Way to Go, Whatcom

2045 Regional/Metropolitan Transportation Plan for the Whatcom Region



Approved by the Whatcom Transportation Policy Board on June 8, 2022



whatcom council of governments

Whatcom Council of Governments 314 E. Champion Street, Bellingham, WA 98225 (360) 676-6974 • wcog@wcog.org • www.wcog.org

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1. Introduction

Welcome to *Way to Go, Whatcom*, the latest update to the Whatcom region's combined metropolitan and regional transportation plan. This section provides an overview of state and federally required transportation planning and the role that the Whatcom Council of Governments (WCOG) plays in satisfying those requirements.

1.1. What is the Whatcom Council of Governments?

WCOG is a regional planning conference: WCOG was created in 1966 pursuant to RCW 36.64.080, the state law enabling the creation of "regional planning conferences," more commonly known in Washington as "councils of governments." In accordance with this legislation, WCOG serves as a regional planning forum for the various jurisdictions in Whatcom County, including the seven cities, Whatcom County government, the Port of Bellingham, the Whatcom Transportation Authority, the Lummi Nation and others. The state's objective under this legislation is to provide a framework for adjacent and nearby jurisdictions to collaborate on problems that are more effectively addressed as a region.

WCOG is a metropolitan planning organization (MPO): By 1980, the City of Bellingham's population exceeded 50,000 and accordingly, the federal government designated the City and its environs an "urbanized area." That designation gave Bellingham access to federal transportation funding, but also required that the federally prescribed transportation planning process be carried out. In order to meet these requirements, Governor John Spellman designated WCOG as the MPO for the Bellingham Urbanized Area in 1982. (Federal law regarding metropolitan planning is found at 23 U.S. Code § 134).

WCOG is a regional transportation planning organization (RTPO): In 1990, following passage of Washington's Growth Management Act (GMA), WCOG was designated as Whatcom County's RTPO. (The responsibilities of RTPOs under GMA are contained in RCW 47.80.) As such, WCOG is required to carry out a regional transportation planning process for all of Whatcom County, not just the Bellingham Urbanized Area.

While there are certain differences between the MPO and RTPO planning processes, they are similar enough that WCOG has integrated them into a unified process governed by a combined MPO/RTPO board known as the Whatcom Transportation Policy Board. As a result, *Way to Go, Whatcom* serves as the long-range transportation plan for all of Whatcom County: its urbanized core in and around Bellingham, its smaller cities, and unincorporated Whatcom County.

The plan is adopted by the MPO/RTPO Board MPO: Metropolitan Planning Organization (Federal designation)
RTPO: Regional Transportation Planning Organization (State designation) With advice from: The Public Whatcom Transportation Including WCOG's **Policy Board** Community Transportation Whatcom County Executive Advisory Group (CTAG) Whatcom County Councilmember Lummi Indian Business Council Chair City of Blaine Mayor **Transportation** City of Bellingham Mayor **Technical Advisory** City of Bellingham Councilmember **Group (TTAG)** City of Everson Mayor City of Ferndale Mayor City of Lynden Mayor City of Nooksack Councilmember Draft plan preparation: City of Sumas Mayor Nooksack Tribal Council Chair Port of Bellingham Commissioner **WCOG Staff** Whatcom Transportation Authority Board Member WA State Dept. of Transportation Representative

Figure 1: Plan Development Flow Chart

1.2. Way to Go, Whatcom: The Long-range Transportation Plan for our Region

While the planning processes that WCOG conducts as an RTPO and MPO are continuous, updates to a long-range (i.e., at least a 20-year horizon) transportation plan are required every five years. Thus, *Way to Go, Whatcom* 2045 is a snapshot as of 2022: an analysis and discussion of:

- Our region's goals the outcomes we expect from our investments in transportation.
- The regional transportation system as it exists and functions today.
- Currently forecasted transportation demand that our region will experience over the next 22 years.
- Our cooperatively developed regional strategy to advance our transportation goals with projects, programs, collaboration, and public engagement and how to pay for it.

Though *Way to Go, Whatcom* is now complete, WCOG's federal and state-mandated transportation planning process continues. System performance monitoring, collaborative identification of needs and solutions, and stakeholder engagement continue to inform policy and investment decisions. WCOG continues to work with and assist its numerous members, particularly by providing technical assistance such as travel demand modeling and project prioritization. And, even with the completion and adoption of *Way to Go, Whatcom*, WCOG staff will soon begin preparing for the next update of the Whatcom region's long-range transportation plan in 2027.

1.3. Why does WCOG prepare a regional and metropolitan transportation plan?

A comprehensive, cooperative, and continuing process is required for an urbanized area to be eligible for federal transportation funding. This "3C" process – resulting in this plan – is the mechanism for aligning future investments of public funds with our communities' priorities, financial capabilities, land-use plans, and population characteristics.

1.3.1. Relationship to sub-regional planning

Whatcom County and its seven cities all engage in transportation planning as part of their GMA-mandated comprehensive planning responsibilities, and the Lummi Nation and Nooksack Tribe carry out similar processes. The Whatcom Transportation Authority – which operates the region's bus transit and ridesharing services – conducts different capital and long-range planning processes. The Port of Bellingham is also engaged in transportation planning to ensure access to its numerous facilities throughout Whatcom County which include marinas, industrial sites, The Bellingham Transportation Center (cruise terminal, ferry terminal, Amtrak station), and Bellingham International Airport. Through their membership on the Whatcom Transportation Policy Board, these entities' transportation planning processes inform the regional planning conducted by WCOG, and vice versa.

1.3.2. Relationship to state planning

Metropolitan and regional planning conducted by the MPOs and RTPOs in the State of Washington – including that of WCOG – is integrated with the state's own transportation planning process, which is the responsibility of the Washington State Department of Transportation (WSDOT). One example of this is the alignment of WCOG's six-year Regional Transportation Improvement Program – a list of upcoming transportation projects developed in cooperation with WSDOT that includes all federally and state-funded regional projects – with the Statewide Transportation Improvement Program. Another example is the collaboration among WCOG, WSDOT and local staff on system evaluation and planning. The integration of regional and statewide planning is also reflected in WSDOT's membership on the Whatcom Transportation Policy Board.

1.3.3. Relationship to all of us

Good planning requires the involvement of the public, businesses, non-governmental organizations, and other community groups and constituencies.

The most basic way for anyone to participate in the regional and metropolitan transportation planning process is to attend meetings of the Whatcom Transportation Policy Board and/or share their concerns and ideas directly with the local elected official representing their community on the Policy Board. Forums held in conjunction with proposed transportation initiatives are also good opportunities for people to have their voices heard.

To additionally encourage public involvement in regional planning and project selection, WCOG facilitates the Community Transportation Advisory Group (CTAG). Members of CTAG are private citizens who sign-up to participate in regular meetings and share their perspectives and ideas about transportation.

Citizens can also stay abreast of the work being conducted by WCOG and its member jurisdictions and agencies through their websites (all of which are linked to WCOG's website, www.wcog.org). WCOG's plan for citizen involvement is detailed in its Public Participation Plan.

2. Whatcom's Regionally Significant System

The scope and perspective of regional transportation planning is different than that conducted by local governments, the state, tribes, transit providers, and other entities. This section of *Way to Go, Whatcom* 2045 describes the Regionally Significant (transportation) System (RSS), including existing and future facilities, services, and programs that are of common interest and impact in the Whatcom region.

2.1. Facilities and related services

The RSS includes both publicly and privately-owned and operated components, including roads, portions of roads, and other dedicated facilities for bicycle and pedestrian travel, railroads, marine terminals, transit stations, and airports. Physical assets such as border inspection stations, parking lots, and electric vehicle charging stations are also included in the RSS.

2.1.1. Roads

- Roads classified as principal or minor <u>arterials</u> per the Federal Highway Administration functional classification system
- All state roads
- Roads serving intermodal facilities, including:
 - o Amtrak stations
 - o airports
 - o ferry terminals
 - o intercity bus terminals
 - o multipurpose passenger facilities
 - o port terminals
 - o public transit stations
 - o truck/pipeline terminals
 - o truck/rail facilities
- Roads serving major activity centers including:
 - regional hospitals
 - o schools
 - emergency management centers
 - o shopping centers
 - o industrial centers
 - employment centers
 - recreation and tourism centers
- Washington State Freight and Goods Transportation System (FGTS) routes T-1 through T-4
- Roads that support facilities generating or attracting significant freight-truck shipments and/or deliveries (Note: Most routes between concentrations of freight trip-ends are served by roads included in the RSS by virtue of the criteria listed above. This criterion

allows inclusion of some roads that do not meet the other criteria, but because of the type and/or volume of traffic they serve, they advance regional transportation goals.)

2.1.2. Bicycle & pedestrian (Active transportation)

- Bicycle routes and bike/pedestrian facilities (trails, etc.) serving regional connections or intermodal facilities. Examples of regional bike/pedestrian routes include:
 - o The Bay-to-Baker Trail
 - o The Coast Millennium Trail
 - The Nooksack Loop
 - o Regional sections of the U.S. Bicycle Route System
- Examples of bike/pedestrian facilities that serve RSS intermodal facilities include:
 - o Dedicated trails serving a park & ride/transit hubs
 - o bike-sharing stations co-located with a transit facility
- Bike share services

2.1.3. Parking

- Publicly owned parking for private vehicles (no-charge and priced), including:
 - On-street parking
 - Publicly owned parking lots and structures
- Passenger vehicle parking facilities located at:
 - Employment centers
 - o Institutional uses (schools, hospitals, etc.)
 - Retail and service providers
 - o Intermodal (rail, ferry, transit, park-and-rides, etc.)
- Park and rides
- Truck parking facilities (public and private facilities where large freight trucks can park for legally required driver rest)
- Privately owned public parking garages
- Facilities for secure parking of bikes and other wheeled mobility devices

2.1.4. Rail

- Railroads (right-of-way, tracks, and related facilities)
- Passenger rail stations
- Freight-rail carrier services (e.g., BNSF, CN)

2.1.5. Marine

- Alaska Marine Highway System
- Public ferry boats and auto and passenger ferry terminals
- Marine cargo and passenger terminals and services
- U.S. Maritime Administration (MARAD) Marine Highway System route

2.1.6. Transit

- Public transit routes, built amenities (pullouts, shelters, etc.), services from:
 - Whatcom Transportation Authority (WTA) and its partners for fixed-route, paratransit, on-demand, and inter-county routes
 - o Lummi Transit
 - o Private scheduled-route operators (Greyhound, Flix, Bellair Airporter, Quik, etc.)
 - o Amtrak Cascades inter-city rail service
 - School district buses
- Bus stations (WTA, Port of Bellingham, and private scheduled-route operators)
- Bus maintenance facilities

2.1.7. Air

- Bellingham International Airport
- Lynden Airport
- Passenger airlines (Alaska, Allegiant, Horizon, San Juan, Southwest, others)
- Air freight carriers (Alaska Air Cargo, FedEx)

2.1.8. Other facilities

- Intermodal
- U.S. and Canadian federal border inspection stations
- Electric vehicle charging stations, fuel stations, other vehicle-service centers

2.2. Other services

- Ride services (taxis, Lyft, Uber, etc.)
- Car share services (e.g., ZipCar, peer-to-peer, etc.)
- Vehicle rental
- Shared mobility (bikes, scooters, etc.)

2.3. Programs

- Safety
 - Washington State's Target Zero
 - Whatcom Unified Emergency Management
- Transportation demand management (TDM)
 - Whatcom Smart Trips Program
 - Washington State's Commute Trip Reduction Program
- Transportation system management & operations (TSMO) and operational programs and strategies (including intelligent transportation systems)
- Transportation system planning
 - MPO/RTPO planning as described in WCOG's unified planning work program (UPWP)

- The International Mobility and Trade Corridor Program (IMTC) cross-border regional planning
- North Sound Transportation Alliance program (NSTA)

3. Whatcom's Regional Transportation System Goals

To plan for our region's transportation future, we need to first establish our goals – what we as a region want to accomplish with our chosen strategies and investments.

Starting with the regional goals developed for the 2017 regional plan update (and slightly amended in 2020), WCOG undertook a robust public-engagement effort in the Spring of 2021 to solicit feedback on regional transportation priorities. A questionnaire (mostly conducted online but availed in alternative formats, too) was promoted for completion by all Whatcom region residents. To help ensure a sufficient level of participation, approximately 44,000 invitations were mailed to randomly selected Whatcom region residential addresses. 2,020 questionnaires were completed.

A primary purpose of this 2021 public engagement effort was to gauge how well the existing regional goals aligned with our community's current priorities and whether some updates should be considered by the Whatcom Transportation Policy Board. Using feedback from the questionnaire, the Whatcom regional transportation system goals were updated as follows. More information on questionnaire results and evaluation of updates to the goals is in **Appendix A**.

These seven regional transportation goals – which largely overlap with the longer list of planning factors that federal and state law require MPOs and RTPOs to address – will take precedence in prioritizing project funding requests and developing performance measures and targets.

1. Safety

The safety of all users of the region's transportation system – pedestrians, bicyclists, transit riders, automobile drivers and passengers, and truckers – must be maximized to the greatest degree practicable in the establishment of regional transportation policies and investment decisions.

2. Provide all types of transportation (multimodal)

To serve the growing number of trips and goods movement effectively and efficiently, our transportation network must provide and promote attractive and well-connected options for all types of trip-making: walking, rolling, biking, cars, buses, rail, ferry, trucks, etc. Operating a multi-modal transportation system means that we are striving to serve *trips* (people, goods, and services) as well as managing road capacity for *vehicles*.

3. Climate (greenhouse gas reduction) and environmental quality

Reducing greenhouse gas (GHG) emissions and more broadly advancing environmental mitigation and restoration (e.g., energy conservation, habitat preservation, and air and water quality) are outcomes of paramount importance in the region.

4. Maintain existing infrastructure in good, operating condition (preservation)

This goal indicates the Whatcom region's intent to ensure that existing transportation systems are kept in a state of good repair before pursuing system expansions. This goal includes the principle of sustainability – choosing investments in facilities and programs that our region has the ability and willingness to pay for, operate, and maintain into the future.

5. System efficiency and reliability (mobility)

High quality travel and goods movement as indicated by various measures such as travel time, travel-time predictability, reliability, and comfort. Our region's goal of optimizing mobility pertains to all types (modes) of transportation. Mobility depends on adequate transportation system capacity. To track progress on this goal (and other goals), WCOG emphasizes planning for the whole system's **operational capacity** for serving forecast increases in *trips* rather than a narrower focus on our roads' capacity for *vehicles*.

6. Access, equity, and economic opportunity

The region's transportation system should work for all people; should acknowledge and reduce barriers related to age (seniors and youth), income, and physical ability; and should connect people to resources, services, and opportunities critical to economic success (especially education and employment).

7. Freight and economic vitality

In addition to providing for the movement of people, our regional transportation system must provide for effective and efficient movement of goods and services and do so in a way that is consistent with our other goals listed above. A transportation network that enables transactions and the associated movement of products and services is essential to economic vitality.

3.1. State and National Goals

Because of WCOG's dual responsibilities as both a federally recognized metropolitan planning organization (MPO) and the state-designated regional transportation planning organization for Whatcom County, *Way to Go Whatcom* must consider and emphasize national and regional planning factors and Washington's transportation policy goals, respectively. This section discusses how the transportation goals of these three levels (regional, state, and national) can be applied as guidance for the Whatcom region's ongoing regional transportation planning process and to the strategies identified in this plan.

A basic requirement of MPOs is that they "consider factors described in CFR §450.306 [the federal planning factors] as they relate to a minimum 20-year forecast period." Additionally, CFR §450.324(f)(2) notes that a plan's discussion of existing and proposed facilities emphasizes, "...those facilities that serve important national and regional transportation functions." A notable recent addition to the original federal planning factors is seven "national goals" introduced as part of the National Goals and Performance Management Measures from the 2012 U.S. transportation funding authorization act known as "Moving Ahead for Progress in the 21st Century," which are included in the discussion below. In addition to national goals and the Whatcom regional goals discussed in the previous section, the Washington State Legislature has also adopted transportation policy goals.

3.2. Aligning Regional Goals with State and National Goals and Planning Factors

Among the three levels of government (regional, state, federal) there are four sets of transportation system goals, all of which are important. Figure 2 organizes these four lists so that the state and national goals are grouped into sets that correspond to each of the seven Whatcom regional goals. This approach acknowledges the importance of the state and national goals and planning factors, but places them in a supporting and secondary role to the seven locally developed Whatcom regional goals. As indicated in the table, the regional goals align neatly with all but three of the 23 state and/or national goals, those being security, tourism, and reduction of project delivery delay. It must be pointed out that WCOG and its member jurisdictions acknowledge the importance of those goals that do not align directly with the Whatcom regional goals, but, unlike the others, they are not consistently mentioned in transportation plans of Whatcom County's local jurisdictions and even less in public input solicited through robust outreach in 2021. Security, tourism, and project-delivery delay are important, they are federally required planning objectives, and WCOG does support them in its work. This is explained in more detail in the Strategies section (Section 6).

Figure 2: Regional, State, and National Transportation Goals

	Whatcom Region	Washington	United	States
infon ph Engag	filted regional transportation goals med by the region's compreshensive ans, 2021 WCOG Regional Public ement Questionnaire, and approved by finatcom Transportation Policy Board.	Statewide transportation policy goals (RCW 47.04.280)	Planning factors 23 U.S. Code § 134(h)(1)	National goals 23 U.S. Code § 150(a)(b)
1	Safety	"Safety: To provide for and improve the safety and security of transportation customers and the transportation system."	"(2) increase the safety of the transportation system for motorized and non-motorized users."	"(1) Safety: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2	Provide All Types of Transportation (Multimodal)		"(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight."	
3	Climate (Greenhouse Gas Reduction) & Environmental Quality	"Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment."	"(5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns." Also, see (8) below regarding storm water impacts.	(6) Environmental sustainability: To enhance the performance of the transportation system while protecting and enhancing the natural environment.
4	Maintain Existing Infrastructure in Good, Operating Condition (Preservation)	"Preservation: To maintain, preserve and extend the life and utility of prior investments in transportation systems and services."	"(8) Emphasize the preservation of the existing transportation system." Also, see (9) below regarding reliability.	(2) Infrastructure condition: To maintain the highway infrastructure asset system in a state of good repair.
		"Stewardship: To continuously improve the quality, effectiveness and efficiency of the transportation system."	(9) Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.	
5	System Efficiency & Reliability (Mobility)	"Mobility (congestion relief): To improve the predictable movement of goods and people throughout Washington state, including congestion relief and improved freight mobility."	"(7) Promote efficient system management and operation."	(3) Congestion reduction: To achieve a significant reduction in congestion on the National Highway System. (4) System reliability: To improve the efficiency of the surface transportation system.
6	Access, Equity, & Economic Opportunity	Economic opportunity is part of the WA legisative policy goal of Economic Vitality.	"(4) increase accessibility and mobility of people and freight."	- Pariti
		Freight included as part of Mobility and Economic Vitality policy goals.	Freight included with FAST Act planning factors 4 and 6.	(5) Freight movement and economic vitality: To improve the
6	Freight & Economic Vitalility	Economic vitality: To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.	(1) Support economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.	national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
			(3) Increase the security of the transportation system for motorized and non-motorized users.	(7) Reduced project delivery delays: To reduce project costs, promote jobs and the economy, and expedite the
			(10) Enhance travel and tourism	movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

3.3. Applying Regional Goals to WCOG's Transportation Planning Process

WCOG is in the early stages of applying Whatcom Mobility 2040's regional goals to its comprehensive, cooperative, and continuing metropolitan and regional transportation planning process, but initial applications have begun.

3.3.1. Regional project selection

The Whatcom Transportation Policy Board is responsible for allocating funds from the federal Surface Transportation Block Grant (STBG) and Transportation Alternatives (TA) programs to projects in the Whatcom region. Under the Bipartisan Infrastructure Law, approximately \$3.25 million in STBG funds and \$450,000 in TA funds are made available annually to invest in projects within Whatcom County, the seven cities, and tribal governments. For a project to be considered, the requesting jurisdiction completes the regional STBG funding application and submits it to WCOG by a prescribed date. All applications are compiled by WCOG so that they can be reviewed and ranked by the <u>Transportation Technical Advisory Group (TTAG)</u> using weighted selection criteria based on the regional goals in *Way to Go, Whatcom*. TTAG's rankings are then considered by the Policy Board when it makes it funding decisions.

3.3.2. Project prioritization in the regional Transportation Improvement Program (TIP)

Regional STBG and TA program funds are prioritized in the TIP based on the ranking they receive during the review and selection process. All federally funded projects in the first four years of the TIP must be "fiscally constrained," i.e., all of the funding needed to complete the project or project phase must be identified. Projects programmed in the first year of the TIP are "priority one" projects, projects in the second year are priority two, etc., through the fourth year.

3.3.3. Identifying regional transportation corridors

As discussed in the **Performance-based planning and programming** section of *Way to Go*, *Whatcom*, WCOG uses the ranked regional goals as a way to support ongoing discussion between local jurisdictions and agencies about identifying regional transportation corridors that connect population centers within the county (cities, unincorporated hamlets, and tribal lands) and then developing operational and investment strategies to maximize the efficiency of those routes.

4. Future Population and Land Use Forecasts

4.1. Households and Employment

WCOG maintains a four-step, trip-based travel demand model that uses current and forecast population and employment data from the Whatcom region to analyze the impacts that specific projects and programming could have on the efficiency of the region's road network. Two main components make up the travel demand model:

- a road and transit network comprised of regionally significant roadways (described in the next section)
- a geography of traffic analysis zones (TAZs) that contain population, employment, and school data, also known as the model's land-use

TAZs are bounded by the regionally significant road system. Their geographies are modeled after census geographies, with each TAZ's population and employment data being informed by census data. Generally, TAZ boundaries are drawn around areas of relatively homogenous transportation activity. Rural areas with more dispersed households and employment centers have larger TAZs, whereas urban areas with more concentrated land-uses have smaller TAZs. This can be seen in Figures 5 and 6 below.

Households (a function of population) and employment (jobs) are critical land-use inputs in developing an accurate travel demand model. They determine the trip-making characteristics of the TAZs - how much traffic is loaded onto the regional transportation system and where it is going – so that model scenarios can be developed to determine the effect from changes to the road system. Transportation planners use outputs from these scenarios to determine future demand and develop strategies to meet it, as well as to accomplish other regional transportation goals.

More information about WCOG's travel demand model can be found on our website here: WCOG Regional Travel Demand Model.

4.2. Base Year 2019

The *Way to Go, Whatcom* regional transportation plan (RTP) uses 2019 as its base year for describing current regional demographic data and transportation conditions. This year is chosen because it contains the most up-to-date aggregation of census data from sources like the U.S. Census Bureau and the Washington State Office of Financial Management (OFM) at the time of the plan update. The most recent major update to WCOG's travel demand model also occurred the year previous in 2018. The accuracy of the data from 2019 allows WCOG to build a defensible long-range forecast. WCOG's previous RTP adopted in 2017 had a base year of 2013.

4.3. Forecast Year 2045

By federal regulation, regional transportation plan updates must be adopted a minimum of every five years and address no less than a twenty-year planning horizon as of the effective date of the plan (23 CRF 450.324). WCOG's 2017 RTP had a forecast year of 2040. Keeping in line with this trend, the year 2022 plan has a forecast year of 2045.

Although regional transportation plans and city/county comprehensive plans follow different update schedules, the two planning cycles will often have closely overlapping update years, allowing MPO planners to leverage the expertise of dedicated long-range planners from local jurisdictions in developing accurate land-use forecasting. The most recent adoption of comprehensive plans occurred in 2016, one year before the previous RTP adoption, and had a base year of 2013 and a forecast year of 2036. With local comprehensive plan adoption not slated again until 2025, 2036 is still the most recent comprehensively developed forecast of demographics in the region, and as such much of *Way to Go, Whatcom*'s forecasting to 2045 is derived from extrapolating trends from the 2036 forecast.

More information on Whatcom County's 2036 comprehensive plan can be found on the county's website here: Whatcom County Comprehensive Plan.

Figure 3: Base Year and Forecasted Households and Employment, 2013-2045

Year	OFM Total Population	Total Pop (WC Comprehensiv e Plan)	Household Population	Total Households	Persons per HH (HH Pop / Tot HH)	Group Quartering (Tot Pop - HH Pop)	Total Employment
2013	205,800	205,800	198,882	81,710	2.43	6,918	83,232
2019	221,525		214,655	88,845	2.42	6,870	92,812
2036 forecast	277,891	275,450	268,750	112,264	2.39	9,141	120,284
2045 forecast	297,223		288,005	119,205	2.42	9,218	139,134

The US Census Bureau defines group quartering as "places where people live or stay in a group living arrangement that is owned or managed by an organization providing housing and/or services for the residents." These are differentiated from typical housing units such as houses and apartments, and their population make up the gap between Total Population and Household Population.

Forecasting the growth of households in the region starts with population projections. Way to Go Whatcom uses the medium series from OFM's most recent Growth Management Act county population projections from 2017 to determine the projected total population of Whatcom County in 2045, as shown in Figure 3. The number of persons per household are derived from census block data from 2019 OFM datasets, annual city statistics computed by OFM, and input

from City of Bellingham planners. Using base year household occupancy rates and persons per households in conjunction with population projections, a forecast of household population and total households is estimated.

Figure 4: Employment Growth, Base Years to Forecast Years

Employment Average Annual Growth					
2019 2036 PA 2045					
2013	1.92%	1.94%	2.10%		
2019		1.74%	1.92%		

Base year employment figures are derived from the U.S. Bureau of Labor Statistics with the help of the City of Bellingham. Because of the volatility of forecasting employment, the 2045 forecast is based on an extrapolation of the employment growth estimate between the new 2019 base year and the most recent 2036 Whatcom County comprehensive plan forecast. As highlighted in Figure 4, this extrapolation produces comparable annual growth rates for the Whatcom region between the 2013-2036 and 2019-2045 forecast periods.

Figure 5: Projected Whatcom Region Household Growth by TAZ, 2019-2045

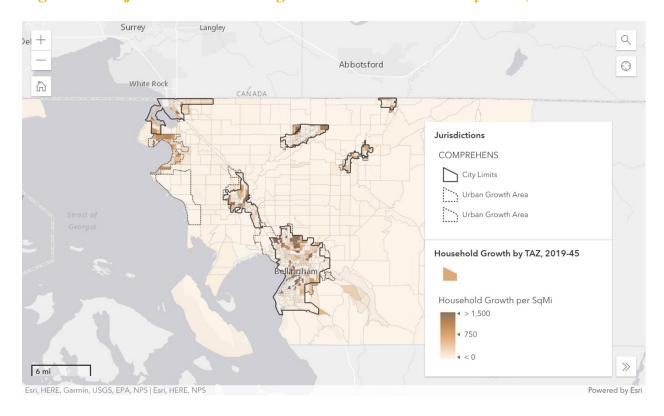


Figure 5 displays household growth density in the Whatcom region - the number of new households forecasted between 2019 and 2045 divided by the area of the TAZ encompassing the growth. Select individual TAZs in the map to view TAZ-specific household data.

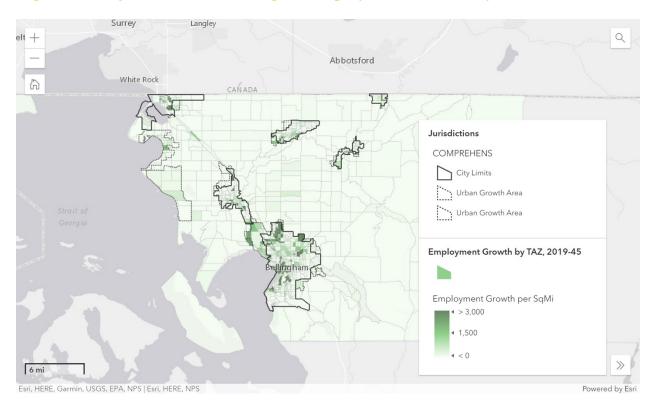


Figure 6: Projected Whatcom Region Employment Growth by TAZ, 2019-2045

Figure 6 displays employment growth density in the Whatcom region - the number of new jobs forecasted between 2019 and 2045 divided by the area of the TAZ encompassing the growth. Select individual TAZs in the map to view TAZ-specific employment data.

5. Measures of Future Transportation

Roads and sidewalks are the primary facilitators of travel for Whatcom residents. Of the nearly 2,000 miles of roadways throughout the county, 486 miles are considered "regionally significant." The regional roads join as a network and are a component of an overall transportation system that connects communities. The Whatcom Council of Government's applies a travel demand model, hereafter referred simply as the model, as a tool to analyze and forecast travel activities on regional roads. The model provides macro-scale indicators of travel behavior, assists in analyses of transportation system deficiencies, and estimates transportation activity relative to expected land-use and transportation system changes.

In order to assess the impact of planned projects on the regional transportation system, three scenarios were created in the WCOG model: a 2019 base year, the 2045 "no-build" scenario, and the 2045 "build" scenario. The 2045 no-build and build scenarios are distinguished by the following:

- The **2045 no-build** scenario applies forecast population growth and land-use changes but assumes that no currently planned transportation road projects that change system capacity are built beyond 2022 to serve the increased land-use demand.
- The **2045 build** scenario applies the same forecasts of population growth and land-use as the no-build scenario and includes all the currently planned transportation road projects to 2045 that will serve the increased land-use demand.

5.1 Vehicular Activities

5.1.1 Vehicle Trips

The Whatcom Regional Transportation Study conducted in 2018 revealed that vehicular trips personal automobiles and trucks - make up 80 percent of trips in the Whatcom region. Aside from a return trip back to home, work and errands account for the majority of trip making purposes. Vehicle occupancy in Whatcom County averages 1.61 persons per vehicle trip. Work and work-related trips have the lowest vehicle occupancy rates with 1.17 persons per vehicle in the City of Bellingham and 1.32 persons per vehicle for the rest of Whatcom County. Conversely, trips for meals and shopping have higher than average occupancy with 1.95 and 1.77 persons per trip, respectively. (RSG, 2019)

Figure 7 compares the daily vehicle trips made in 2019 and the forecast trips in 2045. Note that the travel demand model balances the total number of trips by jurisdictions, but not for "external" trips, i.e., those that either begin or end outside of Whatcom County and begin or end into or outside the U.S-Canadian border.

Figure 7: Daily Vehicle Trips from 2019 to 2045

Jurisdiction	2019	2045	Total Trip Increase	Percentage Change
Bellingham	287,004	383,242	96,238	33.5%
Blaine	16,624	29,428	12,804	77.0%
Everson	4,645	7,382	2,737	58.9%
Ferndale	32,332	47,963	15,631	48.3%
Lynden	33,127	43,615	10,489	31.7%
Nooksack	2,341	3,326	984	42.0%
Sumas	3,537	5,586	2,049	57.9%
Unincorporated	129,138	180,378	51,239	39.7%
Total Whatcom	508,749	700,920	192,171	37.8%

Overall, the model forecast calculates an increase of nearly 200,000 vehicular trips from 2019 to 2045, an increase of 38 percent.

5.1.2 Commute Trips

Trips for work and work-related travel constitute the second-largest share of daily trips in the region, with trips to home being the largest. The morning commute measured in the model refers to the average amount of time it takes to travel from home to place of employment. Figure 8 illustrates the average commute time for jurisdictions. The City of Bellingham continues to have the lowest commute times, understandably so because its urban area contains the most residences and employment options. Conversely, rural communities have higher commute times. Overall, there appear to be slight variations in comparing 2019 with the 2045 build and no-build forecast.

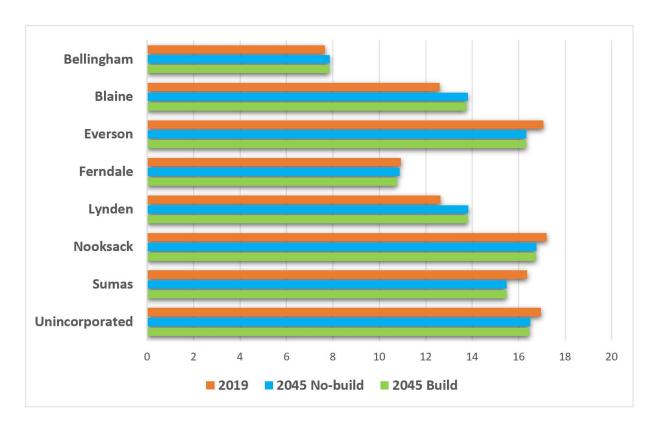


Figure 8: Travel Time to Work

5.1.3 Vehicle Miles Traveled and Vehicle Hours Traveled

Vehicle miles traveled (VMT) is a common measurement of cumulative distances driven by all vehicles on the region's roads throughout a typical 24-hour day. VMT by internal-combustion vehicles is an input for estimating greenhouse gases (GHG) emissions. The Whatcom County Climate Action Plan's first strategy to reduce transportation related GHG is through the reduction of single occupancy vehicle's VMT (CIAC, 2021). Vehicle hours traveled (VHT), the cumulative time that vehicles spend driving during a specific time period, reflects the efficiency of vehicular movement throughout the road network. VHT is a product of factors such as travel speed, roadway capacity, and congestion. Figures 9 and 10 list the growth in average daily VMT and VHT from 2019 to 2045.

Figure 9: Daily Vehicle Miles Traveled from 2019 to 2045

Jurisdiction	2019	2045	Total VMT Increase	Percentage Change
Bellingham	1,761,006	2,405,370	644,364	37%
Blaine	100,535	155,778	55,243	55%
Everson	21,741	30,979	9,238	42%
Ferndale	405,902	569,863	163,961	40%
Lynden	111,603	148,853	37,250	33%
Nooksack	13,996	18,663	4,667	33%
Sumas	13,298	18,221	4,923	37%
Unincorporated	1,921,523	2,797,429	875,906	46%
Whatcom Total	4,349,606	6,145,157	1,795,551	41%

Figure 10: Daily Vehicle Hours Traveled from 2019 to 2045

Jurisdiction	2019	2045	Total VHT Increase	Percentage Change
Bellingham	55,992	118,169	62,177	111%
Blaine	2,571	4,410	1,839	72%
Everson	577	900	323	56%
Ferndale	8,980	16,817	7,837	87%
Lynden	3,259	4,591	1,332	41%
Nooksack	367	496	129	35%
Sumas	353	487	134	38%
Unincorporated	47,765	75,693	27,929	58%
Whatcom Total	119,864	221,564	101,700	85%

As indicated in the tables, both VMT and VHT increase substantially as a result of the projected growth in households and employment among the jurisdictions. It is not a surprise that the higher population areas, City of Bellingham and unincorporated Whatcom County, create the highest total of miles travelled along with the most amount of time spent on the road. The forecast estimates unincorporated Whatcom County to create the highest increases in VMT while the City of Bellingham the highest increases in VHT.

A comparison of the 2045 build and no-build scenarios (Figure 11) shows the reductions in VMT, VHT, and hours spent in traffic that are gained by implementing the projects in *Way to Go, Whatcom*. Although the improvements appear small, these reductions reflect modest changes to vehicular activities throughout the entire regional network and are solely based on planned projects that impact roadway capacities.

Figure 11: Comparison of Daily VMT and VHT by 2045 Scenario

	No Build	Build	% Decrease
Daily Vehicle Miles	6,145,157	6,109,353	-0.6%
Daily Vehicle Hours	221,564	215,757	-2.6%
Hours of Delay	74,232	69,390	-6.5%

5.2 Volume-over-Capacity Ratio and Daily Travel

The volume, or number of vehicles, on a particular roadway segment, divided by the maximum number of vehicles that the segment can accommodate without congestion, it's capacity, estimates a common measure of system performance known as the volume-over-capacity (V/C) ratio. The lower the V/C ratio means that there are fewer vehicles operating on a certain segment of roadway, or less congestion; conversely a higher V/C ratio indicates more congestion when the volume comes close to, or exceeds, the road capacity. A V/C greater than one is considered failing. The V/C ratio is currently used to determine a roadway segment's level of service (LOS) that describes the operating conditions a driver will experience when traveling at a specific time of day.

By analyzing roadway segments during peak hour traffic conditions, including approaches to problematic intersections, planners and engineers can determine which locations require additional analysis that may lead to improvements. Figures 12-14 illustrate the V/C ratios and average daily traffic for road segments on the regional transportation network during afternoon (p.m.) peak hour for 2019 and the 2045 no-build and build scenarios.

Figure 12: 2019 Base Year Volume-Over-Capacity Ratios and Average Daily Traffic

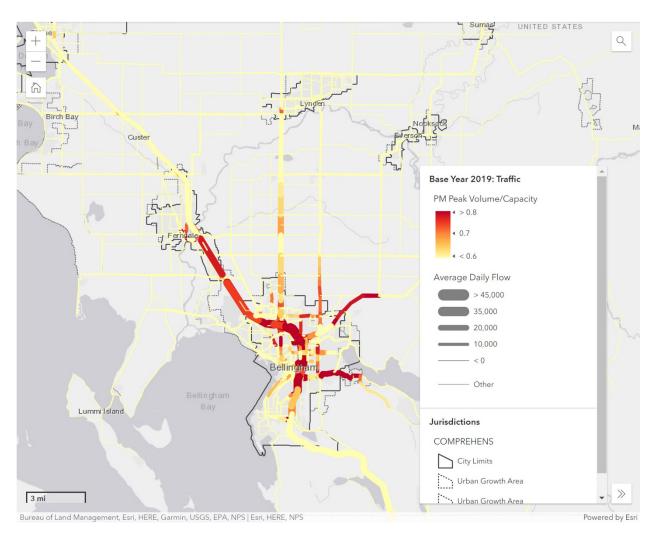
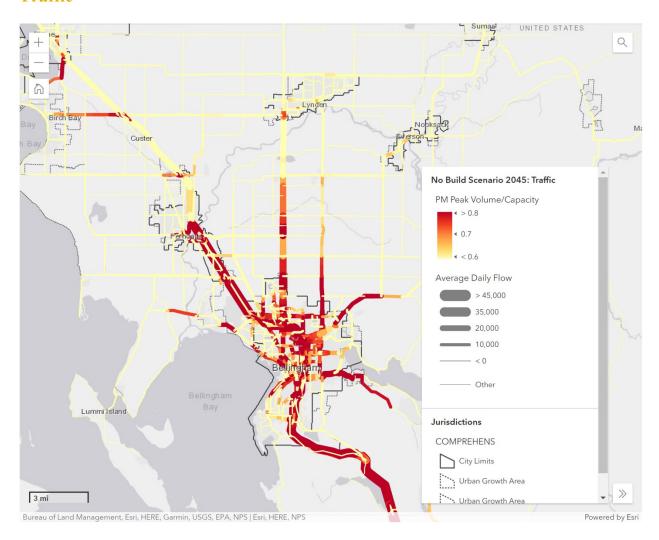


Figure 13: 2045 No-build Volume-Over-Capacity Ratios and Average Daily Traffic



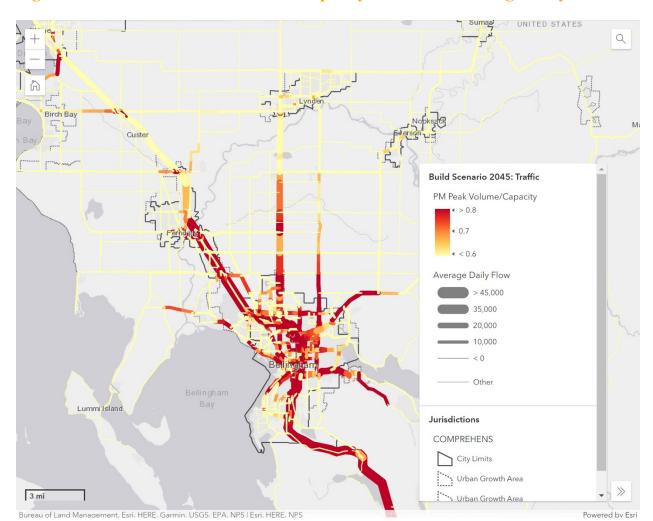


Figure 14: 2045 Build Volume-Over-Capacity Ratios and Average Daily Traffic

5.3 Freight

The movement of commercial goods, commodities and cargo has a substantial impact throughout the Whatcom region. Whatcom County, being on the U.S.- Canada border, has important international transportation links. The Cascade Gateway ports of entry serve very high volumes of trade and travel including trucks, personal vehicles, buses, rail, and pipeline. During the summer of 2019 before the COVID-19 pandemic, the freight dedicated Pacific Highway Port-of-Entry reached over 65,000 commercial trucks a month during the summer. (IMTC, 2021) Traffic count data collected by WCOG at over sixty locations throughout Whatcom's cities estimated that commercial trucks accounts for over 10 percent of the total vehicles using regional roads.

Many Whatcom residents are now receiving daily goods and service deliveries along with standard mail. According to the Whatcom Regional Transportation Study, nearly 15 percent of adults reported a delivery or service on an average weekday (RSG, 2019). The regional model's 2045 forecast estimates up to 63 percent increase in freight trips that are largely influenced by

forecasted employment growth. WCOG continues to seek quality data to quantify and examine the impacts of increasing deliveries and shipment activities on the regional system.

5.4 Active Transportation

Active transportation is non-motorized modes of travel such as walking, biking or rolling. Data collected from the 2018 WCOG travel study estimated that 12.6 percent of trips were made by walking, 3 percent of trips by bike, and 1.1 percent other (e.g. skateboarding or scooter). In all, that's nearly 17 percent of trips that are non-motorized and using the roadways along with motorized travel. (RSG, 2019)

Local jurisdictions are continuing to integrate non-motorized facilities into the road network towards the complete streets and/or complete networks concept. Although the regional network mostly serves motorized activities, many urban-area roads provide sidewalks connectivity for pedestrians and marked lanes for bicycle travel. Many rural roads provide wider shoulders to accommodate bicycle travel. The majority of non-motorized trips occur in urban areas where the percentage of these trips are more than double those made in rural areas. (RSG, 2019) These trips impact the regional transportation system's performance by providing connections to destinations as well as connections to other modes of travel, such as transit or ridesharing. Walking and rolling trips can also reduce traffic congestion by replacing motorized trips and results in less environmental degradation. By applying today's travel behaviors towards the year 2045, bike and walk trips are forecasted to increase by 37 percent and 34 percent respectively.



Figure 15: Walking and Biking Trips for 2019 and 2045 Scenario

5.5 Transit

Nearly three percent of all trips made in Whatcom County are transit. The primary transit service provider in the region, the Whatcom Transportation Authority (WTA), adopted the WTA 2040 plan in early 2022. The plan outlines a "sustained investment" transit services scenario that incorporates a moderate expansion based on current fiscal constraint assumptions. This serves as a basis for *Way to Go, Whatcom*. Comparing the base year transit trips with the 2045 no-build forecast and 2045 build forecast results in transit trip growth of 35 percent and 40 percent, respectively.

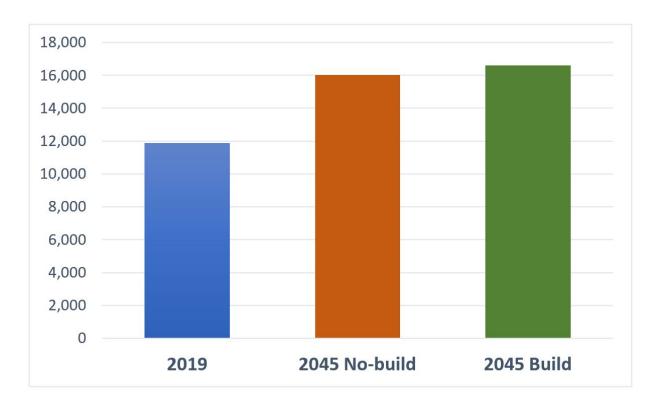


Figure 16: Growth in Daily Transit Trips

Most transit trips are forecasted to occur in Bellingham. However, small urban and rural areas are also projected to increase transit trips. The WTA 2040 plan includes service areas where ondemand service will replace or enhance fixed-route service, thereby improving access to transit. In addition, WTA plans to expand coverage and frequency for much of the WTA service area thereby expanding travel choice, access to jobs, health care, shopping, and education. (WTA, 2022)

6. The Whatcom Region's Transportation Strategies

Informed by the Whatcom Region's transportation system goals, federal and state requirements, and adopted plans of our partners, this section discusses the strategies that guide WCOG's evaluation of transportation system needs and collaboration with regional partners to select investments.

6.1 WCOG's Organization and Planning Work Program

6.1.1 Governance

As discussed in the Introduction, the Whatcom region has chosen to fulfill its federal and state regional transportation planning requirements under the umbrella of WCOG – originally created in 1966 as a state-authorized regional planning conference. Both the federally required MPO and state RTPO are established as one Whatcom Transportation Policy Board (WTBP). The WTPB is a a subcommittee of WCOG's Council Board.

6.1.2 Unified Planning Work Program

Each year, WCOG develops and submits a <u>Unified Planning Work Program (UPWP)</u> for approval by the Washington State Department of Transportation (WSDOT), the U.S. Federal Highways Administration (FHWA), and U.S. Federal Transit Administration (FTA). The UPWP describes in detail how WCOG will fulfill its MPO and RTPO obligations. While many of the planning strategies expanded on below are also discussed in the UPWP, the UPWP documents WCOG's current, one-year allocation of funding to specific activities. This plan's discussion of strategies pertains to the full 20-year planning horizon (at least until the plan is updated again in five years).

6.1.3 Staff and TTAG

The MPO/RTPO (the Policy Board) hires a professional staff to assist in carrying out its UPWP.

The MPO/RTPO is also advised by the <u>Transportation Technical Advisory Group (TTAG)</u>, planning and public-works staff from its member-jurisdictions and agencies.

6.1.4 Public Participation

Regional planning and decision making starts with public input and ongoing opportunities for community engagement. WCOG's strategy for public participation is regularly updated and documented in its Public Participation Plan. One of the practices defined in this plan is the organization and facilitation of the CTAG, CTAG,

jointly administered by WCOG and the Whatcom Transportation Authority (WTA), is a voluntary forum for community participation in decision making about transportation planning, construction, and operations.

6.1.5 Least-cost Planning

The Washington Administrative Code requires regional transportation plans prepared by RTPOs to be based on a "<u>least-cost planning methodology</u> appropriate to the region." Least-cost planning (LCP) is the process by which a region pursues its transportation goals using the most cost-effective mix of options. Furthermore, the process should:

- Consider both transportation *supply* strategies like building or widening roads, adding new transit service; and *demand* strategies like converting general-purpose lanes into high-occupancy vehicle lanes, transportation demand management programs like Whatcom Smart Trips, etc.
- Consider both *direct costs* like infrastructure, operations, preservation and debt service, and *indirect costs* such as safety, travel time, air quality, public health and habitat loss.

To meet this requirement, WCOG has done or is doing the following:

- Adopted regional goals that reflect the expectation that the future effectiveness of the regional transportation system should, and will, rely on a *mix of options*.
- In addition to calling for strategic increases in the supply of transportation infrastructure and services, WCOG has adopted regional *demand* strategies, most notably the regional TDM program, Whatcom Smart Trips. Through this program, WCOG works closely with the jurisdictions and transit providers to support the future effectiveness and attractiveness of transportation modes other than single-occupancy vehicles.
- By adopting regional goals and strategies as a means to both develop and continuously improve performance measures, WCOG's regional planning activities can include benefit-cost analyses that include indirect cost factors (such as safety, travel time, health, environmental quality), which are essential to a LCP approach
- As it relates to the desired LCP outcome of "the most cost-effective mix of options," WCOG has adopted the regional goals of providing all types of transportation (multimodal), and maintaining existing infrastructure in good, operating condition (preservation). This entails: making the best use of available information to identify alternatives; evaluating relative direct and indirect costs and benefits as described above; and selecting alternatives that the region can afford and that provide the most expected benefit for the least cost.

6.1.6 Environmental Mitigation

<u>Federal regulations</u> require that long-range transportation plans "include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan." Accordingly, MPOs are required to seek consultation with federal, state and tribal land-management, wildlife and regulatory agencies

during the preparation of long-range transportation plans. **Appendix E** includes a table of agencies that were provided draft versions of this plan for review.

6.2 System Performance Monitoring

Planning investments and other actions to best pursue our regional transportation goals requires data-based monitoring of trends and current conditions alongside selected measures of system performance.

WCOG doesn't attempt to monitor every element of the regional transportation described in <u>Section 2</u> but it does undertake several performance monitoring strategies and compile a biannual systems performance report incorporated into this plan as <u>Appendix G</u>.

6.2.1 Data Collection

Measurement requires data. WCOG compiles needed data from various sources (e.g. Census, WA Office of Financial Management, local government land-use data, etc.) but also acquires and collects regionally pertinent data directly. These include:

- Traffic and intersection turning counts (directly hiring traffic counting contractors)
- Conducting periodic regional household travel surveys (origin, destination, travel type, times, mode split, corresponding demographics, etc.)
- Large scale public engagement questionnaires.
- Device-generated location-based-services data (from companies like StreetLight)

6.2.2 Regional Transportation Demand Model

To produce detailed, data-based analyses and visualizations of current and forecast transportation system conditions (trip volumes, vehicle volumes, road and traffic conditions, etc.) WCOG maintains a <u>regional transportation demand model</u>. This model is the basis for the base-year and forecast-year assessments discussed in <u>Section 4</u>.

6.2.3 Performance Based Planning and Programming

Revision of federal state and MPO planning rules in 2015 introduced the Performance Based Planning and Programming (PBPP) framework.

Under PBPP, MPOs like WCOG are required to set targets for specific areas of performance using prescribed or other approved measures:

- Safety (five trend-based measures of fatal and serious-injury crashes on all public roadways)
- System Performance (travel time and travel time reliability on major roadways), and
- State of good repair (condition of pavement, bridges, and transit assets)

These measures and targets are then incorporated into selection processes for regional transportation projects that use federal funds that are sub-allocated to MPOs (For more information, see WCOG's Transportation Improvement Program).

System Performance Report

PBPP rules also require MPOs to periodically update a regional system performance report. WCOG's **System Performance Report** includes reporting on the above, federally required measures and targets as well as several other regional measures. WCOG's regional measures are developed for selected interjurisdictional corridors.

WCOG's Interjurisdictional Corridors

As part of adopting performance-based planning practices, WCOG has identified interjurisdictional corridors that serve as the principal connection between two or more communities in Whatcom County. For each of these corridors a generalized geography is identified so as to assess the modes and system components that facilitate mobility along the corridor (roads, transit service, trails, etc.). Identification of regional corridors provides a framework for coordination between jurisdictions and agencies with operational responsibilities on each corridor (Whatcom County, WTA, WSDOT, etc.). With performance measures applied to these corridors, WCOG and its partners can track progress toward meeting established operational goals and more clearly identify system needs and the investments necessary to meet them.

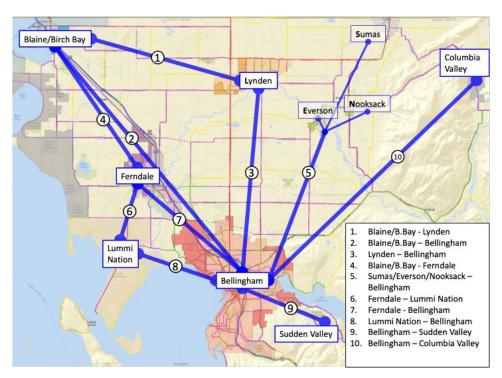


Figure 17: Whatcom's Ten Regional Corridors

Level of Service (LOS)

Washington state law (<u>RCW 47.80.030</u>) requires RTPOs (such as WCOG) to develop and establish LOS standards (in collaboration with WSDOT) for the **regionally significant state routes** within their planning area.

Based on standardized measures of road capacity documented in the Highway Capacity Manual, the long-established LOS for regionally significant state routes in the Whatcom region uses a peak-hour vehicle volume measured as a percentage of the subject road segment's designed capacity. For regionally significant state routes in *urban areas*, the standard is between 80 and 89 percent of capacity ("LOS D"). For regionally significant state routes in rural areas, the standard is between 70 and 79 percent of capacity ("LOS C").

<u>Appendix B</u> expands on this discussion with detail on this LOS requirement, maps of subject state routes, and a discussion of how LOS measures are being reevaluated.

6.3 Safety

Safety is WCOG's highest priority regional transportation goal. Corresponding strategies are integrated throughout legislated requirements, adopted performance measures, and project selection processes. In addition to these practices other strategies that guide WCOG's activities include the following:

- Through partnership with its member jurisdictions and in its directly administered programs, WCOG will work to advance <u>Complete Streets</u>, a road-design framework that prioritizes safety, comfort, and connectivity to destinations for all people who use the street network. Complete Streets is primarily a safety strategy responding to a known need for improvement. In 2019, 62 percent of the motor vehicle crashes that resulted in pedestrian fatalities took place on arterials (National Highway Traffic Safety Administration). Complete Streets also supports *Way to Go, Whatcom's* Access, Equity and Economic Opportunity goal.
- Per the National Highway Traffic Safety Administration's 2019 data,.
- Monitor fatal and serious-injury crashes together rather than separate statistics. This is
 based in the assessment that most serious-injury crashes could have been fatal due to very
 small differences in one of many factors. Additionally, without the higher population of a
 major metropolitan area or a state, annual variation in these summary statistics is already
 higher so a larger, combined statistic is more informative when tracking locations or
 prevalence of contributing behavioral factors.
- In recognition that there is a limit to how much infrastructure improvements (guard rails, cable barriers, rumble strips, sight lines, roundabouts) can continue to reduce fatal and serious injury crashes, work with partners to identify and advance additional actions such as education, encouragement, and enforcement to address prevalent behavioral factors such as speeding, impairment, and distraction.
- Safety is and continues to be well integrated with WCOG's TDM program Smart Trips. This is especially the case for Smart Trips' work with regional school districts delivering

- 7th Grade travel and transit training (with WTA) and work with Bellingham Public Schools on Safe Routes to School initiatives.
- Involvement of the Washington Traffic Safety Commission (WSTC) Region 11 Target Zero Manager on WCOG's TTAG and CTAG.

6.4 Climate and Environment

As discussed in earlier sections, WCOG's regional goal of Climate and Environmental Quality was recently elevated and rearticulated to clarify priority and focus on the reduction of greenhouse gas (GHG) emissions.

To support this goal, WCOG:

- Monitors and engages with climate-action and climate resiliency initiatives of member jurisdictions and agencies.
- Has adopted programming criteria and processes that give relative priority to investments that are expected to reduce GHG and provide other environmental benefits.
- Conducts transportation demand management (TDM) activities through the Smart Trips Program reducing the region's reliance on single-occupant-vehicle travel.
- Will be working with partners to understand and integrate recently authorized state and federal funding programs for advancing GHG emissions reduction, TDM strategies, system resiliency, electrification, and carbon reduction.

6.4.1 Electrification

GHG reduction will be partially achieved by an accelerated transition away from vehicles powered by internal combustion engines to electric and other alternative fuels.

While WCOG's planning-area population is well below the one million that would require it, as an RTPO, to pursue various aspects of planning for electric vehicle infrastructure, it nevertheless considers such activities be critical to progress on its Climate and Environmental Quality goal. WCOG's strategies to advance regional transition from combustion powered vehicles to electric and alternative fuel vehicles include:

- Conducting planning and programming activities in alignment with the compatible elements of federal, state, and member jurisdiction's electric vehicle infrastructure plans and initiatives.
 - o National Electric Vehicle Infrastructure Formula Program (NEVI)
 - o Washington State's Electric Vehicle Infrastructure Deployment Plan.
 - Local jurisdictions climate action and related electrification initiatives (e.g. City of <u>Bellingham's Climate Protection Action Plan</u>, <u>Whatcom County's Climate</u> Action Plan).
- Evaluating and applying data and standardized methods for optimizing locations of
 public charging infrastructure, public-private partnerships, and cost-sharing. To this end,
 WCOG will seek to use <u>Washington State's multi-agency Zero-Emission Vehicles</u>
 <u>Mapping & Forecasting Tool</u> currently under development.

- Coordinate with WTA, neighboring county transit agencies, and WSDOT to support transit's needs to transition vehicles to zero-emission, including funding opportunities.
- Work with member jurisdictions and agencies to prepare for new funding opportunities (WSDOT's Zero Emission Vehicle Infrastructure Partnership (ZEVIP) Program, federal NEVI Program, and federal Carbon Reduction Program.)
- Assess and plan for electric vehicle charging needs of visitors and freight trucks from Canada and, through WCOG's IMTC Program, identify possible benefits related to electrification initiatives in Lower Mainland British Columbia.

6.5 Planning a Multimodal Network

While the term *multimodal* is used throughout the documentation of legislated requirements, federal and state policy statements, and agency transportation plans, one strategy to advance multimodal transportation systems is to refer to it in terms that the public is more familiar with. WCOG's corresponding regional goal is now labeled as "**provide all types of transportation**."

WCOG's strategies to advance this goal are:

- Adopt programming criteria and processes that give relative priority to investments in multimodal connectivity and prioritize the regional system's ability to serve *travel* demand over its ability to serve vehicle volume.
- Support regional coordination of data collection and analysis of modal connectivity (e.g., walking and rolling connections to transit, park-and-ride facilities,
- Conduct transportation demand management (TDM) activities through the Smart Trips Program.
- Continue to collaborate with Whatcom Transportation Authority (WTA) on data sharing, long-range planning, corridor analysis, and TDM activities through the Smart Trips Program.
- Conduct planning and programming that aligns with and supports various active transportation initiatives of WSDOT and member jurisdictions. (See Active Transportation subsection below)
- Monitor, and when appropriate, facilitate regional coordination around recent initiatives
 to evaluate and initiate new passenger-ferry services (E.g., follow-up on the state's <u>2020</u>
 <u>Puget Sound Passenger-only Ferry Study</u>, <u>Washington Maritime Blue initiatives</u> to
 promote fast passenger ferry connections)

6.5.1 Active Transportation

Active transportation refers to trips made by walking, using a mobility assistive device such as a wheelchair, biking, or use of a smaller device such as a scooter or skateboard. Improving the safety and connectivity of active transportation routes and facilities is an important part of advancing WCOG's regional goal of providing *all types* of transportation.

With specific regard to active transportation, WCOG strategies include:

- Continue to coordinate with WSDOT on actions following its adoption of the state's Active Transportation Plan, especially regarding active transportation facilities along, connecting with, or crossing state routes. As part of its interjurisdictional corridor framework, WCOG will seek opportunities to support connection of trail networks between urban centers. WCOG will also continue to coordinate with Whatcom County and its Bicycle / Pedestrian Advisory Committee to advance planning and development of several trail systems described in existing plans (e.g., the Bay to Baker Trail, Coast Millennium Trail, Nooksack Trail, Nooksack Loop Trail, Bellingham-Mt. Baker Trail).
- Support efforts to improve and connect trail networks in the Whatcom region with the perspective that all trails serve trip making and recreation in varying degrees and thus all trails provide meaningful transportation within local communities; to bus stops, schools, and employment; and to recreation and outdoor activities. As part of its interjurisdictional corridor framework, WCOG will seek opportunities to support connection of trail networks between urban centers. WCOG will also continue to coordinate with Whatcom County and its Bicycle/Pedestrian Advisory Committee to advance planning and development of several trail, Nooksack Trail, Nooksack Loop Trail, Bellingham-Mt. Baker Trail).
- Work with other entities in furtherance of trail development (e.g. park districts, private property owners, state and federal land-management agencies).
- Continue to support and maintain GIS resources dedicated to active transportation facilities, transit services, and related service gaps and investment needs. WCOG's current active transportation GIS dashboard can be viewed here.

6.6 Access, Equity, and Economic Opportunity

As stated in <u>Section 3</u>, the region's transportation system should work for all people; should acknowledge and reduce barriers related to age (seniors and youth), income, and physical ability; and should connect people to resources and opportunities critical to economic success (especially education and employment).

To advance this recently expanded regional transportation goal, WCOG employs the following strategies:

- Adoption of an updated Public Participation Plan that specifies outreach to and engagement with community members who represent the actual ethnic, income, age, and linguistic composition of our region.
- Coordination with transportation service providers (WTA, non-profits, private sector) as part of updating and implementing the <u>Human Services Transportation Plan</u>.
- Evaluate project selection criteria to recognize the equity-based interest in investing in historically marginalized communities and locations (e.g. underserved by infrastructure, disproportionately impacted by transportation emissions).
- Evaluate project selection criteria to emphasize investments in connecting high-need communities with transportation -- especially to employment, education, and healthcare.

6.6.1 Environmental Justice

Environmental justice (EJ) is the practice of identifying and addressing those disproportionately-high adverse effects of transportation programs, policies and activities on minority groups and low-income communities to ensure the equitable distribution of both benefits and burdens. WCOG strives to maintain an awareness of potential EJ issues in its transportation planning process and take the necessary action to prevent inequitable outcomes. Specific and overlapping strategies include:

- Inclusion of the U.S. Environmental Protection Agency's environmental justice screening and mapping tool (EJSCREEN) on WCOG's GIS portal.
- WCOG's human services transportation planning activities (described above) include focused attention on the transportation needs of low-income populations.

6.7 Freight

When most of us think about what we need our transportation system to provide, we think of our own travel needs and daily trips. While the movement of goods and services is visible all around us, it's often not top-of-mind. But indeed, individually, and societally, we all need food, goods, and services to move through production and to where they are purchased and/or used. Companies and institutions (e.g., schools, hospitals) need to receive timely deliveries and ship their products. And we all need the trash taken away. These are critical functions that transportation supports. Therefore Freight & Economic Vitality is one of the Whatcom region's transportation system goals.

To support this goal WCOG:

- Participates in state-wide planning and programming activities with WSDOT (especially the WSDOT Rail, Freight, and Ports office)
- Participates in maintenance and application of the state's <u>Freight and Goods</u> <u>Transportation System (FGTS)</u> monitoring and classification program for
- Periodically surveys the region's freight stakeholders. The most recent survey was conducted in Spring of 2021.
- Encourage full consideration of opportunities to add and or expand quiet zones when identifying and designing projects related to rail and railroad crossings.
- Recognizes Whatcom County's position on a major West Coast trade corridor between Vancouver BC and Seattle and gives special attention (as part of WCOG's administration of the IMTC Program) to freight facilities and operations at the United States-Canada border (truck, rail and intermodal components of both).
- Monitors changing needs for improved intermodal connections in the region: rail, marine, air.

Considers current and future rail and marine facility needs and opportunities – especially with respect to federal policy and funding opportunities for intermodal terminal development.

6.8 Security

Discussion of a security strategy is related to the federally required planning factor: "Increase the security of the transportation system for motorized and non-motorized users." WCOG incorporates this planning factor in two ways.

• To the extent this planning factor relates to ways our transportation system can be built, maintained, and operated to be less vulnerable to terrorist attack or being used by terrorists to travel and or deliver means of destruction, WCOG is aware of strategies put in place after 9/11 that interface with transportation facilities and processes. Through work with agency partners like federal border inspection agencies, sheriff and police departments (especially via the Whatcom Unified Emergency Operations Center), Port of Bellingham (especially regarding maritime security (MARSEC) requirements for marine terminals), and WSDOT, FHWA, and TSA regarding various post-9/11 credentialling of commercial divers (e.g., extra background checks for hazardous materials drivers).

To the extent this planning factor relates to making our transportation system as secure as possible for users, WCOG considers this to be a dimension of safety. WCOG will continue to work with partners to support regional efforts that seek to understand any parts of the transportation in which any users feel that their personal safety (especially physical or verbal assault) is at risk and develop strategies for fixing such conditions.

6.9 Toursim

Discussion of a tourism strategy is related to the federally required planning factor: "Enhance travel and tourism." In addition to the fact that WCOG's regional transportation goals all reflect an interest in enhancing travel, WCOG acknowledges that tourism, like most industries, depends on transportation and is therefore advanced as part of the economic vitality goal established by U.S. law, state law, and adopted by WCOG. WCOG does and will continue to work on programs and initiatives with a more direct link to tourism specifically. These include:

- Continuing work on optimizing cross-border travel through regional Canada-U.S. land-border ports of entry (the IMTC Program) supports tourist travel in both directions which is a regionally significant source of economic vitality and regional tax revenue.
- Regional intermodal facilities (bus terminals, airport, Amtrak stations, cruise terminal, etc.) and expansion of transportation options (e-bike share, passenger ferry service) are often discussed in terms of their connection to tourism.

WCOG's continuing facilitation of the North Sound Transportation Alliance (NSTA) is largely based in the five counties' interest in enhancing travel options for visitors.

6.10 Project Delivery Time

Discussion of a Project Delivery strategy is related to the federally legislated national goal of:

"Reduced project delivery delays: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices."

While some of this national goal is directed at policies and practices that WCOG doesn't influence (e.g., regulatory burden, other agencies' work practices, etc.), WCOG does have MPO responsibilities to set and apply policies to ensure that federal funds awarded for projects in the region are used in the allowed timeframe (not delayed). To this end, WCOG works closely with WSDOT's Local Programs and Planning offices; communicates frequently with project-sponsor local jurisdictions; and regularly updates the Policy Board on project readiness, any delays, and if needed, alternatives to reallocate awarded funds within the region (to other federally funded and approved projects) in order to meet delivery date targets.

6.11 Land Use, Housing, and Parking

While WCOG does not have a direct role in land-use policy, land-use and transportation are interconnected. Land-use is a determinant of transportation needs and sustainable transportation networks (fiscally viable public infrastructure and operations) depend on sufficiently dense land-use. Often at odds with planning and development of fiscally viable roads and transit is the phenomenon of "drive 'til you can buy," the observation of people purchasing housing at a distance from their preferred residential location because that's where the prices match what they are willing or able to spend on housing. Individuals regularly end up spending more on increased transportation costs than they save on lower housing costs and the continued dispersion of population from employment, shopping, and services continues to increase the per-person cost of roads and transit (and other public services – utilities; police, fire, EMT; etc.)

The Whatcom region and many other regions are in a housing crisis. Indeed, in response to one of the questions asked in WCOG's 2021 Public Engagement Questionnaire – "What about our region, or future change, could cause you to consider moving away?" – 25 percent of respondents cited cost of living with 45 percent of that group specifically mentioning housing costs. And underrepresented in that data is the visible and growing unhoused population. Housing is complicated and changes to the amount and types of housing supply take time. But integrated planning of transportation connections and services is essential to successfully addressing this need.

Parking is mentioned here, too because it is a significant allocation of land; a key component of how people and businesses use the transportation network; and a key policy variable in how land-managing jurisdictions develop and administer building codes (including parking requirements for residential buildings), and price and enforce publicly developed parking facilities.

Related strategies that WCOG employs include the following:

- Work with local jurisdictions to develop quality forecasts of population, employment, and developable land to support development of local comprehensive plans as well as provide needed inputs to WCOG's regional transportation demand model.
- Support the MPO and RTPO as an effective forum of regional elected officials and others (the WTPB) to coordinate their respective land-use, housing, and parking strategies to support outcomes of shared interest across the region.
- Recognize and support WTA's interest, stated in its 2045 plan, in meeting the needs of
 increased housing supply as well encouraging land-use patterns that allow transit to
 operate efficiently and sustainably.
- Participation in regional discussions and policy evaluation facilitated by the Whatcom Housing Alliance.

6.12 Broadband

Access to the internet and/or cellular data is a very important part of contemporary transportation services; access to education, employment, and healthcare; and TDM strategies. Internet access is a challenge for low-income households. Additionally, internet infrastructure and internet service providers (ISPs) are scarce in the Whatcom region's rural areas.

WCOG's interest in broadband is related to its goals of access, equity, and economic opportunity; and providing all types of transportation.

In support of improving broadband service for the whole of the Whatcom region, WCOG's strategies include:

- Acknowledging and supporting the <u>efforts of the Port of Bellingham and the Public</u>
 <u>Utilities District</u> to improve internet service for the Whatcom region's rural communities.
- Work with the Port of Bellingham, Whatcom PUD, Whatcom County, Cities, and WSDOT to develop a <u>Dig Once</u> policy to coordinate construction projects with broadband deployment.
- Tracking opportunities for support offered through <u>Washington State's Broadband</u>
 Office.

6.13 Megaregional Planning

The Whatcom region's transportation patterns, inclusive of the travel and trade moving to and through our boundaries, is influenced by its position on the North American West Coast corridor and more specifically, its location on the megaregional corridor stretching from Portland, Oregon to Vancouver, British Columbia. This perspective has been <u>programmatically adopted by FHWA</u> over the last decade resulting in case studies and <u>planning strategies</u> to respond to emerging needs and opportunities for megaregional collaboration.

With this megaregional perspective as a backdrop, WCOG employs the following strategies to connect regional transportation planning to changing megaregional transportation conditions as well as current initiatives to promote transportation investments to serve connections between the megaregion's urban centers. These include:

- Continued facilitation of the International Mobility and Trade Corridor (IMTC) Program (detailed below).
- Engagement with WSDOT and other partners as they continue work on feasibility studies, business case analyses, and governance models for development of ultra-high-speed ground transportation (UHSGT) between Portland, OR and Vancouver, BC.
- Participate in activities and dialogue (conferences, working groups) of the <u>Cascadia Innovations Corridor</u> (CIC) initiative.

6.14 Regional Intelligent Transportation Systems Architecture

Intelligent transportation systems (ITS) is a broad term that encompasses many different types of technology that are intended to improve mobility. Such improvement may come in the form of shorter travel times, enhanced safety, lower operating costs and other benefits to both operators and users of the transportation system, the latter including drivers, transit users, freight operators and even pedestrians. Generally speaking, a technology is "intelligent" if it has the ability to communicate (with system operators, users of the facility or other components in that system), is dynamic (i.e., it can be adjusted as conditions warrant) and it generates data that can be analyzed to further improve the operation of that specific facility or the broader transportation network.

The Whatcom Regional Intelligent Transportation Systems (ITS) Architecture is an inventory of transportation technology that is deployed or planned, in Whatcom County. This Regional ITS Architecture is updated periodically to keep pace with the rapid advancement of transportation technology.

The Architecture is available in Appendix D: Whatcom Regional ITS Architecture.

6.15 Programs

In addition to the above strategies that inform and guide all WCOG's activities, WCOG has also established and administers the following programs – ongoing efforts requiring dedicated staff to pursue the goals and required planning and programming objectives of the region.

6.15.1 Whatcom Smart Trips - Transportation Demand Management

Transportation demand management (TDM) reduces the demand for over-burdened roads by providing opportunities for people to use sustainable modes like walking, biking, sharing rides and riding the bus, or to not travel at all (such as working from home). In the Whatcom region, TDM is primarily implemented under the auspices of WCOG's Whatcom Smart Trips program.

The program is currently funded through a partnership of the Whatcom Transportation Authority, WSDOT, and the City of Bellingham.

Whatcom Smart Trips is a collection of initiatives and tools that help and encourage community members to use more efficient and sustainable transportation modes. These include:

- An online trip diary that helps community members identify opportunities for making trips by walking, bicycling, sharing rides and riding the bus
- **Smart Trips Incentives**, which include discount cards, gift certificates, cash prizes and recognition to motivate community members to try new forms of transportation
- **Emergency rides home** using limited, free taxi service so bus riders and other Smart Trips participants who experience an emergency or become ill at work can get home
- Smart Trips employer partners to provide support to businesses and organizations that want to promote sustainable transportation to their employees
- Community outreach provides education, assistance and incentives by partnering with community groups that wish to promote walking, bicycling, sharing rides and riding the bus
- **School Smart Trips** program, which provides classroom activities for middle school students and bicycle skills courses for elementary school students
- An ongoing public awareness campaign that includes advertising and public presentations to make the community aware of the benefits of participation in the Smart Trips program.

In addition to Whatcom Smart Trips, several jurisdictions in the Whatcom region utilize TDM as part of their local transportation strategies. Taken together, regional TDM programs advance the Whatcom regional goals of:

- System Efficiency & Reliability (Mobility) Reducing single-occupant vehicle travel contributes to reduced traffic congestion, faster travel time, and reduced road maintenance needs. It also supports WTA through increased ridership.
- Climate (greenhouse gas reduction) & environmental quality Increased walking and biking advances healthy communities both as a function of increased physical activity and avoided vehicle-related emissions.
- **Provide all types of transportation (multimodal)** Increasing people's awareness of the transportation options they have and informing them how to use more modes directly increases the viability and value of transit, ride-share services, bicycle and pedestrian facilities and indirectly improves effectiveness of roads.

6.15.2 Coordination of Cross-Border Planning, Programming, and Operations: the International Mobility and Trade Corridor Program (IMTC)

The Whatcom region's northern boundary is the United States' international border with Canada. While the Whatcom region is home to about 230,000 people, just across that border, there are approximately 2.5-million people living in Metro Vancouver, one of Canada's largest metropolitan areas. As an international border region, the Whatcom transportation system includes the national facilities of U.S. and Canadian federal border inspection agencies.

Whatcom County's location on the coastal transportation corridor between Vancouver, BC; and Seattle results in high volumes of nationally significant truck and rail freight through the region. Additionally, the asymmetrical population density is a very important dimension of transportation demand in the Whatcom region. In 2020, over 6.3 million personal vehicles and 550,000 commercial vehicles (trucks) entered U.S. ports-of-entry into Whatcom County. Based on earlier studies, about 46 percent of these trips have destinations in Whatcom County. This level of activity has a significant positive impact on the Whatcom region's economy, but also generates a large share of the vehicles using the regional road system. These added cross-border flows of freight and travel are important considerations for the region when planning system capacity and funding for system costs.

Since 1997, WCOG has been the lead agency of the <u>International Mobility and Trade Corridor Program (IMTC)</u>, a voluntary, binational coalition of government, business interests, and non-governmental entities established to support the improvement of safety, mobility and security in the "Cascade Gateway" – the five land-border ports-of-entry connecting Whatcom County and Washington to the Lower Mainland of British Columbia. Through IMTC, participants coordinate planning, identify shared system needs, and optimize investments and operations through collaboration, innovation, and partnership. Active participants include:

- U.S. Federal Highway Administration
- Transport Canada
- U.S. Customs and Border Protection
- Canada Border Services Agency
- WSDOT
- B.C. Ministry of Transportation & Infrastructure
- B.C. and Washington border municipalities
- U.S. Consulate, Vancouver
- Canadian Consulate, Seattle
- Industry associations (trucking, customs brokers, duty-free stores)
- Federal, state, provincial and local legislative offices
- Non-governmental organizations

6.15.3 North Sound Transportation Alliance (NSTA)

The North Sound Transportation Alliance (NSTA), formerly known as the Farmhouse Gang, is a coalition of concerned citizens, elected officials, and professional staff of transportation agencies from Washington's five northwestern-most counties: Whatcom, Skagit, Island, San Juan, and northern Snohomish. Stakeholders voluntarily meet several times a year to develop better ways for people to travel in the region (especially by means other than personal vehicles) focusing on:

- Transit and bus service.
- Passenger rail.
- Ferry service.
- Pedestrian & bicycle facilities.
- Transportation to & from healthcare.

Strategies to advance improvements in these focus areas include:

- Collect travel and system data to identify needs.
- Improve regional connections and sustain and expand services.
- Enhance mobility through sustainable, equitable, and innovative transportation solutions.
- Inform the public about transportation services to enhance awareness of the regional transportation network.

WCOG is the lead agency of NSTA.

7. Regional Project List

As part of this five-year update to the regional/metropolitan transportation plan, WCOG, pursuing the regional transportation goals and employing its strategies, has approved the following list of regional projects – project's that use federal funding or are otherwise significant to the regional transportation system. As described in more detail in the following financial section, this project list is fiscally constrained – limited by a reasonable expectation that revenue will be available to complete the projects in the identified future years.

A PDF version of the regional project list can be found here: Way to Go Whatcom 2045 Regional Project List

Figure 18: Project List

Begins on next page.

Agency	Project Label Location Project Description		Completion Year - change?	Cost Estimate, Year of Expenditure (000's) - update	
Bellingham	Bicycle and Pedestrian Master Plans Implementation	Citywide	Various Unknown Tier 1, 2, 3 Bikeway and Sidewalk Links (funded through Transportation Benefit District program ends in 2030)	2031 - 2045	\$47,576
Bellingham	Bicycle and Pedestrian Master Plans Implementation	Citywide	Various Unknown Tier 1, 2, 3 Bikeway and Sidewalk Links (funded through Transportation Benefit District program ends in 2030)	2022 - 2030	\$19,930
Bellingham	Birchwood Neighborhood Pedestrian Safety Improvements	Alderwood Avenue sidewalk; Cottonwood Avenue sidewalk; Birchwood Avenue sidewalk.	Construct connecting 5-foot wide sidewalks along segments	2025 - 2030	\$4,300
Bellingham	Bridge	Citywide	Bridge repair and reconstruction (funded in part through Transportation Benefit District program ends in 2030)	2031 - 2045	\$23,788
Bellingham	Bridge	Citywide	Bridge repair and reconstruction (funded in part through Transportation Benefit District program ends in 2030)	2022 - 2030	\$9,965
Bellingham	C St / Roeder Ave - Traffic Signal	C Street/Roeder	New traffic signal	2023	\$500
Bellingham	C St / W Holly - Traffic Signal	C Street/Holly	New traffic signal	2023	\$506
Bellingham	Central Avenue/Roeder Avenue- Traffic Signal	Central Avenue/Roeder Avenue	New traffic signal and new "Quiet Zone" BNSF Railroad Crossing	2025 - 2030	\$2,156
Bellingham	Connelly Avenue/I-5 southbound on/off Intersection	Connelly Ave/I-6	Construct a 4-way traffic signal	2022 - 2027	\$562
Bellingham	Cornwall Avenue Bridge Reconstruction	Over BNSF Railroad	Reconstruct existing bridge to three travel lanes to include bike lanes and sidewalks	2033 - 2045	44,847 - 65,688
Bellingham	East Bakerview Road	Deemer Road to Hannegan Road	Reconstruct to Urban Arterial - Sidewalks, bike lanes, 2 travel lanes, center left-turn lane	2033 - 2045	14,749 - 21,589
Bellingham	Fairhaven Urban Village Pedestrian Safety Improvements	12th St/Finnegan Way; 12th St/Mill St	11th/Finnegan intersection reconstruction & flashing crosswalk; 12th/Mill traffic signal; 11th St-Finnegan Way sidewalk construction	2025 - 2030	\$2,586
Bellingham	Governor	Mahonia to San Juan	New urban arterial to include sidewalks and bike lanes. This project is planned to be funded through private: SEPA mitigation.	2033 - 2045	22,793 - 33,365
Bellingham	James Street Multimodal Safety Improvements	East Orchard to Gooding Avenue, Phases 1-4	Two-Way Shared Use Pathway along west side of James Street; Fish passage improvements to culverts under roadway	2025 - 2030	\$18,312
Bellingham	James/Bakerview Intersection Reconstruction	James Street/East Bakerview Road	Intersection reconstruction to multimodal roundabout	2023	\$4,479
Bellingham	Lincoln Street Multimodal Safety Improvements	E. Maple St to south Fred Meyer driveway	Install buffered bike lanes, Viking Cir HAWK signal, traffic signal at Maple St	2024	\$2,200
Bellingham	Lincoln-Lakeway Multimodal Transportation Study implementation	Lakeway Dr, Ellis St to Puget St; Lincoln St, Meador Ave to Samish Way; includes segments of King St, Potter St and Meador Ave; includes I-5 Interchange at Lakeway Dr.	Implementation of projects listed in the subarea study. Projects timing are identified as short, mid and long range and prioritized as high, med and low. Planned funding through a combination of local, state and federal grants.	2023 - 2045	TBD
Bellingham	Meridian/Birchwood Transportation Improvements	Intersections of Birchwood Ave, Squalicum Way and Meridian St	Merge Squalicum Way to Birchwood Ave. Remove Squalicum intersection signal. Install roundabout at Meridian St and Birchwood Ave. Build trail connect to park.	2025 - 2028	\$12,788
Bellingham	North James Street Multimodal Arterial Connection	Gooding Ave to Van Wyck Rd	Constructed by Private Developer with phased subdivision construction	2022 - 2030	\$4,395
Bellingham	North Samish Way, Phase 2	Ellis Street to Bill MacDoland Parkway	Asphalt Resurfacing & ADA upgrades (5-foot sidewalks)	2025 - 2030	\$10,606
Bellingham	Northwest Avenue/West Maplewood Avenue Intersection	Northwest Avenue/West Maplewood Avenue	Construct a 4-way traffic signal	2022 - 2027	\$562
Bellingham	Northwest Drive/Aldrich Road Intersection	Northwest Drive/Aldrich Road	Install right-in; right-out only turn restrictions	2022 - 2027	\$70
Bellingham	Parkview ES Safe Route to School	Sunset Dr to Meridian St	Install sidewalks, ADA ramps, crosswalks, parking removal and bike lanes	2023	\$2,020
Bellingham	Preservation program	Citywide	Arterial Street Resurfacing, Repair, Maintenance	2022 - 2032	\$52,497
Bellingham	Preservation program	Citywide	Arterial Street Resurfacing, Repair, Maintenance	2033 - 2045	\$88,986

Agency	ency Project Label Location Project Description		Completion Year - change?	Cost Estimate, Year of Expenditure (000's) - update	
Bellingham	San Juan	Pacificview to 40th St	New urban arterial to include sidewalks and bike lanes. This project is planned to be funded through private: SEPA mitigation.	2033 - 2045	18,771 - 27,477
Bellingham	South Cornwall Avenue	Wharf Street to Cornwall Beach	New collector arterial to connect Cornwall to the south end of the Waterfront District	2028	\$8,474
Bellingham	Telegraph Road Multimodal Improvements	Deemer Road to James Street	Multimodal improvements to include a center turn lane, traffic signals at Deemer and James, bike lanes, sidewalks, stormwater, flashing crosswalks at bus stops	2023	\$863
Bellingham	Van Wyck Road	James Street to SR 540	New Urban Arterial - Sidewalks, bike lanes, 2 travel lanes, left-turn lanes.	2033 - 2045	12,067 - 17,664
Bellingham	West Maplewood Avenue	Alderwood Avenue to Bakerview Rd	Reconstruct to Urban Arterial standard - Sidewalks, bike lanes, 2 travel lanes.	2033 - 2045	9,385 - 13,739
Bellingham / Whatcom	West Horton Phase II	Aldrich Road to Northwest Drive	New urban arterial to include sidewalks and bike lanes with intersection improvements at Aldrich/Horton and Northwest/Horton.	2033 - 2045	16,089 - 23,552
Bellingham / Whatcom	Bennett Drive	Bakerview Rd to Marine Dr	Rechannelization to Urban Arterial Standards and include sidewalks and bikelanes.	2033 - 2045	1,341 - 1,963
Bellingham / Whatcom	Lakeway Drive	City limits to Lakeview	Rechannelization to Urban Arterial Standards and include sidewalks and bike lanes. Also includes intersection improvements.	2033 - 2045	1,341 - 1,963
Bellingham / Whatcom	West Maplewood Avenue, Phase 2	City limits to W. Bakerview Rd	Reconstruction to urban arterial standards and include sidewalks and bike lanes.	2033 - 2045	9,385 - 13,739
Blaine	Bell Rd Grade Separation	At I-5 Exit 274	Preliminary Design, Right of Way acquisition and Construction of railroad grade separation at this intersection	2033 - 2045	47,500 - 69,533
Blaine	Marine Drive Phase 4	Lighthouse Point Water Reclamation Facility to Public Pier	Reconstruct road	2025 - 2027	\$4,081
Blaine	H Street Sidewalk and Road Reconstruction	Terrace to Harvey	Reconstrcution road and sidewalks	2025 - 2027	\$3,798
Blaine	Mitchell Avenue/Peace Portal Drive Signal	Mitchell Avenue/Pece Portal Drive	Add signal to intersection	2033 - 2045	1,240 - 1,850
Blaine	Hughes Road/Peace Portal Drive Signal	Hughes Road/Peace Portal Drive	Add signal to intersection	2033 - 2045	1,240 - 1,850
Blaine	H Street Intersections	Intersections at Harrison Ave and Peace Portal Drive	Add signals to intersection	2033 - 2045	2,480 - 3,631
Blaine	Boblett Street Traffic Channelization	Boblett Street	Improvements will include: Channelization, sidewalk replacement, storm drainage, and roundabout construction.	2023	\$2,434
Blaine	Citywide Pavement Preservation	Citywide	Annual resurfacing program of city streets	2022 - 2027	\$1,597
Blaine	Blaine Athletic Trail Installation	within city limits	Pedestrian and bike trail construction	2024 - 2027	\$1,077
Blaine	Cain Creek Trail Installation	to be determined	Pedestrian and bike trail construction	2025 - 2027	\$1,049
Blaine	Semiahmoo Spit Pedestrian Path Safety Improvements	County Park to Marina	Pedestrian Path Safety Improvements	2024	\$850
Blaine	Hughes Avenue Pedestrian Improvements	West of Railroad tracks	Construct pedestrian facility improvements along Hughes Av	2025 - 2027	\$816
Blaine	Mitchell Avenue/H Street Signalization	Mitchell Avenue/H Street	Improve Signalization	2022 - 2032	\$800
Blaine	Lincoln Park Trail Enhancements	to be determined	Pedestrian and bike trail construction	2025 - 2027	\$527
Blaine	Monfort Park and Heron's Pond Trail Enhancement	to be determined	Pedestrian and bike trail construction	2025 - 2027	\$408
Blaine	Peace Portal Drive Sidewalk Gap Elimination	Clark Street to Boblett Street	Sidewalk Gap Elimination	2024	\$260
Blaine	Peace Portal Drive Community Trail - Phase 3	Hughes to Bell Rd	Construct multimodal path	2022	\$210
Blaine	Bell Rd and Peace Portal Lane Improvements	Bell Rd (SR 548) and Peace Portal Lane	Lengthen right turn lane and add northobound lane to prevent intersection blockage.	2022	\$150
Canada Border Services Agency	Rebuild/expand Pacific Highway Port of Entry	Terminus of SR 543 (at Blaine, WA)	Rebuild & expand this border inspection facility which is the I-5 corridor's and region's primary truck crossing into Candada.	2025	TBD

Agency	Project Label	Location Project Description		Completion Year - change?	Cost Estimate, Year of Expenditure (000's) - update
Everson	SR 544 South Everson Sidewalk Improvements	SR 544 South Everson	Fill in missing segments of sidewalk along SR 544 from approximately Robinson Street to Everson Road	2026	\$2,721
Everson	Blair Dr Improvements	Reeds Ln to SR 544	Reconstruct roadway and include sidewalks, curb and gutter, on-street parking and a bicycle lane	2024	\$2,013
Everson	Preservation Program	Designated Arterials	Preserve designated arterials through timely overlays and reconstruction	2033 - 2045	\$849
Everson	Preservation Program	Designated Arterials	Preserve designated arterials through timely overlays and reconstruction	2022 - 2032	\$461
Ferndale	Main St, Barrett Rd to Old Settler Dr	Barrett Rd to Old Settler Dr	Reconstruct and widen to meet City standards, including utilities and multimodal facilities	2026	\$5,452
Ferndale	Pavement Rehabilitation Program	City-wide	City-wide program	2022 - 2032	\$4,427
Ferndale	Thornton - Vista to Malloy	Vista Drive to Malloy Ave	Reconstruct and widen to meet City standards, including utilities	2023	\$4,025
Ferndale	Thornton - Church to Maureen	Church Road to Maureen Drive	North side of road, 8-ft wide road widening and curb, gutter, sidewalk and storm. Existing road and south side curb, gutter and sidewalk remains.	2022 - 2027	\$3,712
Ferndale	Ferndale Terrace Improvement Project	Shannon Ave to Vista Dr	Reconstruct and widen to city standard and include multimodal facilities	2022 - 2027	\$2,404
Ferndale	Pavement Rehabilitation Program	City-wide	City-wide program	2033 - 2045	\$8,185
Ferndale	Main Street / I-5 Overpass	Main Street / I-5 Overpass	Widen to five lanes and include multimodal improvements.	2033 - 2045	34,168 - 50,016
Ferndale	Reconfiguration Washington Street / Vista Drive Intersection	Interchange Washington Street / Vista Drive	One larger roundabout or two compact roundabouts at Washington Street and Vista Drive	2033 - 2045	5,916 - 8,659
Ferndale	Labounty Drive / Nordic Way Intersection	Labounty Drive / Nordic Way	Signalize intersection	2033 - 2045	1,125 - 1,647
Ferndale	Barrett Road / Southeast Connector Road Intersection	Barrett Road / Southeast Connector Road	Construct 1 lane roundabout	2033 - 2045	1,176 - 1,721
Ferndale	Barrett Road	Smith Road to north City Limits	Reconstruct and widen to meet City standards, including utilities and sidewalk on one side of the street	2033 - 2045	22,180 - 32,468
Ferndale	Main Street / Southeast Connector Road Intersection	Main Street / Southeast Connector Road	Construct 1 to 2 lane roundabout with eastbound and northbound right turn lanes	2033 - 2045	2,216 - 3,244
Ferndale	LaBounty Dr	Segments include: Seahawk Dr to Sunset Ave and Main St to Smith Rd	Reconstruct and widen to city standard and include multimodal facilities	2033 - 2045	34,677 - 50,760
Ferndale	Grandview Interchange Reconfiguration	Grandview / I-5 Overpass Interchange	Widen Grandview Rd interchange and ramps that includes improvements to northbound ramps, freight passage, the railroad intersection, and to add multimodal components.	2033 - 2045	53,631 - 78,506
Ferndale	Portal Way Corridor	Within city limits	reconstruct to include bicycle and pedestrian improvements	2033 - 2045	26,673 - 39,045
Ferndale	Portal Way / North Enterprise Street / Destiny Street Intersection	Portal Way / North Enterprise Street / Destiny Street	Remove south leg of Portal Way and improve alignment into Destiny Street / North Enterprise Street intersection	2033 - 2045	2,543 - 3,723
Ferndale	Smith Rd Intersections	Smith Rd and Labounty Dr, Smith Rd and Barrett Rd	Construct roundabouts	2033 - 2045	3,549 - 5,195
Ferndale	Main Street Intersections	Main St and Hovander Dr, Main St and Labounty Dr, Main St and Barrett Rd	Intersection improvements that may include roundabout construction, channelization or signlization. Implement an adaptive signal control system.	2033 - 2045	6,174 - 9,038
Ferndale	Portal Way / I-5 Northbound Ramps Intersection	Portal Way / I-5 Northbound Ramps	Construct single lane roundabout	2027 - 2032	\$1,041
Lynden	Double Ditch Road	Segments: Main St to Village Dr and Main St to north City Limits	Reconstruct/upgrade corridor to include sidewalks, bicycle facilities and other safety measures.	2022 - 2030	\$7,828
Lynden	Benson Road	Sunrise Drive to Badger Road (Connect to future Pepin Parkway)	Widen to avoid ditch, reconstruct to City standards (inc. 36' width), including sidewalks and bicycle facilities.	2025 - 2027	\$5,254
Lynden	Bradley Road	Vinup Road to Line Road	Reconstruct to include possible signalization at Bradley and Vinup	2022 - 2027	\$4,421
Lynden	Line Road Box Culvert Bridge Reconstruction	Line Road Box Culvert Bridge Reconstruction	Reconstruct box culvert on Line Road near the KOA campground.	2022 - 2027	\$2,923
Lynden	Bicycle Facilities and Pathways Program	Bicycle Facilities and Pathways Program	City-wide	2033 - 2045	\$455

Agency	Agency Project Label Location Project Description		Project Description	Completion Year - change?	Cost Estimate, Year of Expenditure (000's) - update
Lynden	Sidewalk / Crossing Improvement Program	Sidewalk / Crossing Improvement Program	Annual program to construct missing sidewalk links, repair existing sidewalks, improve crosswalk markings, and install ADA- accessible curb ramps at intersections.	2033 - 2045	\$98
Lynden	Street Overlay and Maintenance	Street Overlay and Maintenance	City-wide	2033 - 2045	\$2,274
Lynden	Jim Kaemingk Sr. Trail Fishtrap Creek Core	Depot Road to N. 8th, 17th to Front, Front to Kok Road, Kok Road to Guide Meridian (SR-539)	17th to Dickinson Park. Dickinson Park to Front Street.	2033 - 2045	1,341 - 1,963
Lynden	Birch Bay Lynden Road Pavement Preservation	Birch Bay Lynden Road from SR-539 (Guide Meridian) at the east to Tromp Road to the west	Birch Bay Lynden was constructed in two phases (2001 and 2002) and the asphalt pavement wearing course has met its expected useful life. The City has proactively performed preventative maintenance with crack sealing, chip seal and spot grinding and repavement of severe wheel path rutting. The project will include pedestrian improvement to current ADA standards.	2022 - 2027	\$2,267
Lynden	Vinup Road Pavement Preservation	Vinup Road from Bradley Road at the south to SR-546 (East Badger Road) at the north	The City has been proactive in both crack sealing and chip seal pavement management, but now is the time for a formal 2.5-inch asphalt grind and replacement project. The project will include ADA upgrades.	2022 - 2027	\$2,041
Lynden	4th St Corridor	Front Street to Grover Street	Reconstruct corridor to HBD standards (inc. 36' width), including sidewalks. Complete intersection and signal timing improvements as needed.	2033 - 2045	1,044 - 1,529
Lynden	Intersection Improvements along Grover St and Front St	Intersections include: 1st St and Grover St, 17th St and Front St, 17th St and Grover St and 7th St and Front St	Evaluate intersection operations and implement improvements that may include traffic signalization, left- turn signals or roundabouts	2033 - 2045	1,992 - 2,917
Lynden	Birch Bay - Lynden Road and Berthusen Road Intersection	Birch Bay - Lynden Road and Berthusen Road	Evaluate intersection operations and install roundabout to improve future level of service when needed.	2033 - 2045	1,773 - 2,595
Lynden	Kamm Road	Line Road to Northwood	Reconstruct/Upgrade corridor to City standard (inc. 36' width), including sidewalks and bicycle facilities, and other safety measures.	2033 - 2045	1,998 - 2,924
Lynden	W Front Street and Tromp from Duffner Drive to Birch Bay - Lynden Road	W Front Street and Tromp from Duffner Drive to Birch Bay - Lynden Road	Reconstruct corridor to City standard (inc. 36' width), including sidewalks and bicycle facilities.	2033 - 2045	7,814 - 11,438
Lynden	SR 546 Intersections	SR 546 Intersections include: Benson Rd, Vinup Rd and Line Rd	Upgrade intersection to a roundabout consistent with designs at adjacent intersections on SR 546 corridor.	2033 - 2045	5,592 - 8,186
Lynden	SR539 (Guide Meridian) from Birch Bay Lynden to SR546 (Badger Rd)	SR 539 (Guide Meridian) from Birch Bay Lynden to SR 546 (Badger Rd)	Widen roadway to 4 travel lanes between BBL and Main Street. Lane and shoulder widening north of Main Street with safety improvements. Possible roundabouts at Main and Badger Intersections.	2033 - 2045	20,112 - 29,440
Lynden	Line Road - Badger Road to Bradley Road	Badger Road to Aaron, and Burlwood to Bradley Rd	Reconstruct corridor to City standard (inc. 36' width), including sidewalks and bicycle facilities, and other safety measures to address building of a new school along Line Road.	2033 - 2045	3,017 - 4,416
Lynden	Benson Road and Main Street Intersection	Benson Road and Main Street	Evaluate intersection operations and install traffic signal to improve future level of service when needed.	2033 - 2045	804 - 1,178
Lynden	Main Street Corridor Completion	Berthusen Road east 0.5 miles to existing roadway	Berthusen and West Main Round about	2023	\$1,925
Lynden	SR 546 Intersection w/ City Arterials	Intersections	Upgrade Lighting & Channelization	2022 - 2027	\$1,026
Lynden	Northwood Road	South City limits to Badger	Preliminary Engineering; Upgrade to Full City Standard	2022 - 2027	\$641
Lynden	Berthusen Road	Birch Bay Lynden Road to Main Street	Design engineering to full City standard	2022 - 2027	\$400
Lynden	Street Overlay and Maintenance	Street Overlay and Maintenance	Annual program to maintain the City's transportation roadway infrastructure.	2022 - 2032	\$283
Lynden	Non-street trail and multi-use transporation and recreational network	Various locations through the City	Construction and/or development and design of new non- motorized vehicle facilities and multi-use trails throughout the City	2022 - 2032	\$260
Lynden	Bicycle Facilities and Pathways Program	Bicycle Facilities and Pathways Program	Annual Striping of City-identified bicycle routes within City limits. Some facilities may be listed above in reconstruction projects.	2022 - 2032	\$255

Agency	Project Label	Location	Location Project Description		Cost Estimate, Year of Expenditure (000's) - update
Lynden	Sidewalk / Crossing Improvement Program	Sidewalk / Crossing Improvement Program	Annual program to construct missing sidewalk links, repair existing sidewalks, improve crosswalk markings, and install ADA- accessible curb ramps at intersections.	2022 - 2032	\$57
Nooksack	Preservation Program	Designated Arterials	Preserve designated arterials through timely overlays and reconstruction	2033 - 2045	\$531
Nooksack	Preservation Program	Designated Arterials	Preserve designated arterials through timely overlays and reconstruction	2022 - 2032	\$288
Nooksack	Nooksack Avenue (SR 9) Sidewalk	Hayes Street to Tom Road	Install sidewalk on Nooskack Avenue (SR 9) on west side of street	2027	\$170
Nooksack	Breckenridge Rd Sidewalk	Madison St to Elementary School	Install sidewalks	2023	\$160
Sumas	SR 9 (Cherry Street) bridge replacement	SR 9 bridge crossing Johnson Creek	Replace SR 9 (Cherry Street) bridge that crosses Johnoson Creek	2025	\$4,010
Sumas	Sumas Avenue Reconstruction	From E. Front Street (SR 547) to Garfield Street	Reconstruct Sumas Avenue from SR 547 (Front Street) to Garfield Street	2025	\$2,995
Sumas	Preservation Program	Multiple Arterials	Preserve designated arterials through timely overlays and reconstruction	2033 - 2045	\$531
Sumas	Preservation Program	Multiple Arterials	Preserve designated arterials through timely overlays and reconstruction	2022 - 2032	\$288
To be determined	Kendall Trail	SR 547 from SR 542 to Shamrock Rd	Construct non-motorized trail along SR 547	2025 - 2032	\$4,500
U.S. Customs and Border Protection	Redevelopment of Sumas, WA, Port of Entry	POE at State Route 9, Sumas, WA	Rebuild this 30 year old facility.	2026	\$30,000
U.S. Customs and Border Protection	Redevelopment of Lynden, WA Port of Entry	POE at State Route 539, Lynden, WA	Rebuild this 33 year old facility.	2027	\$20,000
U.S. Customs and Border Protection	Additional Primary Inspection Booths at Pacific Highway Port of Entry (POE)	POE at State Route 543, Blaine, WA	Add four primary inspection booths to existing six with corresponding canopy, road, and lane modifications.	2023	\$8,000
WCOG	Cascade Gateway Border Data Warehouse 3.0	Cross-border region	Update to the existing border traffic data archive system to address data storage effciencies, modernize the user interface, and integreate new data sources.	2020	\$300
WCOG	IMTC Cross-border freight study	Cross-border locations	Conduct large field work data collection and analysis of cross-border freight activities. Typically performed every five years.	2022, 2027, 2032	\$410
WCOG	IMTC Cross-border freight study	Cross-border locations	Conduct large field work data collection and analysis of cross-border freight activities. Typically performed every five years.	2037, 2042	\$310
WCOG	IMTC Program - Regional Cross- border Planning & Coordination	Cross-border region	Adminstration of and participation in coordination of regional, cross-border planning, programming, and operations.	2022 - 2032	\$2,536
WCOG	IMTC Program - Regional Cross- border Planning & Coordination	Cross-border region	Adminstration of and participation in coordination of regional, cross-border planning, programming, and operations.	2033 - 2045	\$3,698
WCOG	Mobility Programs	Whatcom County	Adminstration of programs to improve regional mobility through transportation demand management (commute trip reduction), incentive programs (Smart Trips), and travel training, and related interagency partnerships.	2022 - 2032	\$4,332
WCOG	Mobility Programs	Whatcom County	Adminstration of programs to improve regional mobility through transportation demand management (commute trip reduction), incentive programs (Smart Trips), and travel training, and related interagency partnerships.	2033 - 2045	\$6,317
Whatcom County	Countywide paving and preservation	Countywide	Road paving and preservation program	2022 - 2032	\$22,542
Whatcom County	Birch Bay-Lynden Rd Improvements	Includes; Harborview Rd to Lynden City Limit, intersection of Birch Bay-Lynden Rd and Kickerville Rd	Rehabilitation improvements with multi-modal enhancements; intersection improvements as warranted with multi-modal, drainage and safety enhancements	2028 - 2032	\$18,200
Whatcom County	Kickerville Road	Kickerville Road	Reconstruct to Rural Major Collector standards with non- motorized facilities	2030	\$13,500
Whatcom County	Birch Bay Drive & Pedestrian Facility	Birch Bay Drive (Lora Ln to Cedar Ave)	Construct a soft shore beach berm for roadway protection with a pedestrian pathway and drainage upgrades.	2022	\$11,450

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Whatcom County	Northwest Drive Corridor Intersections	Intersections along Northwest include Smith Rd and Slater Rd	Intersection Improvements as warranted with multi-modal, safety enhancements and/or drainage or fish passage	2026	\$11,000
Whatcom County	North Fork Road/Kenny Creek	North Fork Road/Kenny Creek	Fish Passage	2030 - 2032	\$10,400
Whatcom County	North Lake Samish Road Bridge No. 108	North Lake Samish Road Bridge No. 108	Replacement with multi-modal enhancements	2023	\$9,700
Whatcom County	East Smith Road	Ferndale City Limits to Everson Goshen Road	Resurfacing, restoration & rehabilitation improvements with multi-modal enhancements	2027	\$9,300
Whatcom County	Countywide paving and preservation	Countywide	Road paving and preservation program	2033 - 2045	\$38,210
Whatcom County	Harborview Road Intersection Improvements	Intersections along Harborview Rd include Birch Bay Dr and Birch Bay-Lynden Rd	Intersection Improvements as warranted with multi-modal, drainage and safety enhancements	2026	\$8,000
Whatcom County	West Badger Road	Sunrise Road to Markworth Road	Reconstruct to Rural Major Collector standards with non- motorized facilities	2033 - 2045	8,045 - 11,776
Whatcom County	Grandview Road (SR 548)/Vista Drive	Grandview Road (SR 548)/Vista Drive	Intersection Improvements as warranted with multi- modal, drainage and safety enhancements	2033 - 2045	6,033 - 8,832
Whatcom County	Lake Whatcom Boulevard Water Quality Improvements	Cable St to Strawberry Pt	Water quality improvements and multi-modal enhancements	2026	\$7,000
Whatcom County	Lincoln Road Extension and Improvement	Harborview Road to Blaine Road (SR 548)	Reconstruct existing road and construct 2-lane urban arterial to Blaine Road with nonmotorized enhancement including intersection improvements at Blaine Road and Harborview Road	2028	\$6,975
Whatcom County	Marine Drive/Little Squalicum Bridge No. 2	Marine Drive/Little Squalicum Bridge No. 2	Rehabilitation and multi-modal enhancements	2030 - 2032	\$6,500
Whatcom County	Birch Bay Lynden Rd & Blaine Rd Intersection Improvements	Birch Bay-Lynden Road/Blaine Road (SR 548)	Intersection Improvements as warranted with multi-modal, drainage and safety enhancements	2024	\$5,500
Whatcom County	Hampton Road	Lynden City Limits to Van Buren	Resurfacing, restoration & rehabilitation improvements with multi-modal enhancements	2030 - 2032	\$5,200
Whatcom County	Jackson Road/Terrell Creek Bridge No. 82	Jackson Road/Terrell Creek Bridge No. 82	Replacement with multi-modal enhancements	2025	\$5,000
Whatcom County	North Shore Road	Bellingham City Limits to Y Road	Spot Safety, stormwater improvements and multi-modal enhancements	2028	\$4,650
Whatcom County	Goshen Road/Anderson Creek Bridge No. 249	Goshen Road/Anderson Creek Bridge No. 249	Rehabilitation and sedimentation control with multi- modal enhancements	2028	\$4,650
Whatcom County	Marine Drive II	Alderwood Ave to BNSF RR Overpass (Bridge No. 172)	Reconstruct to Urban Minor Arterial standards with non- motorized facilities	2026	\$4,550
Whatcom County	Harborview Road roadway improvements	Segments include Birch Bay Drive to Birch Bay-Lynden Road to Drayton Harbor Road	Improve roadway to functional classification standards including non-motorized facilities	2033 - 2045	9,739 - 13,740
Whatcom County	Blaine Road (SR 548) intersection improvements	Blaine Rd (SR 548)/Drayton Harbor Rd, Blaine Road (SR 548)/Loomis Trail Rd	Intersection improvements as warranted to include multi- modal, drainage and safety improvements	2033 - 2045	17,430 - 25,515
Whatcom County	Slater Rd roadway and intersection improvements	Segments include Hannegan Rd to Aldrich Rd to Northwest Dr, Lake Terrell Rd to Haxton Way, and Slater Rd/Ferndale Rd intersection	Hannegan to Northwest; construct 2-lane extension roads. Lake Terrell Rd to Haxton; left turn lanes with multi-modal improvements.	2033 - 2045	40,223 - 58,880
Whatcom County	Lake Louise, Austin St to Lake Whatcom Blvd	Lake Whatcom Boulevard to Austin Street	Reconstruct to Major Collector standards including non- motorized facilities	2033 - 2045	13,408 - 19,627
Whatcom County	Jackson Road	Birch Bay Drive to Grandview Road	Reconstruct to Rural Collector standards including paved shoulders for non-motorized facilities	2033 - 2045	6,704 - 9,813
Whatcom County	Marine Drive	Lummi Shore Drive (North of Cagey Road) to Country Lane	Resurfacing, restoration & rehabilitation improvements with multi-modal enhancements	2033 - 2045	4,022 - 5,888
Whatcom County	Mountain View Road	Mountain View Road	Reconstruct to Rural Major Collector standards with non- motorized facilities	2033 - 2045	13,408 - 19,627
Whatcom County	Birch Point Road	Semiahmoo Drive to Shintaffer Road	Reconstruct to urban minor arterial standards including non- motorized facilities	2033 - 2045	13,408 - 19,627
Whatcom County	Lenhart Road/Saar Creek Bridge No. 330	Lenhart Road/Saar Creek Bridge No. 330	Replacement with multi-modal enhancements	2033 - 2045	4,693 - 6,869

Agency	Project Label	Location	Project Description	Completion Year - change?	Cost Estimate, Year of Expenditure (000's) - update
Whatcom County	Replacement of Whatcom Chief & Terminal Modifications	Gooseberry and Lummi Island Ferry Terminals	New Ferry & terminal modifications with ADA requirements addressed	2033 - 2045	33,519 - 49,067
Whatcom County	Slakanum Way/Anderson Creek Bridge No. 510	Slakanum Way/Anderson Creek Bridge No. 510	Replacement with multi-modal enhancements	2033 - 2045	5,363 - 7,851
Whatcom County	Loomis Trail Road/Bertrand Creek Tributary Bridge No. 498	Loomis Trail Road/Bertrand Creek Tributary Bridge No. 498	Replacement with multi-modal enhancements	2029	\$4,171
Whatcom County	E. Smith / Hannegan Roundabout	East Smith Road and Hannagan Road	0.4 miles of Intersection improvements. Constructing a new round-a-bout	2022	\$4,050
Whatcom County	Marine Drive Reconstruction	Marine Drive – limits are Locust Avenue to Alderwood Avenue	Reconstruct 0.65 miles of roadway to urban standards (curb/gutter/sidewalk) with emphasis on bike/pedestrian enhancements and stormwater upgrades. – all work in Bellingham UGA	2022	\$3,550
Whatcom County	Martin Road/Anderson Creek Bridge No. 251	Martin Road/Anderson Creek Bridge No. 251	Replacement with multi-modal enhancements	2027	\$3,490
Whatcom County	ADA Barrier Removal and Pedestrian Improvements	Countywide	Systematically remove and replace barriers with ADA compliant pedestrian facilities	2022 - 2027	\$3,400
Whatcom County	Birch Bay Drive, Jackson To Shintaffer	Jackson Road to Shintaffer Road	Resurfacing, restoration & rehabilitation improvements with multi-modal enhancements	2023	\$3,000
Whatcom County	Mosquito Lake Road/Porter Creek Bridge No. 142	Mosquito Lake Road/Porter Creek Bridge No. 142	Replacement with multi-modal enhancements	2025	\$3,000
Whatcom County	Everson Goshen Road & E Smith Rd	Everson Goshen Rd/E Smith Rd intersection	Intersection Improvements	2027	\$2,830
Whatcom County	Lakeway Drive Corridor Improvements	Bellingham City Limits to Lakeview Ln	Multi Modal/Safety Improvements throughout the corridor	2026	\$2,500
Whatcom County	Various Bridges Rehabilitation/Replacement	Countywide	Rehability or replace bridges countywide as prioritized	2022 - 2027	\$2,040
Whatcom County	Everson Goshen Rd, Smith Rd to Pole Rd	Smith Rd to Pole Rd (SR 544)	Resurfacing, restoration & rehabilitation improvements with multi-modal enhancements	2025	\$1,900
Whatcom County	Fish Passage Projects	Countywide	Replace fish passage barriers with passable structures	2022 - 2032	\$390
Whatcom County	Non-motorized Transportation Improvements	Countywide	Implement non-motorized transportation improvements	2022 - 2027	\$180
Whatcom County	Corridor Intersection Analyses and improvements	BBL/Enterprise, Bay/Kickerville, Bay/V.View, Hann/Hemmi, Hann/VanWyck	Assess and implement intersection improvements	2022 - 2032	\$31
WSDOT	Asphalt/Chip Seal Preservation Whatcom Council of Governments	Regionwide	Resurface the roadway with chip seal or hot mix asphalt to preserve the structural integrity of the roadway and extend the service life of the pavement.	2022 - 2027	\$93,589
WSDOT	Mobility			2027 - 2032	\$81,231
WSDOT	Preservation			2027 - 2032	\$40,233
WSDOT	SR 539/Bay-Lyn Dr to International Boundary - Corridor Improvements	SR 539 from milepost 10.3 to 15.16	Constructing a four-lane divided highway will improve mobility, reduce the risk of collisions, and facilitate freight movement across the international border.	2026	\$40,000
WSDOT	Environment			2027 - 2032	\$36,440
WSDOT	I-5/Slater Road Interchange - Improvements	I-5 and Slater Rd interchange	The project will relieve congestion on the I-5 off ramps at the Slater Road Interchange. This will include the implementation of improvements at the Slater Road NB/SB ramp terminals, as well as the intersections on Northwest Ave, Pacific Highway and Rural Ave.	2022	\$20,961
WSDOT	SR 539/Duffner Ditch - Fish Passage	SR 539 from milepost 11 to 11.20	Remove the existing fish passage barrier and replace it with a fish passable structure.	2022	\$7,564
WSDOT	Safety			2027 - 2032	\$5,907
WSDOT	Other			2027 - 2032	\$4,494
WSDOT	SR 546/Pepin Creek and Duffner Ditch - Fish Passage	SR 546 from milepost 0 to 0.6	Remove the existing fish passage barrier and replace it with a fish passable structure.	2022	\$4,490
WSDOT	SR9/Acme Vicinity to Mt Baker Highway Vicinity - Virtual Weigh- In-Motion Enforcement Area	SR 9 from milepost 73.3 to 73.48	The project will construct a Virtual Weigh-in-Motion Enforcement Area location. Washington State Patrol WSP will be able to police freight traffic on SR 9 more effectively as a result of this project.	2026	\$2,752

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WSDOT	Concrete Roadway Preservation Whatcom Council of Governments	Regionwide	Replace existing concrete with a thicker concrete and steel bars at the joints. This work will extend the life of the highway at least another 40 years, and provide a smoother ride.	2025	\$1,932
WSDOT	SR 539/Telegraph Road to Westerly Road - ADA Compliance	SR 539 from milepost 0 to 0.67	This project will improve pedestrian safety by upgrading ADA sidewalk ramps within the project limits.	2023	\$1,044
WSDOT	SR 20/Tributary to Thornton Creek - Culvert Replacement	SR 20 from milepost 118.08 to 118.12	The project will replace the existing 2 feet in diameter corrugated metal culvert with a larger culvert to adequately allow stream water flow.	2025	\$1,014
WSDOT	I-5/Squalicum Creek to SR 539 - Bridge Deck Overlays	I-5 from milepost 255.36 to 256.25	The project will rehabilitate Bridges 5/820E, 5/822E and 5/822W on I-5 by removing the existing asphalt, reapplying a waterproofing membrane (deck seal), and repaving the bridge decks with HMA.	2024	\$926
WSDOT	SR 542/Bagley Creek Bridge - Bridge Scour	SR 542 from milepost 49.16 to 49.17	The footing for the bridge has been exposed due to erosion to the point of forming a void beneath one of the footings. Filling the void and placing riprap around the exposed footings will protect the bridge from further erosion.	2023	\$865
WSDOT	SR 546/Benson Road - Intersection Improvements	SR 546 from milepost 0.96 to 1.04	Installing a compact single lane roundabout at this location will improve mobility and reduce the risk of collisions.	2023	\$757
WSDOT	SR 548/Alderson Road Vicinity - Culvert Replacement	SR 548 from milepost 7.65 to 7.66	The culvert will be replaced in kind with a new culvert that will convey water properly.	2023	\$430
WSDOT	Preservation	Regionwide	Investment projects to preserve and extend the useful standards of the roadway's functionality	2033 - 2045	\$128,593
WSDOT	Safety	Regionwide	Projects specific to improving safety such as curve warnings, rumblestrips, lighting, and other enhancements.	2033 - 2045	\$16,202
WSDOT	Mobility	Regionwide	Construction of new facilities or reconstruction of existing facilities	2033 - 2045	\$222,800
WSDOT	Other	Regionwide	Investments projects not categorized by safety, mobility, preservation or environment.	2033 - 2045	\$12,326
WSDOT	Environment	Regionwide	Includes fish passageway projects and other environmental focus projects	2033 - 2045	\$11,595
WSDOT	NWR Breakaway Cable Terminal Replacement 21-23	Regionwide	The BCTs will be removed and replaced with guardrail terminals meeting current standards reducing the risk of injury collisions at these locations.	2022	\$53
WTA	Fixed-Route Bus Replacement	n/a	Purchase Fixed-route buses	2033 - 2045	\$75,200
WTA	Fixed-Route Bus Replacement	n/a	Purchase Fixed-route buses	2022 - 2032	\$39,806
WTA	Paratransit Bus Replacements	n/a	Purchase paratransit buses	2022 - 2032	\$13,963
WTA	Paratransit Bus Replacements	n/a	Purchase paratransit buses	2033 - 2045	\$24,492
WTA	Fixed-Route Bus Replacement	n/a	Purchase Fixed-route buses	2022 - 2032	\$39,806
WTA	Fixed-Route Bus Replacement	n/a	Purchase Fixed-route buses	2033 - 2045	\$75,200
WCOG	MPO & RTPO Work Program	Whatcom planning area	Metropolitan Planning Organization (federal) and Regional Transportation Planning Organization (state) planning and programming responsibilities.	2022 - 2032	\$7,502
WCOG	MPO & RTPO Work Program	Whatcom planning area	Metropolitan Planning Organization (federal) and Regional Transportation Planning Organization (state) planning and programming responsibilities.	2033 - 2045	\$10,939
WCOG	North Sound Transportation Alliance (NSTA) coordination	Whatcom, Skagit, Snohomish and Island Counties	Coalition of citizens, elected officials and professional staff to improve interregional travel between the northern-most counties by coordinated data collection, expand and improve mobility services, and inform the public.	2022 - 2032	\$264
WCOG	North Sound Transportation Alliance (NSTA) coordination	Whatcom, Skagit, Snohomish and Island Counties	Coalition of citizens, elected officials and professional staff to improve interregional travel between the northern-most counties by coordinated data collection, expand and improve mobility services, and inform the public.	2033 - 2045	\$385
WCOG	Passenger Ferry Business Plan	Bellingham to Friday Harbor	Conduct feasibility study based on PSRC passenger ferry study that identified Bellingham to Friday Harbor as top tier route.	2022 - 2025	\$100
To be determined	Kendall Trail	SR 547 from SR 542 to Shamrock Rd	Construct non-motorized trail along SR 547	2025 - 2032	\$4,500

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WCOG	Regional Household Travel Survey	Whatcom County	10-year refresh of housedhold travel data.	2028	\$150
WCOG	Regional Household Travel Survey	Whatcom County	10-year refresh of housedhold travel data.	2038	\$150
WSDOT	SR9/Acme Vicinity to Mt Baker Highway Vicinity - Virtual Weigh- In-Motion Enforcement Area	SR 9 from milepost 73.3 to 73.48	The project will construct a Virtual Weigh-in-Motion Enforcement Area location. Washington State Patrol WSP will be able to police freight traffic on SR 9 more effectively as a result of this project.	2026	\$2,752
WSDOT	I-5/Squalicum Creek to SR 539 - Bridge Deck Overlays	1-5 from milepost 255.36 to 256.25	The project will rehabilitate Bridges 5/820E, 5/822E and 5/822W on I-5 by removing the existing asphalt, reapplying a waterproofing membrane (deck seal), and repaving the bridge decks with HMA.	2024	\$926
WSDOT	SR 546/Benson Road - Intersection Improvements	SR 546 from milepost 0.96 to 1.04	Installing a compact single lane roundabout at this location will improve mobility and reduce the risk of collisions.	2023	\$757
WSDOT	SR 548/Alderson Road Vicinity - Culvert Replacement	SR 548 from milepost 7.65 to 7.66	The culvert will be replaced in kind with a new culvert that will convey water properly.	2023	\$430
WSDOT	NWR Breakaway Cable Terminal Replacement 21-23	Regionwide	The BCTs will be removed and replaced with guardrail terminals meeting current standards reducing the risk of injury collisions at these locations.	2022	\$53
WSDOT	SR 539/Bay-Lyn Dr to International Boundary - Corridor Improvements	SR 539 from milepost 10.3 to 15.16	Constructing a four-lane divided highway will improve mobility, reduce the risk of collisions, and facilitate freight movement across the international border.	2026	\$40,000
WSDOT	SR 20/Tributary to Thornton Creek - Culvert Replacement	SR 20 from milepost 118.08 to 118.12	The project will replace the existing 2 feet in diameter corrugated metal culvert with a larger culvert to adequately allow stream water flow.	2025	\$1,014
WSDOT	Concrete Roadway Preservation Whatcom Council of Governments	Regionwide	Replace existing concrete with a thicker concrete and steel bars at the joints. This work will extend the life of the highway at least another 40 years, and provide a smoother ride.	2025	\$1,932
WSDOT	Asphalt/Chip Seal Preservation Whatcom Council of Governments	Regionwide	Resurface the roadway with chip seal or hot mix asphalt to preserve the structural integrity of the roadway and extend the service life of the pavement.	2022 - 2027	\$93,589
WSDOT	I-5/Slater Road Interchange - Improvements	I-5 and Slater Rd interchange	The project will relieve congestion on the I-5 off ramps at the Slater Road Interchange. This will include the implementation of improvements at the Slater Road NB/SB ramp terminals, as well as the intersections on Northwest Ave, Pacific Highway and Rural Ave.	2022	\$20,961
WSDOT	SR 539/Duffner Ditch - Fish Passage	SR 539 from milepost 11 to 11.20	Remove the existing fish passage barrier and replace it with a fish passable structure.	2022	\$7,564
WSDOT	SR 539/Telegraph Road to Westerly Road - ADA Compliance	SR 539 from milepost 0 to 0.67	This project will improve pedestrian safety by upgrading ADA sidewalk ramps within the project limits.	2023	\$1,044
WSDOT	SR 542/Bagley Creek Bridge - Bridge Scour	SR 542 from milepost 49.16 to 49.17	The footing for the bridge has been exposed due to erosion to the point of forming a void beneath one of the footings. Filling the void and placing riprap around the exposed footings will protect the bridge from further erosion.	2023	\$865
WSDOT	SR 546/Pepin Creek and Duffner Ditch - Fish Passage	SR 546 from milepost 0 to 0.6	Remove the existing fish passage barrier and replace it with a fish passable structure.	2022	\$4,490
Lummi Nation	Slater Road and Bridge	At the Nooksack River basin	Elevate Slater Rd to minimize seasonal flooding impact	2033 - 2045	25,475 - 37,291
Nooksack Tribe	SR 542 Intersection	In Deming	Install a roundabout	2025	\$1,500
Lummi Nation	Kwina Triangle Roundabout	Kwina Rd, Marine Drive, and Lummi Shore Drive intersection	Construct a multimodal roundabout	2033 - 2045	12,193 - 17,848
Lummi Nation	Lummi Shore Pedestrian Project	Lummi Shore Drive	Construct pedestrian pathways and improvements to include street lighting, storm and sewer.	2033 - 2045	3,605 - 5,278

8. Financing the Regional Transportation System

Operation and preservation of our transportation system, as well as completion of the 20-year project list contained in the previous section, requires funding. This section of *Way to Go*, *Whatcom* discusses the funding sources that are anticipated to be available to implement the strategies and projects in this plan along with recommendations for additional financing strategies. In accordance with federal regulations, the regional transportation plan is fiscally constrained, i.e., its projections of future funding are conservative to increase the likelihood that the cost of planned projects will not exceed available funding. WCOG's analysis of regional transportation costs and revenues is based on historical revenue and cost data, current state and federal funding authorizations, and conservative projections of recent revenue and spending trends. This analysis considers the characteristics of each program area, such as local roads, state highways, bicycle and pedestrian facilities, and transit.

Obviously, shorter-range financial forecasting tends to yield more accurate results than that performed for time periods further in the future. Factors that may influence longer term transportation financing include rapid advancements in technology (e.g. connected infrastructure), increasing private-sector options from transportation network companies (e.g. Uber and Lyft), improvements and changes in vehicular fuel sources towards cleaner energy, and evolving travel behavior and generational preferences such as the trend among younger adults to live in urbanized areas without owning a car. For these reasons, *Way to Go, Whatcom's* financial forecast is broken into two time periods:

- 1. 2022-2032: This forecast period is fiscally constrained and based on a list of programmed and planned projects that will or are highly likely to be advanced by the region's jurisdictions.
- 2. 2033-2045: Outer-year revenues and planned expenditures are aggregated in recognition of the increased chance of changes in project costs, economic conditions, regulations, and local priorities.

8.1 Financial Assumptions

Federal, state, and local revenue estimates change over time and are revised regularly due to a variety of factors, including adjustments for actual uses, changes in funding estimates, and other economic conditions. Despite fluctuations, the estimates in this plan depend on some reasonable assumptions to set a baseline and estimate future conditions in transportation funding for the region. Assumptions include the following:

• Federal funding will continue to be available in similar amounts for regional roadway and transit infrastructure. The adoption by Congress of federal transportation authorizations that are historically created and enacted every few years, currently the *Infrastructure*

- *Investment and Jobs Act* also referred as "Bipartisan Infrastructure Law" that was signed into law on November 15, 2021, will continue through the year 2045.
- Because the Whatcom region's economic vitality and quality of life depend on a functioning transportation network, state agencies and local jurisdictions will continue to invest to maintain and preserve the transportation network. Therefore, it is assumed that state and local financial resources will continue to be available through the year 2045 with levels comparable to recent years.
- Funding will support the transit system through the year 2045. Transit funds in the region are administered through the Whatcom Transportation Authority (WTA) in the form of federal grants, sales tax revenue, fare revenue, and interest earnings. WTA will likely continue to use federal relief funds to replace lost revenue, manage expenses and maintain reserve levels. The agency continues to pursue innovative financing strategies to maintain its level of service.
- Bond proceeds and debt payments have a minimal influence on transportation investments in the region, and that will continue to be the case. Since bond revenues are generated by individual initiatives rather than part of ongoing, legislated authorizations, they are difficult to forecast and have been excluded from *Way to Go, Whatcom's* financial forecast.
- The Port of Bellingham manages Bellingham International Airport as well as maritime freight activities in the region. However, costs and revenues associated with aviation and marine freight are not directly covered in this plan and therefore funding for those activities is not included in *Way to Go, Whatcom*'s financial forecast. (Information on the Port of Bellingham's planning activities can be found by clicking on this <u>link</u>.)

8.2 Historical and Current Funding

As mentioned previously, the Whatcom region uses several funding sources from various levels of government to pay for regional transportation. Historical revenues and expenditures inform the regional transportation plan's financial forecast.

8.2.1 Federal Funding

The Whatcom region receives federal support through two primary sources:

- U.S. Federal Highway Administration: FHWA provides funding for a number of regional projects through several programs, including the National Highway System, Interstate Maintenance, the Surface Transportation Block Grant program, and Coordinated Border Infrastructure program.
- U.S. Federal Transit Administration: FTA administers programs to fund regional transportation agencies through its Rural Transit Assistance Program, Metropolitan and Statewide Planning program, and the Transit Cooperative Research program.

Federal Highway Administration STBG program funds are allocated to WCOG, while <u>FTA</u> <u>Section 5307</u> grant funds are managed by WTA. Both funding programs receive apportionments

based on the federal authorization at the time. **Figure 19** illustrates the federal transportation funding in the region since 1992.

Figure 19: Federal Highway and Transit Allocations to the Whatcom Region (in 000s)

Federal	Federal	Surface Transportation Program Allocations to WCOG		Federal Transit Administration Grants to WTA		
Authorization	Fiscal Year	Nominal Dollars	Adjusted for Inflation	Nomimal Dollars	Adjusted for Inflation	
	1992	\$465	\$880	//		
	1993	\$1,322	\$2,430	\$280	\$515	
ICTEA	1994	\$1,596	\$2,860	\$1,877	\$3,363	
ISTEA	1995	\$1,023	\$1,783	\$2,257	\$3,934	
	1996	\$1,390	\$2,353	\$575	\$974	
	1997	\$1,507	\$2,493	\$484	\$801	
	1998	\$1,226	\$1,997	\$1,842	\$3,001	
	1999	\$1,745	\$2,782	\$633	\$1,009	
	2000	\$1,817	\$2,803	\$528	\$814	
TEA-21	2001	\$1,982	\$2,973	\$2,493	\$3,740	
	2002	\$2,097	\$3,096	\$1,297	\$1,915	
	2003	\$1,714	\$2,474	\$575	\$830	
	2004	\$2,207	\$3,103	\$1,071	\$1,506	
	2005	\$1,733	\$2,357	\$981	\$1,334	
	2006	\$1,721	\$2,268	\$110	\$145	
And a second second	2007	\$2,239	\$2,868	\$2,059	\$2,637	
SAFETEA-LU	2008	\$2,243	\$2,767	\$575	\$709	
	2009	\$1,512	\$1,872	\$4,832	\$5,981	
	2010	\$2,695	\$3,282	\$4,133	\$5,033	
	2011	\$2,840	\$3,353	\$2,892	\$3,415	
	2012	\$2,701	\$3,125	\$925	\$1,070	
22222	2013	\$2,912	\$3,320	\$5,293	\$6,034	
MAP-21	2014	\$2,825	\$3,170	\$1,872	\$2,100	
	2015	\$2,719	\$3,047	\$218	\$244	
	2016	\$2,963	\$3,279	\$4,608	\$5,099	
	2017	\$2,824	\$3,060	\$617	\$668	
	2018	\$3,291	\$3,481	-\$89	-\$94	
FAST ACT	2019	\$3,200	\$3,324	\$3,981	\$4,136	
	2020	\$3,313	\$3,397	\$2,445	\$2,508	
	2021	\$3,247	\$3,247	\$6,232	\$6,232	

8.2.2 State Highway Funding

WSDOT manages the state highway system. In the Whatcom region, state highways make up 11 percent of all roadway miles and 45 percent of *regionally significant* roadway miles.

The majority of the region's vehicle-miles-traveled (VMT) also occurs on the state highways. WSDOT funds state highways from its apportionment of federal highway aid and with state revenues primarily generated from fuel tax. **Figure 20** illustrates historic and anticipated WSDOT expenditures by funding category, including preservation, safety, mobility improvements, environmental, and other projects. Note that WSDOT currently has investments identified in the regional and state capital improvement program for years 2022-2026.

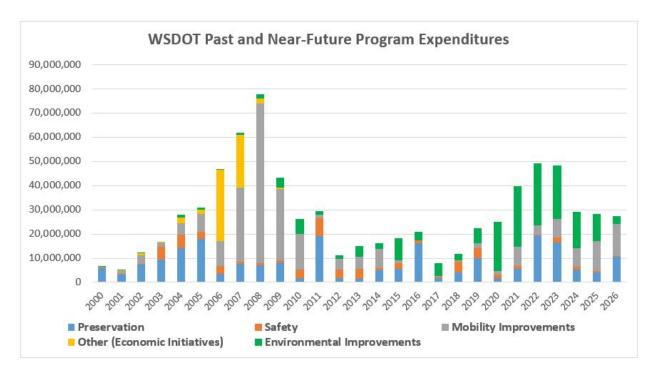


Figure 20: WSDOT Past and Near Future Program Expenditures

A peak in state program funding occurred from 2006 to 2009 under the federal transportation authorization Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) as well as via annual legislative appropriations that benefited the Whatcom region. The near-future program has prioritized investments into improving fish passage barriers for salmon migration.

8.2.3 Local Funding

Whatcom County's seven incorporated cities maintain local roads within their respective jurisdictions, while the county maintains roads in the unincorporated areas. As indicated in **Figure 21**, the region's local governments have seen their expenditures increasing at a faster rate than revenue (local tax collection and state and federal grant funds). Expenditures have outpaced revenues an average of 4.6% over the last four years from 2015 through 2018.

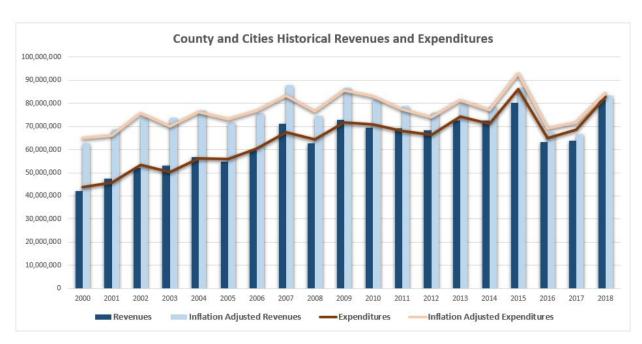


Figure 21: County and Cities' Historical Revenues and Expenditures

Figure 22 depicts the five-year average from 2014 through 2018 of local jurisdiction funding by level of government as well as the expenditures of those funds towards transportation related investments. The local level generates the greatest source of revenues while investments in system preservation and improvements (also referred as construction) account for over a third of expenditures.





8.3 Revenues and Expenditures Forecast

In general, transportation funding sources are in decline. It is therefore important to consider how funding is designated for specified project categories. For the purposes of this plan, four project types are identified: operations, maintenance, preservation, and improvements.

8.3.1 Operations

Operations involves the personnel, facilities and capital required to administer, plan, run, engineer and police the transportation system.

8.3.2 Maintenance

Jurisdictions in the region continuously monitor conditions of the transportation system to maintain its functionality. Maintenance refers to responses to specific events or seasonal impacts that deteriorate assets, and to ongoing maintenance scheduled and performed to avoid more significant future costs.

8.3.3 Preservation

Preservation involves those activities that keep transportation assets in a state of good repair to ensure their longevity and operational integrity but do not add capacity. Preservation activities such as repaving roads, protecting against rock falls, and rehabilitating bridges are identified through a local needs analysis and the Pavement Management and Bridge Management systems. These types of projects tend to result in longer-term benefits and are typically more expensive than maintenance projects. Delayed infrastructure preservation often leads to steep increases in future reconstruction costs.

8.3.4 Improvements

In addition to maintaining and preserving existing system components, this plan includes a recommended set of capital and other improvement projects that improve safety; increase access, connectivity and mobility; support transportation demand management activities, and; promote healthy communities. Improvement projects that add vehicle capacity are typically very expensive, and thus, completing even a small number of these projects reduces a region's ability to pay for standard preservation and maintenance of existing facilities. Conversely, improvement projects that expand mode sharing, e.g., adding bicycle lanes, tend to be less expensive.

8.4 WCOG Transportation Improvement Program

Anticipated resources for transportation projects listed in the regional Transportation Improvement Program (TIP) have been considered in the financial forecast. The TIP provides a six-year comprehensive list of transportation projects that utilize federal funds, or which are considered a regional project. The total cost of projects programmed, funded, and scheduled to

begin in the first four years of the <u>2022-2027 TIP</u> does not exceed anticipated resources, meaning the program is fiscally constrained.

8.5 Balance Sheet

The assumptions applied to the Whatcom region's long-term financial forecast include growth estimates based on local, state, and federal sources. There are a host of known and unknown variables that can affect the revenues and expenditures necessary to sustain the regional transportation system.

Figure 23: Estimated Revenues and Expenditures

Years	Jurisdiction	Revenues	Expenditures	Difference
	Local	907,805	1,059,261	-151,456
2022 - 2032	WSDOT	350,803	362,105	-11,302
2022 - 2032	Transit	439,593	428,872	10,721
	Totals	1,698,201	1,850,238	-152,037
	Local	1,434,059	1,531,578	-97,519
2033 - 2045	WSDOT	391,516	524,469	-132,953
2033 - 2043	Transit	645,819	666,754	-20,935
	Totals	2,471,394	2,722,801	-251,407
	Local	2,341,864	2,590,840	-248,976
2022 - 2045	WSDOT	742,319	886,574	-144,255
2022 - 2045	Transit	1,085,412	1,095,626	-10,214
	Totals	4,169,595	4,573,040	-403,445

Figure 23 indicates that future revenue will be insufficient to accommodate the rising costs of maintenance, operations, preservation, and improvements for the local and state systems.

8.6 Fiscal Constraint

For a fiscally constrained plan, the +20-year cost of planned investments in the regional transportation system are compared with the available revenues forecasted. Projects are individually prioritized within the first 10-year period (2022-2032) and batched as an aggregate estimated cost for the outer years (2033–2045). Projects fall into three funding-status categories in the regional plan:

1. **Currently funded** projects are those programmed in the TIP and for which construction will commence during the period of 2022-2027. These projects are fiscally constrained.

- 2. **Planned** projects are expected to secure funding and start construction during the plan's timeframe within the first 10-year period out to 2032. Some of these projects may also exist in the outer years. These projects are also fiscally constrained.
- 3. **Illustrative** projects support regional goals, but funding for them has not yet been identified and therefore they cannot be classified as fiscally constrained. However, their inclusion in this plan acknowledges their potential value to the region and constitutes a commitment to seek funding for them.

When looking specifically at the total costs of regionally-significant projects listed in the previous section, adequate revenues to pay for those projects are expected to be available for all plan time-periods (Figure 24).



Figure 24: Forecasted Revenues and Plan Projects

8.7 The Financial Gap

When looking at full set of transportation system costs -- operations, maintenance, projects, etc. - Available revenues are not estimated to cover anticipated expenditures, especially in the outer years from 2033 - 2045. Over this timeframe, it is difficult to anticipate, or plan, for how travel behavior will impact the growth of vehicle miles traveled (VMT). For this plan, the use of the regional travel demand model estimates that VMT will continue to increase as the population continues to grow throughout the region. Improvements in vehicle fuel efficiency and electrification will continue to reduce fuel tax revenues (assuming the fuel tax will remain as a source of transportation funding). This stresses the importance of prioritizing transportation

investments to better maintain a functional regional transportation system. There is no single funding source that will make-up the anticipated revenue shortfall. Rather, employing a combination of transportation strategies and program adjustments will serve to shrink, if not completely bridge, the financial gap.

8.7.1 Local Jurisdictions

Looking ahead to the 2045 planning horizon, Whatcom County and incorporated cities estimate a revenue shortfall of \$249 million. The primary revenue sources for the locally-managed transportation system in the Whatcom region include:

- **Property taxes** collected by Whatcom County provide nearly 50 percent of the revenue generated for transportation spending in unincorporated areas. To a lesser extent, cities also use property taxes to fund transportation.
- City sales taxes and other local receipts contribute over 50 percent of funding used for transportation spending in incorporated areas.
- Federal funds provide about 16 percent of annual regional revenues.
- **State funds** through General Fund appropriations, state fuel tax distribution, and other state-generated funds such as the County Road Administration Board and the Transportation Improvement Board contribute nearly 25 percent of revenues.

8.7.2 State System

The WSDOT-maintained state highway system will have an estimated shortfall of approximately \$144 million through the year 2045. Funding for the agency is primarily generated through the motor vehicle fuel tax. WSDOT also uses other revenue sources such as bond sales, federal funds, road and bridge tolls, and ferry fares.

8.7.3 Transit

The Whatcom Transportation Authority (WTA) capital and operations revenues closely align with expenditures through the plan's outer years, falling short by less than one percent. Funding available for transit may drastically increase over the next 16 years with the pending Move Ahead Washington legislation. If approved, these funds will enable WTA to adapt and grow service over the next 20 years to fulfill its mission to the community.

8.8 Future Regional Funding Strategies

This section discusses options for generating additional revenue – either for closing the funding gap estimated for years 2034-2045 or for funding additional investments or new strategies identified during the next several years.

8.8.1 Reasons to Consider New Revenue Sources

Forecasted Shortfall in Regional Revenue

As indicated in the first part of this chapter, it is hard to ensure that WCOG's 20-year project list will have sufficient funding to be fully implemented. (More detailed citation of estimated shortfall or better definition of risk). Strategies explored below could help generate revenue to advance regional goals.

Forecasted Decline of Current Revenue Sources

It is well understood that fuel tax revenues, the primary source of transportation funding (at the national level and for Washington State), is declining and not sustainable. As vehicles have become more fuel-efficient, and the vehicle fleet continues to shift to an increasing share of electric vehicles that don't use taxed fuels, fuel tax revenues are declining as vehicle miles traveled (VMT) on our roads continues to increase. While this trend affects funding that comes to the region via federal and state programs, several Whatcom region jurisdictions collect local-option fuel taxes authorized for cities or transportation benefit districts (TBDs) within ten miles of the Canadian border.

At the state level, the Washington State Transportation Commission has completed a study and pilot project to develop proposals for transitioning the state's fuel tax to a per-mile road usage charge (RUC). While the proposal is for a transition over many years, the work has identified various technologies (In-vehicle devices with or without GPS, smart phone apps, odometer upload options) and policy considerations (fee adjustments related to vehicle weight and/or emissions; income) that would be useful to consider as part of many possible future transportation financing strategies.

8.8.2 WCOG's Financial Working Group

To inform this discussion, WCOG convened a **financial working group** composed of staff from member jurisdictions.

The objectives of the Financial Working Group were as follows:

- Assess revenue strategies that are available to Whatcom jurisdictions under state law.
- Improve collective understanding of "local-option" revenue strategies already being used by the region's jurisdictions.
- Identify those strategies that seem to be the most feasible and effective so that they may be more readily considered by decision makers for possible expansion or adoption.
- Consider if any revenue strategies would work as a regionally coordinated strategy or (at least among two or more jurisdictions).
- Evaluate the near-term likelihood of increased federal funding and/or new state transportation revenue and the probability either or both of those will change the fiscal forecast for Whatcom Mobility 2045.

Participants in the Financial Working Group included: WCOG, WSDOT, City of Bellingham, Whatcom County, and the Whatcom Transportation Authority.

8.8.3 Authorized Regional Transportation Revenue Options and Which Whatcom Jurisdictions Use Them

As part of the discussion with its Financial Working Group, WCOG used resources available from the <u>Municipal Research and Service Center of Washington (MSRC)</u> to research and document an inventory of which public financing options for transportation investments were currently available to Whatcom County jurisdictions and whether or not those options were currently being used.

Spread sheets detailing this assessment are available <u>here</u> but a summary of findings is as follows.

Property Taxes

Options used in Whatcom County:

- County Road Levy used by Whatcom County
- Revenue Development Areas (RDAs) have been used by Bellingham and the Port of Bellingham.

Options **not used** in Whatcom County:

- Excess Property Taxes
- Tax Increment Financing
- Real Estate Excise Taxes (REET)
- Passenger-only Ferry District (County would be allowed to establish)

Fares/Service Fees

Examples of these include:

- Parking garages/lots such as operated by the City of Bellingham and the Port of Bellingham
- Parking meters
- WTA Bus and Whatcom Chief ferry fares

Transportation Benefit District (TBD)

Bellingham, Blaine, Ferndale, Lynden, and Whatcom County have formed and use a transportation benefit district. All except Whatcom County fund the TBD with an addition to sales tax. Whatcom County's TBD is set up to enable collection of the Border Area Fuel Tax in Point Roberts. TBDs can also be funded by locally imposed vehicle license fees.

Non-TBD Local Option Sales Taxes

- All eligible Whatcom County jurisdictions have applied the unrestricted local-options sales tax for transportation and for public safety.
- WTA is using the Transit Sales Tax option.

Sales Tax Credits

None of the cities or the county is using the Local Infrastructure Financing Tool (LIFT) which would be funded using sales tax credits.

Local Option Fuel Taxes

Options **used** in Whatcom County:

• Blaine, City of Nooksack, Sumas, and Whatcom County (in Point Roberts) use the optional **Border Area Fuel Tax**.

Options **not used** in Whatcom County:

• A Local Option Fuel Tax can be applied by counties. Whatcom County, nor any other county in the state has implemented this option.

Commercial Vehicle Parking Tax

State law allows cities, counties, or districts to tax operators of parking facilities. No jurisdictions in the Whatcom region currently do this.

Municipal Debt

No Whatcom jurisdictions currently use Municipal Debt – e.g. bonds, local improvement districts (LIDS), or loans.

Impact Fees

Bellingham, Blaine, Ferndale, and Lynden all assess impact fees on developers to help fund mitigations to development related increases in travel demand.

Federal Timber Sales Revenue Sharing

This is used by Whatcom County.

Federal and State Formula and Discretionary Funding Programs

As largely accounted for in the first section of this Finance chapter, local jurisdictions, primarily by way of the Washington Department of Transportation (WSDOT), receive federal gas-tax

revenues via various formula programs, additionally through federal discretionary programs, and state discretionary programs.

8.8.4 Most Feasible Options for Regionally Generated New Revenue

Based on review of the above as well as discussions among the Financial Working Group, a few options appear to have more potential fit with possible needs for more revenue. Given the Whatcom region's transportation system goals and existing project list, out-year projects and project types with uncertain funding include:

- Expanded transit services and infrastructure (e.g. bus rapid transit, on demand services, transit street design improvements),
- Non-infrastructure strategies to reduce fatal and serious injury crashes (e.g. education, enforcement, communications, new and modified laws).

Transportation Benefit Districts (TBDs)

Jurisdictions that haven't yet set up a TBD could consider doing so. Jurisdictions could also consider a *regional* TBD for investments of shared interest over larger geographies.

2022 state transportation legislation increases amount of additional sales tax that voters may approve for TBDs)

Border Area Fuel Tax Options

As mentioned above, most eligible Whatcom jurisdictions have elected to collect a border-area fuel tax (currently 1 cent per gallon). While within the 10-mile distance from the U.S.-Canada border, Lynden and Ferndale have not added a border-area fuel tax.

Additionally, if a TBD was formed that included at least one international border crossing in its boundaries, the border-area fuel tax could be collected within that TBD.

2022 state transportation legislation increases optional border fuel tax from 1 cent/gallon to 2 cents/gallon.

Tax Increment Financing (TIF)

In 2021, the Washington State legislature passed HB 1189 authorizing the use of tax increment financing by counties, cities, and port districts.

8.8.5 Possible Future Strategies

In addition to possible future needs for additional revenue, other possible motivations for adding or switching to different revenue types include:

- Declining returns from fuel taxes related to vehicle electrification and inflation,
- Possible future decisions to improve system performance with pricing (e.g., fare-free transit, tolling, congestion pricing, HOT lanes).

8.8.6 Road Usage Charge (RUC)

In the most basic terms, a road usage charge would be based on the distance vehicles travel on public roads.

In 2020, Washington completed a <u>Road Usage Charge Study</u> which includes recommendations for transitioning the state from the current fuel-tax system to a RUC system. Transitioning to a RUC will require decisions about reporting methods and technologies, rates, phasing, etc.

It is unclear if the emergence of a RUC system would create opportunities for integration with regional revenue and/or operations strategies. Would there be local-option RUC rates? If conversion to a RUC system required vehicles to be equipped with readable technology (E.g., radio frequency tag, transponder, etc.), such systems could possibly support use of other revenue and/or systems operations strategies like congestion pricing, HOT lanes, etc.)