

Chapter 2: Bellingham's Multimodal Transportation Planning Approach

Complete Networks Policies

In 2004-2005, 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. A fundamental tenet of this policy is that while Bellingham emphasizes creating physical space to accommodate safe and comfortable travel for vulnerable users, the multimodal transportation system must continue to work for all user groups, including vehicles.

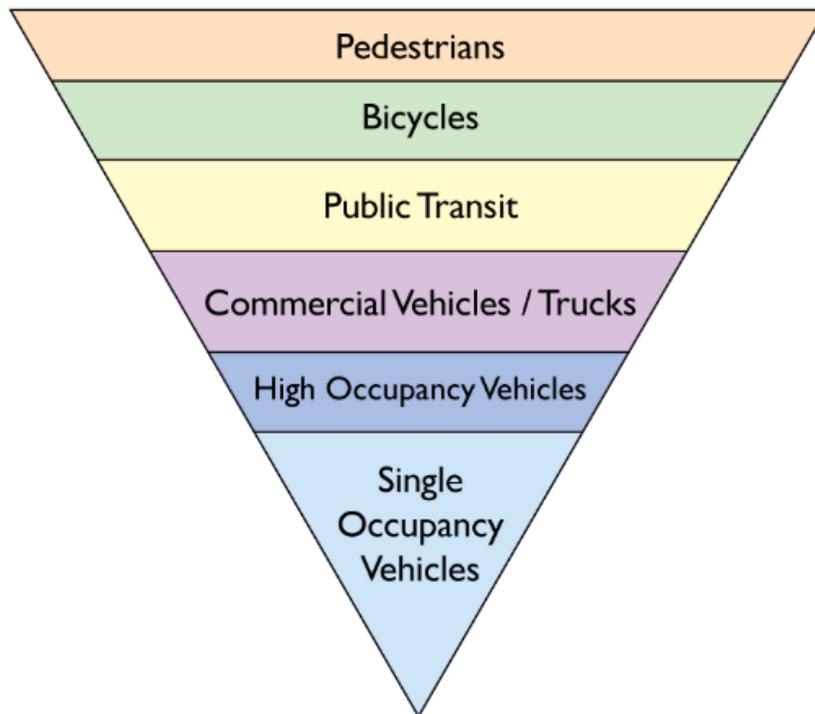


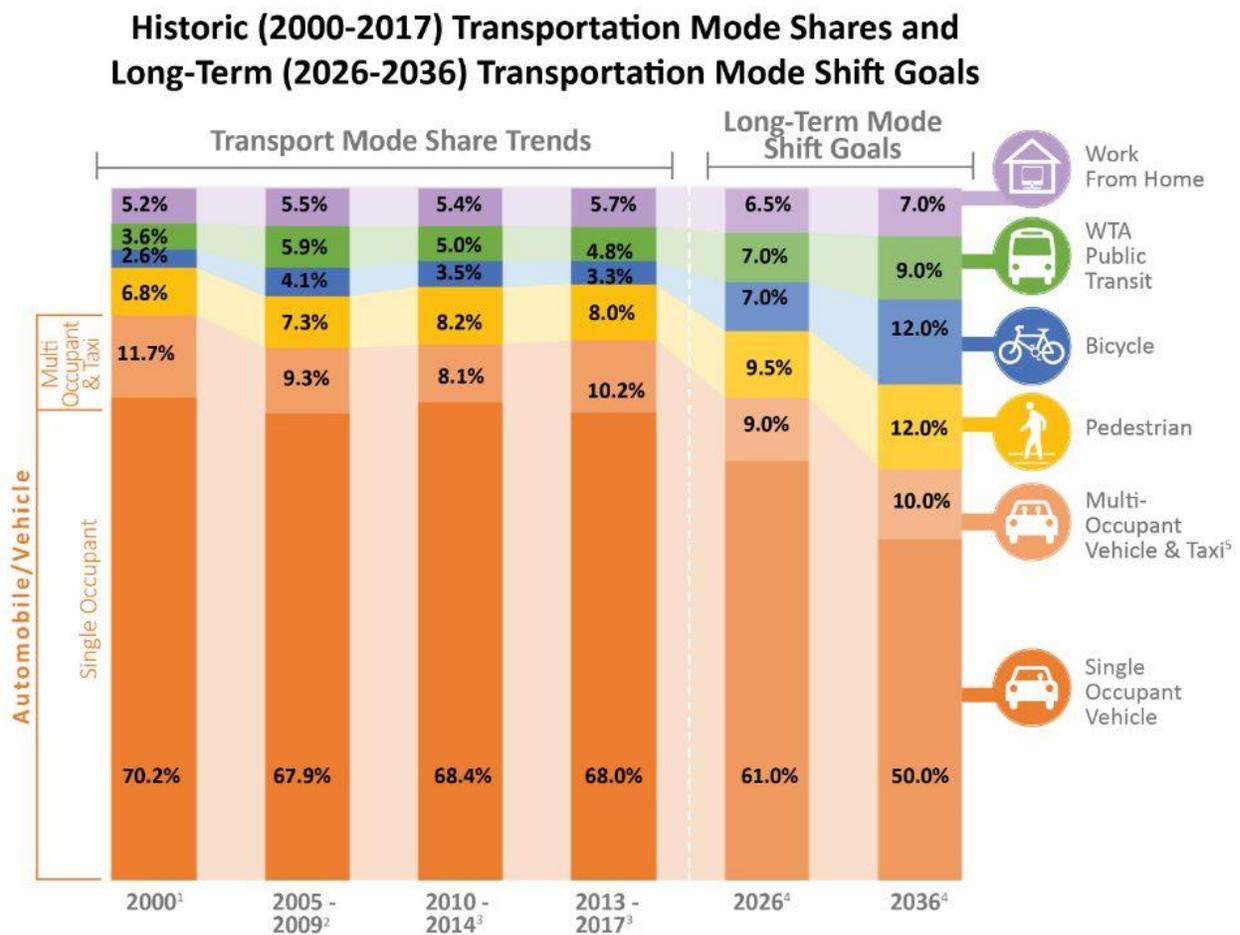
Figure 2.2. - Bellingham's Transportation Modal Priorities

Bellingham’s 2012 Pedestrian Master Plan, 2014 Bicycle Master Plan, and 2021 ADA Transition Plan each include extensive sidewalk, pedestrian crossing, ADA ramp and driveway upgrade, 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, ADA upgrades, 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, ADA, and Bicycle Master Plans are always considered. Bellingham transportation planners also prioritize improvements identified in the Pedestrian, ADA, and Bicycle Master Plans when seeking state or federal grants for transportation improvements. Lists of sidewalk, ADA, 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. These are **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 (*Some borne out of COVID-19*) are very likely to 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 2019 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 City of Bellingham 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, which on a regional scale relies on vehicle trips.



- Notes:
- 1.) Table P030: 2000 U.S. Census Summary; Means of Transportation to Work
 - 2.) Table B08301: 2005-2009 Average from American Community Survey (U.S. Census)
 - 3.) Table S0801: 2010-2014 & 2013-2017 Average from American Community Survey (U.S. Census)
 - 4.) 2016 baseline and long-term mode shift goals [Monitor annually in TRAM; update goals in 2026 Comp Plan]
 - 5.) Taxi includes ridesharing organizations, such as "Uber" and "Lyft"

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 Fund (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 services, education, recreation, and entertainment. 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).
- **Online shopping has increased and become part of everyday lifestyle for local and regional consumers.** For the past 15 years, online retail shopping has grown annually as a percentage of local sales tax generation. As shown in Figure 2.4, below, the initial impact of the COVID-19 global pandemic depressed sales tax revenue, but the cumulative effect of stay-at-home orders, travel restrictions, and limits on indoor events and gatherings, led to a pandemic-induced surge in online retail shopping. The City of Bellingham experienced a 16% increase in sales tax revenue from 2019 through 2021.

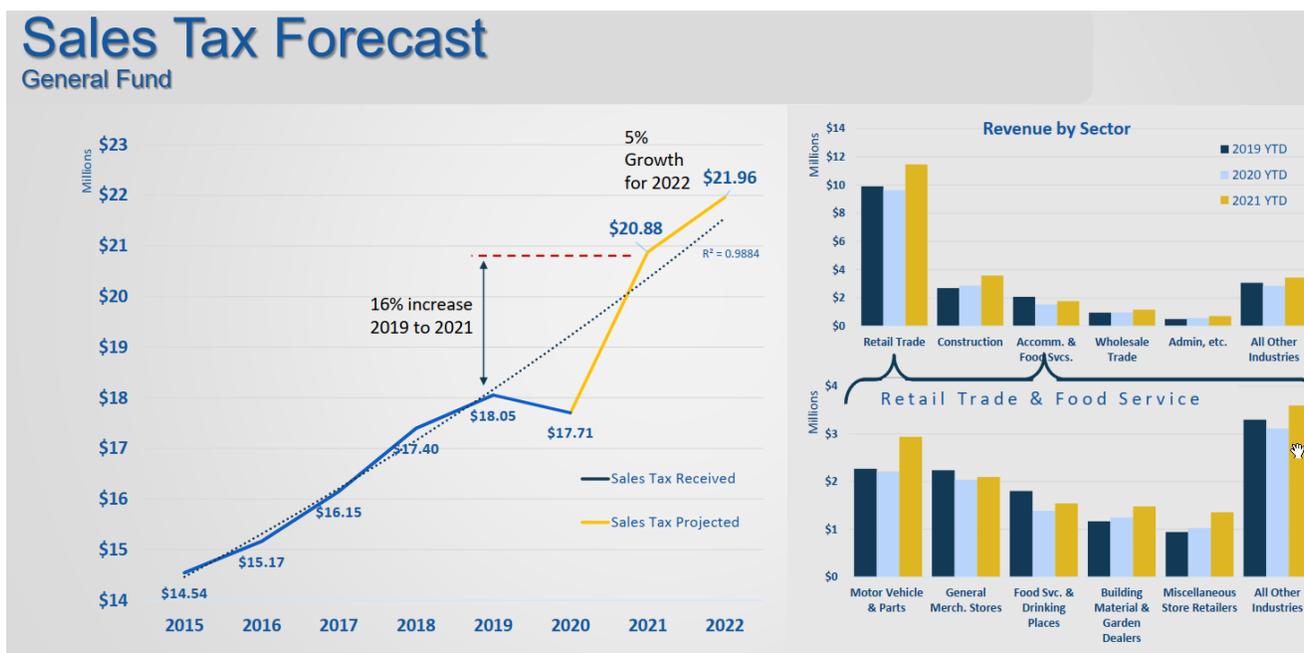


Figure 2.4. Growth in sales tax revenue in Bellingham, largely from COVID-induced online shopping

- **Bellingham’s population (City limits + unincorporated UGA) continues to grow at a rapid pace**
 - City and UGA combined population has grown by over 30% in the past 20 years from 77,000 in 2000 to 101,588 in 2020 (Source: OFM, April 1, 2020) and has more than doubled since 1980.
 - Demographic data indicates that the local population is aging as the “Baby Boomer” generation chooses places like Bellingham for retirement.
- **COVID-19 untethered many employees from physical office locations in expensive housing markets.**
 - COVID led to a surge in companies allowing employees to work remotely, which induced geographic migration to reside in more affordable locations with lifestyle amenities, such as Bellingham, with its active outdoor recreation culture (Ski/Snowboard, Mountain/Road Bike, Hike/Backpack/Camp, Boat/Sail, Sea Kayak/Paddle Board). In planning lingo, these places are referred to as “Zoom Towns.”
- **Bellingham housing has become much less affordable** for local wage workers, which has resulted in surging home sales in Ferndale, Birch Bay, Blaine, Lynden, and Everson as well as rural Whatcom County. For those employed in Bellingham, this translates to increased regional vehicle-based trip making.
 - This is being exacerbated by the COVID-induced influx of untethered workers (*see above*) whose employers are located outside of Bellingham as their income allows them to out-compete local wages earners for housing stock.

Transportation Mode Shares 2015-2019* (5-Year Average) *Pre-COVID-19

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 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 2015-2019 5-year averages show that:

- Single Occupant Vehicle (SOV) mode share **decreased** (-0.9%) to 69.2%
- Multi-Occupant Vehicle (MOV) mode share **remained stable** (+0%) at 8.9%
- WTA Public Transit mode share **increased** (+0.3%) to 5.1%
- Bicycle mode share **increased** (+0.3%) to 3.9%
- Pedestrian mode share **decreased** significantly (-0.6%) to 6.5%, and
- Work at home mode shares **increased** (+0.9%) to 6.4%.

Decreases in mode shares for walking might be consistent with the national trend of increased vehicle miles traveled, which 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 downside of the ACS 5-year averages is the lag time of the data. For example, the 2014-2019 ACS mode share data is reported in December 2020, but does not yet reflect the known radical 85% decreases in WTA transit ridership in 2020 due to COVID-19 (See TRAM chapter 8), or the anticipated increase in bicycle ridership due to the significant expansion of the citywide bicycle network 2015-2020.

See Page 15, Discussion of transportation impacts from COVID-19 global pandemic, March 2020 to March 2022

Unfortunately, according to the City’s Census point of contact “The most-recent ACS Table S0801 is still the 2015-2019 version. **The 2020 ACS data has had a number of release-date setbacks due to statistical sampling errors from reduced sample sizes and response rates attributed to the Covid-19 pandemic. There is an experimental 1-year 2020 dataset that has been released with a whole host of disclaimers as to it's accuracy but it only has detail at the statewide level.**”

Table 2.1. Transport Mode Share Trends 2000 - 2019 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	2015 to 2019	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%	6.5%	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%	3.9%	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%	5.1%	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%	77.3%	70.0%	60.0%
<i>Single Occupant</i>	70.2%	67.6%	69.1%	67.6%	68.6%	68.7%	69.8%	67.1%	66.9%	68.0%	70.1%	69.2%	61.0%	50.0%
<i>Multi-Occupant + Taxi</i>	11.7%	10.0%	9.1%	9.2%	8.3%	8.5%	8.1%	9.0%	9.8%	10.1%	8.9%	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%	6.4%	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	101,588	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	45,003	~	~
NOTES:														
1.) Year 2000 = Table P030 2000 U.S. Census Summary: Means of Transportation to Work														
2.) Years 2005-2019 = Table S0801 U.S. Census American Community Survey 5-Year Averages Means of Transportation to Work														
3.) Years 2026 and 2036 = Adopted Long-Term <i>Aspirational</i> 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, 2014-2020"														

Figure 2.5. Transport Mode Share Trends 2000-2019 & Long-Term Mode Shift Goals

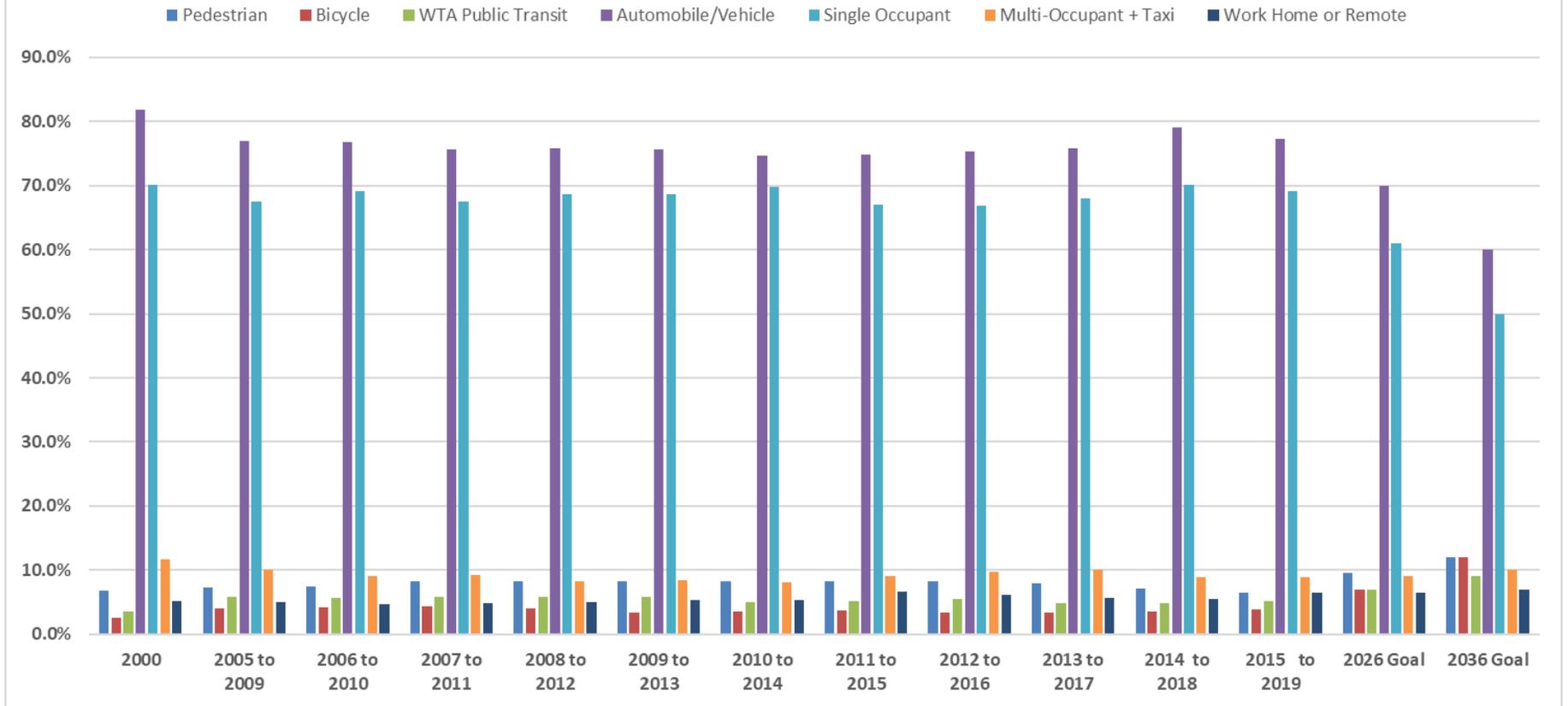
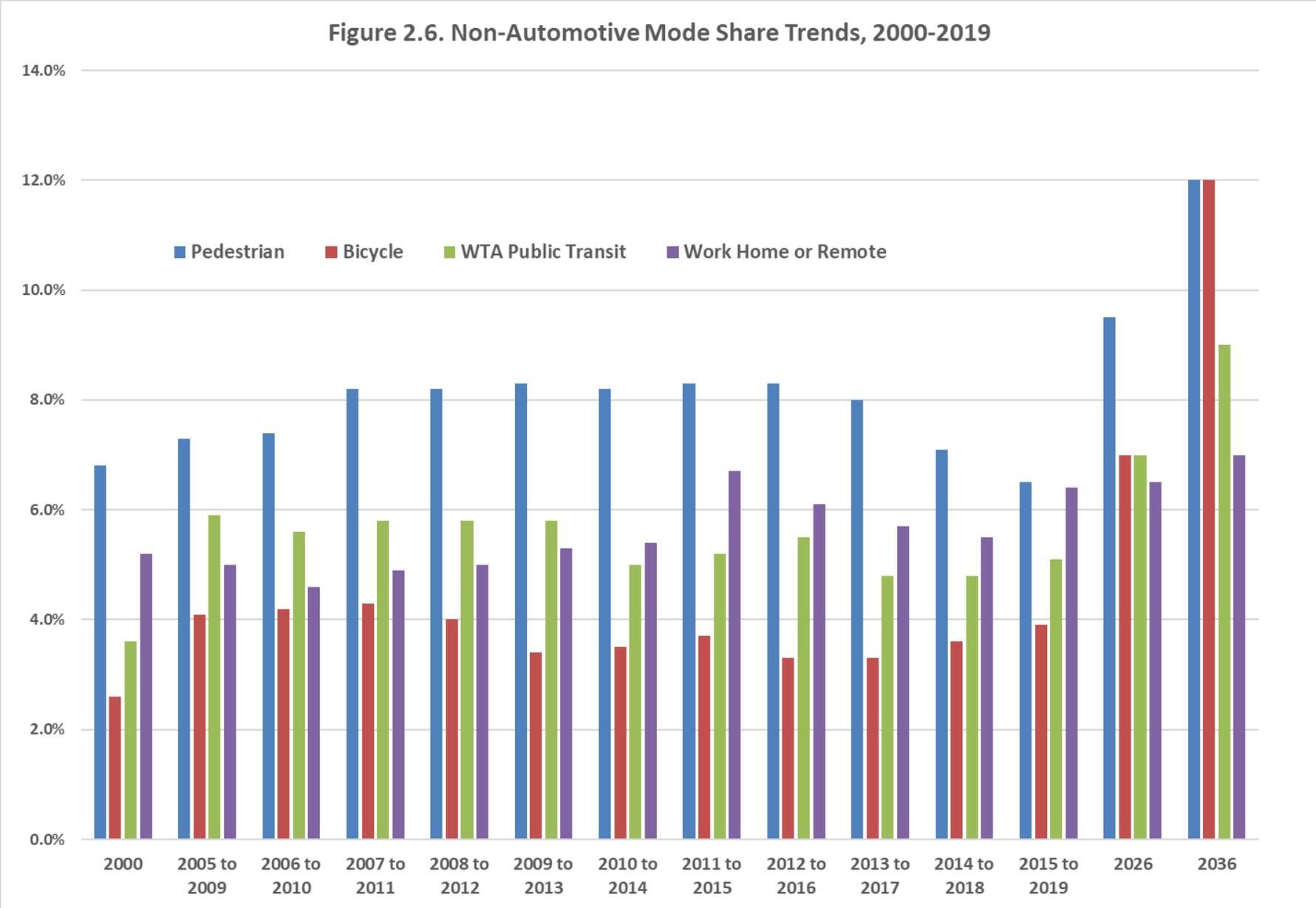


Figure 2.6. Non-Automotive Mode Share Trends, 2000-2019



Since the Bicycle Master Plan (BMP) was adopted in October 2014, Bellingham has completed 118, or over half (52%), of the 227 recommended bicycle network 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 Fund (T-Fund).** See TRAM Chapter 6 for more information on T-Fund. Citywide bicycle network improvements constructed from 2015-2022 are illustrated in Bikeway Connectivity Graphics available on the [Bellingham Complete Networks](#) web page.

Bellingham’s rapid implementation of the 2014 Bicycle Master Plan from 2015 – 2020 garnered a great deal of positive attention and recognition both statewide and nationally with the following:

- [2020-2024 Gold-level Bicycle Friendly Community – League of American Bicyclists;](#)
- [2020 Association of Pedestrian & Bicycle Professionals national webinar \(March 18, 2020\);](#)
- [2020 APA national Transportation Planning Division featured article in “State of Transportation Planning.”](#)
- [2019 Washington Governor’s Smart Communities Award;](#)
- [2019 American Planning Association Washington Award for Transportation Plan Implementation;](#)



Strategic Policy Measures and Strategies to Encourage Transportation Mode Shift

Bellingham already implements many policies and strategies aimed at incentivizing walking, biking, and transit while also de-emphasizing vehicle capacity on roadways. Examples include, but are not limited to:

- Planning for high-density mixed use Urban Villages connected by high-frequency (15 min.) transit;
- Significant construction of sidewalks, flashing crosswalks, traffic signals, and on-/off-street bikeways;
- Road diets removing 12 miles of vehicle lanes and 6 miles of on-street parking to install bikeways;
- Extensive multiuse Greenways recreational trails available for secondary transportation purposes;
- BMC 13.70 Multimodal Transportation Concurrency Program integrating land use and transportation;
- BMC 19.06 Multimodal Transportation Impact Fees (TIF) directly funding pedestrian and bicycle projects;
- BMC 19.06.040 Urban Village TIF Reduction Program incentivizing mixed use infill development; and
- Voter approval of Bellingham Transportation Benefit District (2010) and Transportation Fund (2020).

Other Possible Measures Likely to Promote 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 – primarily focused on vehicle parking - that the City Council is currently discussing, which would be likely to help support Bellingham's transportation mode shift goals as well as implementation of the [Climate Protection Action Plan](#).

- Increase metered parking rates. While this could be controversial, it could also be a very effective disincentive to driving in areas promoting walking, biking, and transit. Bellingham has always had 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. 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.
- Expand parking management areas beyond Downtown and Fairhaven to more Urban Villages (Old Town, Waterfront, Fountain District, N. Samish, Barkley) as these areas continue to develop.
- Implement variable, market-based parking prices to maintain parking turn-over in high-demand, higher-priced parking locations. This could attract drivers to park in lower-demand, lower-priced parking locations, thus spreading parking demand.
- Reduce parking requirements for new development citywide. This is already built-in to many Urban Village master plans, but Bellingham land use regulations require new development to provide a minimum number of on-site parking spaces, which can create an over-supply of on-site parking spaces, which incentivizes driving. 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.

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- 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. This is both a critical social equity issue and a transportation mode shift issue because WTA transit ridership has plummeted in the past year due to COVID-19 (*See Chapter 8, WTA charts*).

Note: In March 2020, WTA stopped collecting bus fares from passengers to reduce contact and risk for drivers, as well as to provide essential travel for low-income passengers, but resumed transit fare collection in July 2021. At the same time that fare collection resumed, WTA initiated a program for all youth (0-17) now ride WTA buses for free.

- Support use of automated technology to collect data, improve public safety, and use law enforcement resources more efficiently. Traffic signal technology is improving and both automated cameras and detectors are becoming more sensitive to balancing demand at different times of day more efficiently. Automated cameras could be installed at intersections with high collision histories and/or high pedestrian crossing demand, in 20 mph school zones, and/or intersections where red light running is a problem. Automated cameras can be used to detect ‘near-misses’ involving vehicles-pedestrians-bicycles, which do not show up in collision data (*Seattle and Bellevue are currently using this technology*) and can count people walking and biking to support pedestrian and bicycle infrastructure improvements seeking local or outside grant funding, which would also help promote transportation mode shift.
- Continue to support the removal of on-street parking on arterial streets to allow the installation of bikeways on corridors identified in the Bicycle Master Plan, including but not limited to:
 - West Illinois Street (Sunset Drive to Lynn Street) – marked bike lanes (2022-2023)
 - Meridian Street (Squalicum Parkway to West Illinois Street) – marked bike lanes (2022-2023)
 - Girard Street (Broadway Avenue to B Street) – marked bike lanes (2022-2023)
 - James Street (Illinois Street to Alabama Street) – marked bike lanes (2022-2023)
- Allow e-scooters and e-bike share for a trial period to test market and develop supportive regulations. **Note:** *In March 2020, the City issued an RFQ seeking proposals from companies wishing to operate e-bikes and e-scooters on public streets, but due to the COVID-19 global pandemic had to rescind the RFQ. The RFQ could be re-issued when safe to do so later in 2021.*
- Update the 2012 Pedestrian Master Plan and the 2014 Bicycle Master Plan in 2022-2023. **Note:** Updates to both the Pedestrian and Bicycle Master Plans are expected to begin in March 2022. With the Governor’s mask mandate and restrictions on indoor gatherings to be lifted in mid-March 2022, the City and consultants are planning for genuine public engagement using both online engagement platforms, such as Engage Bellingham, as well as a variety of in-person public meeting formats, such as Public Open Houses, topic-oriented Technical Review Committee meetings, Neighborhood Association meetings, etc.
- Other possible options

Notes About the COVID-19 Global Pandemic Effects on Transportation

Beginning in mid-March 2020, radical, unprecedented, and transformative changes began 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, some of which may become permanent.

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 initially 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;
- The U.S.-Canada border was closed for "non-essential" trips since mid-March 2020, which essentially extinguished Canadian travel and consumer spending activity in Whatcom County and Bellingham.
- Air travel passengers initially plummeted by 90% at the Bellingham International Airport and nationally, but has since recovered to some extent;
- Amtrak Cascade Rail passengers plummeted by 90% in Washington and on the west coast; and
- WTA transit ridership decreased 85%, fare collection was suspended, and group-oriented transit service was limited to essential routes for vulnerable populations in Bellingham and Whatcom County with bus capacity limited to 12 individual riders on each bus (*See Chapter 8, WTA charts*).

COVID-19 outcomes on human behavior and vehicle traffic volumes are uncertain, but it is very likely that there will be significant long-term changes to individual transportation mode choices as a result of the pandemic.

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

- A significant increase in people telecommuting and working from home as employers embrace technological improvements in group communication platforms and work from home productivity;
- An increase in people biking for transportation trips as bicycle infrastructure expands and as electric bike battery technology improves and leads to reduced prices and increased use of e-bikes;
- Throughout the pandemic, high-density residential development has continued in Bellingham's Urban Villages, which may lead to an increase in walking, biking, and bus riders living in infill developments close to work, shopping, and entertainment interconnected by WTA high-frequency transit service.

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, new suburban single-family homes at the edge of town or in bedroom communities, which require driving; and
- Even after vaccines are made widely available, societal wariness of large group travel situations may result in less ridership on fixed route group transit bus service, trains, and airplanes.

Negative funding implications of COVID-19 that could lead to decreased transportation funding may include:

- Closure of normal activities reduced vehicle traffic and vehicle miles traveled in Spring 2020 reduced State gas tax revenue and funding available in State transportation grant programs;
- Less commercial retail and office development in 2020 resulted in a 54% decline in Transportation Impact Fee (TIF) revenue in 2020 (See TRAM Chapter 10).

As of March 1, 2022, the Russian invasion of Ukraine may reverse some of the trends listed above, such as low-cost oil and gasoline, which historically has resulted in increased transit ridership. The City will continue to monitor all of the above.