Given the region’s predicted population growth, the state of our current system, and the WCOG strategies identified in Chapter One, this twenty year program and project investment strategy is directed toward building a robust, multi-modal and equitable transportation system for the future.

Programmatic solutions

Numerous efforts are already underway within Whatcom County to bring about the overall strategies of this plan. WCOG has helped coordinate efforts that address future demand through the following programs.

Regional safety initiatives

Strategy 2: Safety

Multiple programs are designed to promote a safe and secure transportation system, meeting federal safety requirements to ensure the risks involved in moving passengers and goods through the region are minimized. The following strategies illustrate how WCOG is working with partner agencies to prioritize safety:

- **Strategic Highway Safety Plan** – The SHSP is the Washington State plan that establishes highway safety goal areas. The major goal of the plan is to eliminate traffic deaths and disabling injuries. In order for Washington State to achieve Target Zero, the State must experience 24 fewer fatalities each year for the next 25 years.

- **Transit safety** – WTA uses its System Safety Plan to guide operations to prevent injuries, accidents, and other losses. Their plan meets all federal and state safety requirements and is in compliance with the WA Transportation Insurance Tool best practices recommendations.

- **Pedestrian safety** – Nationwide, about 70,000 people walking on road shoulders, sidewalks, and crosswalks are injured annually by motor vehicle crashes, and an additional 4,000 pedestrians are killed, making up 12 percent of all roadway fatalities. Pedestrian safety can be increased by addressing pedestrian needs in policies, planning, design and construction of transportation facilities. WCOG works with member agencies to examine means for improving the regional safety record, including improved roadway design features, smart land use decisions to encourage safe crossings, and improved pedestrian and motorist behaviors.

• **Bicycling safety** – The fatality rate for bicycle crashes nationally has fallen more than 20 percent in the past ten years. However the risks involved in bicycling remain equivalent in safety to driving or riding in a car. By encouraging engineering solutions that increase safety for cyclists, including construction of bike lanes improving education programs for cyclists and drivers, and enforcing traffic rules for both drivers and cyclists all contribute to improving regional bicycling safety.

**Regional attention to security**

*Strategy 2: Safety*

Security is a priority for state and federal transportation agencies. Given the region’s location along an international border, the nature of the geography (near open water and dense woodlands), and the condensed development of the west coast, regional agencies have also focused on making sure the transportation system is not only safe and efficient, but secure from threat as well.

At the federal level, the U.S. Department of Homeland Security (DHS) has numerous branch agencies operating throughout the county as well as at the border crossing. U.S. Customs & Border Protection serve at Cascade Gateway crossings and work with other enforcement agencies to secure the border and its ports-of-entry; U.S. Border Patrol works to patrol the 100 mile stretch of land south of the border.

WCOG manages the *B.C. – WA Protocol for Binational Interagency Communication about Highway and Border Station Incidents*, a protocol established between six transportation, inspection, and enforcement agencies (CBP, WSDOT, WA State Patrol, Royal Canadian Mounted Police, Canada Border Services Agency, and B.C. Ministry of Transportation) to share information and alerts about emergency highway or border closures.

Other federal agencies such as the Transportation Security Administration provide security at ports, and the Federal Emergency Management Agency provides assistance in case of emergency.

At the state level the WA State Comprehensive Emergency Management Plan (CEMP) is the framework for statewide mitigation, preparedness, response, and recovery activities. It’s intent is to provide a structure for standardizing plans statewide and to facilitate interoperability between local, state, and federal governments.

A Whatcom County Comprehensive Emergency Management Plan has been developed to ensure that all jurisdictional members of the Emergency Management Inter-local Agreement have the capability to respond to emergencies and disasters. The Whatcom County Division of Emergency Management is responsible for coordinating such mitigation, preparedness, response, and recovery activities.

Mode-specific security plans also help define security functions within the region. For transit there is a specific System Security Program Plan developed by WTA that is based on a prevention and response-oriented approach to security. For pedestrians and
bicyclists, the design of public spaces, trails, and roadways can help mitigate security risks such as theft, harassment, and assault. WCOG continues to work with partner agencies to ensure proper attention is given to address security needs.

**Intelligent Transportation Systems (ITS)**

*Strategy 10: ITS*

Intelligent Transportation Systems (ITS) are technology solutions to improve the functionality, safety, and cost-effectiveness of transportation systems. Within Whatcom County, several components of the transportation system use ITS solutions every day to improve the safety, functionality, and capacity of existing networks.

WCOG serves as the lead agency for the Whatcom County ITS Committee and maintains the regional ITS architecture. The architecture illustrates what ITS systems are currently in place in Whatcom County; what systems are planned to be deployed in the next five years; and what opportunities exist to share resources and improve coordination between agencies to improve overall system functionality.

**Whatcom Smart Trips**

*Strategy 1: Public information and education*

*Strategy 8: Transportation Demand Management*

*Strategy 9: Transportation Multi-modal*

*Strategy 12: Health*

Transportation demand management (TDM) programs manage demand for automobile infrastructure with a focus on peak periods to reduce traffic congestion. Strategies such as shifting travel out of peak periods, encouraging higher occupancy in vehicles, and using other modes of travel have proven track records for reducing congestion in urban communities.
WCOG’s Whatcom Smart Trips (www.WhatcomSmartTrips.org) is a nationally-recognized program that approaches TDM from another angle. Rather than focusing on reducing vehicle trips, Whatcom Smart Trips aims to increase other modes by emphasizing the unique benefits associated with these modes, benefits related to individual and community cost-savings, the environment, and quality of life.

Another difference between Whatcom Smart Trips and traditional TDM programs is that the latter typically focuses on work trips, whereas the Smart Trips program focuses on all trip purposes – the benefit being that people are more likely to participate when encouraged to change whatever trips are the easiest to modify.

The program was implemented by WCOG and WTA in July 2006. Funding partners include Bellingham, Whatcom County, WSDOT and USDOT. The following educational, assistance, and incentive programs are offered:

- **Smart Trips Diary** – allows community members to record walking, bicycling, ridesharing and transit trips and track pollution prevented (www.WhatcomSmartTrips.org)
- **Smart Trips Incentives** – include discount cards, gift certificates, cash prizes and recognition for Smart Trips participants as they record Smart Trips
- **Emergency Ride Home** – provides limited, free taxi service to bus pass holders and Smart Trips participants who experience an emergency or illness at work
- **Smart Trips Employer Partners** – provides assistance to employers who implement worksite trip reduction programs
- **Targeted Outreach** – provides education to seniors and women (program data indicate good opportunities for increasing bus and bicycle trips in these demographic groups)
- **School Smart Trips** – provides classroom activities for middle school students and their teachers to teach the benefits of using sustainable transportation choices - www.SchoolSmartTrips.org
- **EverybodyBIKE** – provides educational opportunities for children and adults who want to learn how to ride bicycles as transportation (www.everybodyBIKE.com)
- **Smart Trips Public Awareness Campaign** – includes advertising and public presentations to make the community aware of all elements of the Smart Trips program
- **Neighborhood Smart Trips** – provides home-based education and assistance to individuals in targeted Bellingham households

Whatcom Smart Trips has proven that community-wide education and encouragement can significantly reduce vehicle trips and increase walking, cycling, transit trips. The next step for the program is to secure funding to conduct Neighborhood Smart Trips campaigns in the remaining two-thirds of Bellingham. In the
meantime program staff will continue operating the ongoing Smart Trips programs and will publicize these initial program results. Smart Trips programs can be easily replicated in other communities.

International Mobility & Trade Corridor Project (IMTC)

Strategy 2: Safety
Strategy 3: Access
Strategy 5: Connectivity
Strategy 6: Freight Mobility

Transportation connections for travel and trade between Whatcom County and neighboring Canada are served by four land border ports-of-entry: Peace Arch/Douglas (Interstate 5), Pacific Highway (WA State Route 543), Lynden/Aldergrove (WA State Route 539), and Sumas/Abbotsford-Huntingdon (WA State Route 9). Collectively, these four ports are known as the Cascade Gateway.

A fifth land-border port-of-entry is located at Point Roberts, serving a local community.

To coordinate operations and improvements throughout the Cascade Gateway, WCOG has served as the lead agency for IMTC since 1997. IMTC is a U.S. – Canadian coalition of government and business entities that identifies and promotes improvements to mobility and security for the Cascade Gateway. The objectives of IMTC are to:

1. Improve planning and data collection efforts.
   - Improve travel information and data.
   - Promote development and management of the Cascade Gateway as a system.
   - Determine the feasibility of rail, transit, and marine options.
   - Monitor work of regional and national-level border planning initiatives including the Transportation Border Working Group and the West Coast Corridor Coalition.
   - Monitor emerging border-related regulatory and policy changes by the U.S. and Canada (i.e. Western Hemisphere Travel Initiative).

2. Promote infrastructure improvements.
   - Improve border crossing approach roads.
   - Improve rail crossings and connections.
   - Improve corridor connections of trade and travel routes.
   - Integrate Intelligent Transportation Systems (ITS).
3. Promote improvements to operations, policy, and staffing at the border.

- Promote cooperation and improvements in accordance with the goals of various federal initiatives, including the Beyond the Border Action Plan.
- Increase resources and staffing levels at border inspection facilities.
- Improve traffic management at all four Cascade Gateway ports-of-entry.
- Ensure ongoing sustainability of the NEXUS and FAST programs.
- Encourage institutional collaboration and integration of information systems to improve risk management and increase cross-border security.
- Promote harmonization and consolidated administration of regional pre-approved travel programs including commercial pre-approved travel.

- Explore options for binational financing structures for future cross-border improvements.
- Pursue shared, U.S.–Canadian border inspection facilities including the creation of accord processing zones.
- Consider off-border inspection functions.
- Promote the adoption of pre-clearance for passenger rail under Canada’s 1999 Pre-Clearance Act.

For fifteen years IMTC has coordinated regional, binational planning and partnerships, advancing projects funded by U.S. and Canadian agencies to pursue the goals listed above. Cumulatively these improvements total over $38 million.

Specific project solutions

In addition to ongoing programs to address the strategies defining this region’s development, WCOG member agencies have also agreed to support continuing improvements to the transportation networks within and connecting to Whatcom County. A twenty-year project array is part of this plan and located in Appendix H: Fiscally constrained projects.

This array of projects covers all types of transportation modes and plays out over the twenty year span of this plan. The array contains capital projects, safety and preservation projects, maintenance and operational activities, and other initiatives identified by regional jurisdictions.

Resource agencies were given the opportunity to review the selected projects within the metropolitan planning area. Comments were provided to the respective jurisdictions. WCOG staff also reviewed transportation projects in the metropolitan planning area for impacts to priority habitat and species (PHS). The results were shared with the resource agencies.

In the next plan update, WCOG will add a section on the state of the environment within the planning area. It will highlight the environmental issues of concern that may be affected by transportation infrastructure and activities. We will also discuss strategies for addressing these problems within the context of the regional plan. In addition, planning and environmental linkages will be identified and any gaps will be addressed through consultation with resource agencies.
Selecting projects

WCOG used a two-step process to identify projects for inclusion in this plan. Initially cities and county were each asked to provide a list of projects they considered to be important improvements needing completion within the twenty-year planning period. These projects were then modeled and subsequently analyzed for system benefit. Those projects with the greatest benefit were then evaluated in consultation with the respective city/county, according to a set of guidelines.

The following guidelines were provided to the member agencies for use in preparing their respective capital investment project lists.

- The total cost of projects on each agency’s list cannot exceed the amount of resources “reasonably expected to be available” to the respective agency in the twenty year planning period.
- The cost estimate should include environmental mitigation.
- Give priority to projects that are in the adopted regionally significant system.
- Describe projects with enough detail to determine a reasonable project cost in the year of expenditure.
- Cite the state legislative transportation goals that the project satisfies to demonstrate consistency between the WCOG regional plan and Washington State transportation policy goals.
- For projects more than ten years in the future, aggregate cost ranges may be provided.
- Review and consider the project list from the local comprehensive plan transportation element when developing the WCOG capitol project list.

WCOG then reviewed the project lists in light of the guidelines, and with respect to WCOG’s adopted regional road system.

Selecting projects for the regional road system

Projects identified in the plan must also have significant regional benefit. To help identify which projects will have the greatest benefit, a regionally significant road system has been identified to show which facilities will be impacted the most by future development.

Criteria used to determine the regionally significant road system were developed by the TTAC and CTAG in 2010. The criteria are consistent with the state’s regional transportation planning program standards. They include:

1. All state routes.
2. Surface routes serving facilities and projects of regional significance and connecting to the regional routes or facilities.
3. Routes serving major activity centers.
4. Public transportation routes connecting cities and major activity centers with other regional routes.
5. Intermodal facilities and the routes connecting them to other regional routes or facilities.
6. Streets and roads classified as arterials under the Federal Highway Administration system of functional classifications.
8. Other streets and roads which support sub-regional industries.
Figure 18: Regionally Significant System
The transportation facilities designated as part of the regional transportation system are those that are truly regional in nature. They form the basis for discussion of any transportation issue associated with a regional perspective.

**Other factors considered in developing regional priorities**

Consideration of roadway levels of service (LOS), allows agencies to focus efforts on areas with the worst congestion. Numerous LOS definitions apply to this region and are listed in Appendix I: Level of Service.

**Environmental justice**

Environmental justice works to assure that the needs of low income, disabled, and minority populations are equally considered when making decisions related to policy, planning, and project development. The key principles are to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low income populations; to ensure the full and fair participation by all potentially affected communities in the transportation-making process; and to prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

WCOG’s Employment Access and Coordinated Human-services transportation plan (EACH)

Not only is this to help organizations secure more funding to provide transportation for community members who have special needs, but to make sure these populations are fully part of the transportation decision-making process.

**Endangered Species Act and stormwater requirements**

Another filter in defining which regional projects to pursue is the effect the project has on Whatcom County’s environment. State and federal environmental protection policies are in place to assure that any transportation project fulfills required standards to minimize its impact. More details about the environmental review process is described in Appendix J: Endangered Species Act and stormwater requirements.

**Fiscally constrained projects**

Once projects have been selected as priorities, they fall into two categories: those fiscally constrained projects for which funding has been identified over the next twenty years, and those un-programmed projects that are regional priorities addressing critical issues.

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A complete list of fiscally constrained projects is available as Appendix H: Fiscally constrained projects. Illustrative examples of how projects relate to one or more of this plan’s strategies include:

**Strategy 1: Public information and education**
- Whatcom Smart Trips
- WCOG web site
- WCOG Transportation Town web site
- CTAG
- Public meetings and hearings

**Strategy 2: Safety**
- Central Avenue bridge construction – seismic retrofit
- Northwest/Bakerview intersection safety improvements
- Rural road safety program
- I-5 Ferndale vicinity – cable median barrier
- SR-539 Access Management and Safety Improvement

**Strategy 3: Access**
- Mission Road realignment – build to all-weather standards
- Fir Street connector
- Lynden pedestrian trail

**Strategy 4: Environmental justice**
- SR 543 grade separated pedestrian crossing
- Birch Bay Drive pedestrian facility

**Strategy 5: Connectivity**
- I-5 Exit 274 interchange/environmental review – to connect Blaine with full intersection
- West Bakerview Road – re-channelization and improved pedestrian connectivity
- Orchard Street Extension – Grade separated multimodal crossing of I-5 to connect north Bellingham to St. Joseph Hospital.

**Strategy 6: Freight mobility**
- Hughes Avenue reconstruction – for commercial movements
- Thornton Street/Newkirk Road grade separation
- Heavy Haul Road – construct to meet heavy haul standards

**Strategy 7: Congestion and mobility**
- McLeod/Northwest roundabout – enhanced mobility to interstate
- Preservation program in Everson
- Main Street Lynden construction to full standards
- Portal Way/I-5 northbound ramp control improvements
- Hannegan Road capacity enhancements
Strategy 8: Transportation demand management
- Northwest Avenue bicycle lanes
- Whatcom Smart Trips
- Bellingham pedestrian master plan sidewalk construction

Strategy 9: Transportation Multi-modal
- Bellingham bicycle master plan bicycle facility construction
- Nooksack Avenue sidewalk
- North Shore Road non-motorized enhancements
- Ferry dock improvements
- SR 539/Lynden to SR 546 widening for multiple modes

Strategy 10: Intelligent Transportation Systems
- Birch Bay-Lynden Road/Portal Way intersection signalization – with railroad crossing
- I-5 Bellingham variable message sign

Strategy 11: Land use
- Semiahmoo Spit shoreline stabilization
- BNSF Railroad ROW acquisition in Everson

Strategy 12: Health
- Indian Street bicycle and pedestrian improvements

Strategy 13: Public participation
- Satisfied by processes in Public Participation Plan

Un-programmed projects
Un-programmed projects are those that have been developed by regional transportation committees as priorities that are currently not fiscally constrained.

IMTC develops a construction and planning project priority list annually that serves as the guide for regional cross-border needs. Projects from the list are funded when opportunities arise or regional stakeholders successfully secure funding for the effort.

The Bicycle/Pedestrian Committee of Whatcom County has a list of unfunded bicycle infrastructure improvements that they use to seek grants or other funding as available.

The EACH Plan specifies a list of projects that would benefit special needs populations and improve service and efficiency.

WTA has a specific set of transit-related projects as well which would improve transit service in the region.

The Bellingham Pedestrian Master Plan has over 300 unfunded sidewalk infill, widening, and intersection improvements.