor all of the above, work with partner transportation agencies, and adjust accordingly to maintain public safety and mobility on the local multimodal transportation system.