CHAPTER 3.
MEETING FUTURE NEEDS

RTC staff worked with the RTC Board, intertwining emerging issues with current policies, to develop a 2045 vision for the region. Goals, objectives, and actions were crafted to help implement the vision through the 2024 RTP. All of these guide transportation planning and investment decisions; strategies that help meet those goals and policies, a shared understanding about existing financial resources, and a recommended set of projects that make progress addressing the region's significant and growing transportation needs and challenges.

Emergent Issues, Programs, and Strategies

The RTC Board recognizes that regional transportation system development is at an evolutionary point where emerging issues, strategies, and programs can impact transportation networks.

Maintenance and Preservation

Maintenance work ensures a safe, reliable, and efficient transportation system on a day-to-day basis. Maintenance activities include pothole filling, repairing damaged bridges, incident response, maximizing operational efficiency by signal timing, snow clearing, vegetation planting and clearing, drainage, fence maintenance, and litter removal. The RTP supports regional system maintenance work identified by WSDOT and local agencies.

Preservation projects ensure that investment in the regional transportation system is protected. Specific projects include highway repaving, refurbishing rest areas, and bridge rehabilitation. Needs and projects are identified by local agencies and WSDOT through such programs as the Highway Performance Monitoring System (HPMS), Washington State Pavement Management System (WSPMS), and Bridge Management System (BMS).

Safety

The frequency, severity, location, and type of crashes are assessed by WSDOT and local jurisdictions. The RTP supports regional system safety projects identified through Safety Management System (SMS) planning, in addition to local plans and programs to reduce serious and fatal injury crash potential on the regional transportation system.

Target Zero Plan

Target Zero, The Washington State Strategic Highway Safety Plan: Target Zero (SHSP) was developed to identify Washington's traffic safety needs and to guide investment decisions in order to achieve significant reductions in traffic fatalities and serious injuries. It was last updated in 2019. Priority areas now include pedestrians and bicyclists, and the older driver age threshold has been lowered from 75 to 70 because data shows risk factors for older drivers have a statistically significant break point at age 70.

The goal of the Target Zero plan was to reduce the number of traffic deaths and serious injuries on Washington's roadways to zero by 2030. It also serves as the state's strategic highway safety plan.

The 2019 Target Zero Plan is the fifth version of this safety roadmap, and it is more important now than ever. Data from the most recent three years (2015–2017) show that Washington's traffic fatality and serious injury trend is going in the wrong direction. Compared with prior three-year period (2012–2014), traffic fatalities have increased 23 percent and serious injuries 7 percent. This mirrors a national increase of 11.3 percent in traffic fatalities. Target Zero is focused on new ways to accomplish the zero goal. Since Target Zero began in 2000, partners have accomplished much by enacting policies, completing projects, and developing new programs. Continued success will require new, more challenging initiatives. The next round of solutions may require more resources, changes in state laws, more education, or design changes on roadways around the state.

Quarterly Traffic Safety Reports

RTC instituted quarterly reporting of fatality and serious injury collisions within the RTC region. The reports are provided to the Board of Directors. Technical committees use the latest data available from the WSDOT Crash Data Portal.

Traffic Safety Dashboard

RTC has begun prototyping the use of a web-dashboard tool designed to improve traffic safety data analysis and reporting. The dashboard will be maintained by RTC using state datasets. Member agencies can use the dashboard to further enhance the region's analytical capabilities and response strategies.

Local Road Safety Plans

RTC partnered with five member public agencies to fund and develop City Safety Plan studies for the cities of Battle Ground, Camas, La Center, Ridgefield, and Washougal. These Safety Plans were developed using the framework established in Washington's Target Zero program using the following basic steps:

1. Analyze Crash Data
2. Identify Needs
3. Identify Countermeasures
4. Develop Prioritized List of Projects

Local agencies used the prioritized list of projects to apply for WSDOT City Safety Grants.

BY 2040, 25 PERCENT OF COUNTY RESIDENTS WILL BE 65 AND OLDER, UP FROM 16.4 PERCENT IN 2020.

Aging Readiness

Clark County is anticipating rapid growth in its population of older residents. By 2040, 25 percent of county residents will be 65 and older, up from 16.4 percent in 2020. The County took a proactive step to plan for a future with this changing demographic.

The Aging Readiness Plan was gleaned from workshops, surveys, and best practices from other communities. The ARP recognizes that people are working to create communities that are good places to live, work, grow up, and age in. Affordable and appropriate housing, supportive community features and services, and transportation options help create places where everyone has the opportunity to live independently and participate in civic and social life as they age. Recommendations within this plan focus on connectivity of missing public infrastructure, support for social services, and zoning and planning standards that encourage age-friendly communities older adults can thrive in. An updated ARP was adopted in 2023

Environmental Justice

Environmental Justice is rooted in the idea that everyone, regardless of race, ethnicity, language, income, or other demographic factors, has the right to live, learn, work, and play in a clean, safe, healthy environment. Environmental justice in Washington, as defined in the 2021 Healthy Environment for All (HEAL) Act, addresses disproportionate environmental and health impacts in all laws, rules, and policies by prioritizing vulnerable populations, providing equitable distribution of resources and benefits, and eliminating harm. The Federal Justice40 Initiative was

established in 2021 to address decades of underinvestment in disadvantaged communities. The goal is for 40 percent of overall benefits of certain federal investments, including investment in clean transit, to flow to these communities to redress legacy pollution, climate change, and environmental hazards. For additional information, see Appendix G.

Complete Streets

"Complete streets" describes an approach to transportation planning, design, and construction that considers the needs of all potential users. The Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), Section 11206, defines Complete Streets standards or policies as those which "ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles." A *complete street* is safe and feels safe for everyone using it. In practice, it is not always possible to accommodate all modes on a single street due to right-of-way constraints; so a practical approach to Complete Streets also focuses broadly on building Complete Networks to provide connectivity for different modes of travel.

To reduce reliance on automobiles, Clark County needs to develop adequate sidewalks and bikeways to access activity centers and allow people to safely and easily get to their destinations. Developing Complete Streets and active transportation infrastructure is a strategy that can maximize the existing transportation system's capacity. Local jurisdictions within Clark County are focusing on nonmotorized projects to provide a balanced transportation system that safely accommodates all users by developing Complete Streets Plans for their jurisdictions and implementing Complete Street projects

In 2022 the Washington State Legislature passed Senate Bill 5974, the Move Ahead Washington package. It included a Complete Streets requirement added to RCW 47.24.060, which directs that "in order to improve the safety, mobility, and accessibility of state highways, it is the intent of the Legislature that the department must incorporate the principles of complete streets with facilities that provide street access with all users in mind, including pedestrians, bicyclists, and public transportation users for state transportation projects starting design on or after July 1, 2022 and that are $500,000 or more." Local agencies that have adopted Complete Streets ordinances and are eligible for the program include the cities of Battle Ground, Ridgefield, and Vancouver, and Clark County.

Green Transportation

Traditionally, policy efforts to "green" the transportation sector have focused on the adoption of more sustainable forms of transportation, such as public transportation and bike/pedestrian facilities. Increasingly, and in step with advances in technology, policy has sought to support zero- or low-emission vehicles that produce no or low tailpipe emissions. EVs are not without their challenges:

- EVs are currently more expensive than traditional gasoline powered vehicles, both in terms of the upfront vehicle cost and the cost of the batteries.
- A lack of charging infrastructure is a major barrier to EV adoption.
- Many consumers are still unfamiliar with EVs and their benefits.

The IIJA established new federal funding programs, including the National Electric Vehicle Infrastructure formula program, to accelerate the adoption of EVs.

Washington's RCW 54.16.430 allows utilities to voluntarily develop transportation electrification (TE) plans and EV-related incentive programs. Clark Public Utilities adopted a TE Plan in 2021. Vancouver released a climate action framework in 2022 to outline strategies and actions to reduce greenhouse gas (GHG) emissions. C-TRAN has begun a zero emissions bus transition plan to convert its diesel bus fleet to entirely zero emissions by 2040.

Strategies such as vehicle electrification—along with continued growth of the State's clean energy portfolio—are important pieces of the State's climate change effort within the transportation sector. However, while these steps are necessary, they are insufficient on their own to reduce transportation-related GHG emissions to goal levels over the near term. Reducing vehicle miles traveled (VMT) is a critically important part of meeting statewide GHG reduction goals. Even with 100 percent electrification, significant cuts in VMT are needed to meet GHG emissions goals.

TRANSPORTATION ACCOUNTS FOR THE HIGHEST PROPORTION OF GHG EMISSIONS (29%). OF THIS, LIGHT-DUTY VEHICLES (I.E- PERSONAL CARS) ACCOUNT FOR 58% OF THE SOURCE OF TRANSPORTATION EMISSIONS.

Source: *Fast Facts on Transportation Greenhouse Gas Emissions | US EPA*

Vehicle Miles Traveled (VMT)

VMT is the measure of all the miles traveled by motor vehicles on the transportation system. It is a helpful measure of system use and tailpipe emissions associated with motorized vehicles. There are three major public policy goals that seek a reduction in VMT:

- Managing transportation demand and seeking efficient use of the multimodal transportation system to reduce the need for expensive road infrastructure projects
- Improving air quality and lowering GHG emissions
- Lowering energy use required for travel and the amount of clean energy needed to support electrification of the economy's transportation sector

Proposed legislation and federal rules target VMT and greenhouse gas reductions. The Generating Resilient, Environmentally Exceptional National (GREEN) Streets Act was introduced in the U.S. Senate in 2021. The act would direct the Secretary of Transportation to establish minimum standards for states to use to decrease GHG emissions and per capita VMT on the national highway system and direct federal highway funding to facilitate compliance.

In 2021 the Washington State Legislature passed SSB 5165 Electric Power System Transmission Planning, which directed WSDOT to develop a process for establishing VMT reduction targets. Clark County is one of ten counties in the state where efforts to set VMT reduction targets are focused. Having to set a local VMT reduction target will require a local review of both transportation and land use policies, plans, and programs to support VMT reduction efforts.

The VMT Reduction Report made the following recommendations related to regional planning agencies:

- When certifying local comprehensive transportation elements, the RTPO should confirm that the comprehensive plan includes goals, policies, and strategies to reduce per capita VMT consistent with the regional target.
- Update state law to require that all city and county comprehensive plans be certified by the RTPO for consistency with the RTP, GMA planning requirements, and RCW guidelines and principles related to regional transportation planning.
- There should be no enforcement/punitive actions against regions, cities, counties, or agencies whose the actual VMT per capita is not decreasing in proportion to the VMT reduction target. Instead, resources should be directed to actions that can help improve performance and move them closer to their targets.

If a plan or project is forecast to fail to meet the regional VMT reduction targets, any discretionary funding administered by the RTPO to be spent only on transportation projects that would not increase roadway capacity (e.g., state of good repair, transit, active mode infrastructure, safety, etc.) will be retained until a revised plan or project that meets per capita VMT reduction targets is adopted.

VMT reduction efforts build upon and complement both longstanding and recent efforts at the federal, state, regional, and local levels that contribute to VMT reduction, including GMA, the Congestion, Mitigation and Air Quality Improvement program, the Commute Trip Reduction program transportation demand management strategies, and Complete Streets policies.

Transportation and Housing

Housing costs are usually the single largest expense for most households. When combined with transportation costs, these expenses account for approximately half of the average U.S. household budget. The combined cost of housing and transportation has implications for living affordability. Combined housing and transportation costs strongly reflect aspects of the built environment, including land use density, mix of land uses, and overall accessibility. Further, lack of affordable housing and holistic transportation planning influences public health through physical activity and access to basic amenities.

When people decide where to live, they usually consider housing costs. They often don't consider the added transportation costs for getting to work, essential services, and recreation spots. Jobs further away from home increase a family's transportation expenses, resulting in less disposable income for other needs. Consequently, housing affordability indexes that do not account for transportation costs cannot provide an accurate assessment of the cost of housing choices. Affordable housing is typically defined as housing that requires no more than 30 percent of a household's income, but this measure does not account for the transportation costs associated with home locations. True affordability is related to the cost of housing and the cost of transportation from that location.

The link between housing and transportation is highlighted in the 2021 BIL, which directs MPOs to better connect transportation with housing and employment. The 2021 BIL also suggests MPOs develop a Housing Coordination Process or a Housing Coordination Plan (49 USC §5303).

Washington's GMA requires that comprehensive plans include housing and transportation elements. The housing element, as of 2021, must address infrastructure availability, including multimodal transportation options, access to transit, and provisions for walking, cycling, and using mobility devices.

Climate Change

Climate-related severe weather events pose an immediate and long-term threat to the reliability and capacity of the transportation network. Continued and enhanced system maintenance, repairs, and preservation will increase the resiliency of regional infrastructure.

Legislation passed and signed into law in 2023 (HB 1181) adds a climate goal to the GMA and requires local comprehensive plans to have a climate element with resilience and GHG mitigation sub-elements. Climate elements must maximize economic, environmental, and social co-benefits and prioritize environmental justice in order to avoid worsening environmental health disparities. The resilience sub-element must include goals and polices to improve climate preparedness, response, and recovery efforts. This is mandatory for all counties and cities fully planning under the GMA and encouraged for others.

The GHG emissions sub-element must include goals and policies to reduce emissions and VMT. Clark County and the jurisdictions within will develop GHG emissions goals and VMT reduction targets as part of their 2025 Comprehensive Plans.

Carbon Reduction

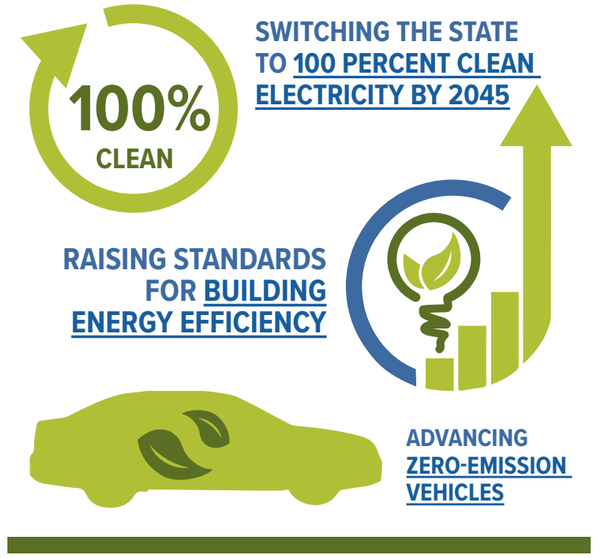
The Washington State Transportation Carbon Reduction Strategy (TCRS) builds upon the 2021 State Energy Strategy. The TCRS describes the policy framework Washington State is using to reduce transportation emissions and identifies the types of strategic actions Washington is investing in to work toward achieving state statutory GHG emissions limits.

The TCRS serves three main purposes:

- The TCRS aids Washington in implementing FHWA's Carbon Reduction Program (CRP), which will provide an estimated $110 million to Washington for the federal fiscal years 2022-2027. The TCRS helps WSDOT and transportation planners across the state identify and select eligible investments appropriate to Washington's population and context.
- As an educational tool, the TCRS summarizes ongoing actions to reduce transportation carbon emissions in Washington. It helps inform transportation-related organizations and decision makers about the State's goals, policies, priorities, and strategies to decarbonize transportation.
- The document supports future planning efforts by establishing a baseline for decarbonization actions with partners, setting the stage for prioritizing the next steps, and establishing consistent messaging across the state.

The TCRS is designed to provide a roadmap for meeting the State's GHG emission limits. The law commits Washington to limits of 45 percent below 1990 levels by 2030 and 70 percent below 1990 levels by 2040. To achieve these statutory limits, the Washington State Legislature has policies and programs to reduce GHG emissions across every aspect of Washington's economy. Progress toward meeting these limits is reported in the Washington State Greenhouse Gas Emissions Inventory.

Greenhouse Gas (GHG)
Governor Jay Inslee and the Legislature have secured new policies to reduce future GHG emissions. Examples of steps Washington is taking to cut emissions include:



Vancouver Area Smart Trek Program

The Vancouver Area Smart Trek Program (VAST) is a coalition of state, regional, and local agencies that have been actively working together to address the region's transportation needs through ITS and traffic operations solutions. The VAST focuses on low-cost operational and ITS technology approaches to make better use of existing transportation facilities by improving system efficiency and performance. It is made up of several initiatives to improve the management and operation of the system.

Transportation System Management and Operations (TSMO)

Transportation System Management and Operations (TSMO) strategies also maximize the efficiency of the existing transportation system. Potential System Management and Operations solutions are identified in RTC's Transportation System Management and Operations Plan, updated in September 2016. System management strategies are also outlined in the Washington Transportation Plan and local growth management plans. A key strategy of transportation system management is the implementation of an intelligent transportation system (ITS) for the Clark County region.

Two projects of note in 2021 included the Portal Data Archive, which developed preliminary visualizations of C-TRAN transit data and the Shared Signal System Study, which is near completion and has identified a solution to actively manage traffic signals across jurisdictional boundaries. The signal share signal operations resources include a playbook for agency coordination under various traffic operations scenarios.

Other ongoing activities include further development of fiber asset permits—where agencies make better use of existing fiber and communication equipment by sharing available capacity among agencies—and a common GIS mapping cloud database (OSPInSight) that seamlessly allows any approved user to easily view information, such as fiber and communication network, fiber ownership, capacity, and availability.

These initiatives include:

- Communications infrastructure
- Traveler information
- Incident management
- Transportation management
- Advanced traffic control
- Transit priority
- Transit operation and management

The VAST Implementation Plan is a 20-year project list developed around the initiatives above. It contains a description of each project, its priority, estimated costs and benefits, and its relationship with other projects in the plan. There is also an implementation schedule for the plan that, in general, lists short, medium, and long-term time frames. C-TRAN's VAST projects include automatic vehicle locators, computer aided dispatch, automatic passenger counting, transit signal priority, transit speed and reliability, and regional transit fare integration.

Transportation Demand Management (TDM)

TDM is about reducing auto trips, shortening some and eliminating those that are unnecessary. The RTP supports TDM as a strategy to maximize the existing transportation system's efficiency. TDM strategies to reduce vehicle trips on the regional transportation system include transit use, carpooling, vanpooling, working of flexible hours and/or a compressed work week, and remote work. TDM can also include getting users to mode shift into walking or biking.

There are numerous TDM strategies that can be put into place to increase transportation system efficiencies. These strategies include:

Education to ensure transportation agencies, professionals, and the public consider and understand TDM

- Employee commute trip reduction programs, such as those required by the State's Commute Trip Reduction law
- Special transport services for efficient transportation to special events
- Transportation allowance for commuters rather than free parking

- Maximizing transit service efficiency and effectiveness
- Park and rides at urban fringe transit stops
- Vanpool programs
- Rideshare marketing and rideshare matching

- Parking pricing for users
- Road pricing such as road tolls and congestion pricing
- Mileage fees per mile, such as charges for road use and/or distance-based vehicle insurance and registration fees
- Fuel tax increase

High-occupancy vehicle lane preference for transit and rideshare vehicles

Free transit zones in commercial centers

Bicycle and pedestrian facility improvements

Bike lockers at transit stops; bike racks on transit vehicles

Guaranteed ride home programs to provide a limited number of free rides home for transit and rideshare commuters

Addressing security concerns of rideshare, transit, bicycle, and pedestrian commuters

REMOTE WORK FROM HOME TO AVOID COMMUTE TRIPS

Alternative work hours, either through flex time or alternative work weeks (such as four 10-hour days)

Such TDM strategies will become increasingly important as travel demand in the region continues to grow and transportation investments do not keep pace. TDM strategies can help preserve transportation system capacity.

Commute Trip Reduction (CTR)

In 1991, the State of Washington adopted its Commute Trip Reduction (CTR) law. The law is focused on reducing traffic congestion and air pollution by shifting drive-alone commutes to other modes. The Washington State Commute Trip Reduction Law (Chapter 468-63 WAC) states "an affected employer must make a good faith effort to develop and implement a Commute Trip Reduction program designed to reduce the number and length of drive-alone commute trips made to the worksite." In Southwest Washington, Clark County, Vancouver, Camas, and Washougal are affected areas.

You can review their local CTR Ordinances below:

- Clark County (CCC Chapter 5.50)
- City of Vancouver (VMC Chapter 18.12)
- City of Camas (CMC Chapter 10.36)
- City of Washougal (WMC Chapter 10.35)

Local agencies in the area use the Get There SW Washington tool to help users connect to transportation options. Get There SW Washington is a regional partnership between Clark County and the cities of Vancouver, Washougal, and Camas. The City of Vancouver, through an interlocal agreement with the County and other cities, monitors the CTR program to ensure the 10 percent trip reduction goal is being met or actively worked toward. Currently, 55 different workplaces in Clark County are involved in the program, including but not limited to the Port of Vancouver, PeaceHealth, the City of Vancouver, Clark College, Bonneville Power Administration, Vancouver Public Schools, SEH America, and the Vancouver Clinic.

Vision and Goals

Every good plan has a well-defined purpose, smart goals, and specific objectives to guide it from vision to implementation. The RTP is no different. While many of these goals, objectives, and actions are defined through federal legislation, the nuances of each are still in the hands of local officials and policymakers to tailor to their communities' needs. Laying out these goals and objectives, and the performance-based measures by which the plan's success will be judged, helps all understand the rationale guiding the planning process.

VISION STATEMENT

Our vision for 2045 is a safe, reliable, resilient and equitable transportation system in the Clark County region.

To achieve this vision, we seek to promote safe, healthy, equitable, sustainable, and reliable modes of transportation, mitigate congestion, enhance the livability of our region, and support economic growth. Our intent is to create transportation and mobility options that provide access to all system users and preserve our communities' natural and cultural resources. At the same time, we will prioritize safety, reduce environmental impacts, and ensure our investments build healthy, livable, and economically vibrant communities and cohesive regional transportation networks.

GOALS AND OBJECTIVES

Additional information on how we are supporting many of these objectives is contained in appendices H, I, and J).

Safety and Security

GOAL

Maintain and enhance a multimodal transportation system that ensures the safety and security of people and goods across all users and modes.

OBJECTIVES

- Provide safe and reliable evacuation routes. Ensure safety of, among others, vulnerable road users, passengers, and freight systems by prioritizing investments in existing physical assets.
- Promote safe streets and intersections through a safe system approach.
- Align with the state safety goals of Target Zero, which strive to reduce serious and fatal crashes throughout the transportation systems.
- Improve the safety and security of system operations.
- Further the ability to shelter in place and provide safe and reliable evacuation routes.

Economic Vitality and Quality of Life

GOAL

Enhance regional economic vitality through transportation policies and investments that connect people with jobs, educational opportunities, parks

OBJECTIVES

- Consider additional metrics for regional transportation performance, including evaluation tools that measure accessibility to jobs and services, such as the Housing and Transportation Cost Index, etc.
- Support transportation improvements that provide family wages, improve economic competitiveness, revitalize commercial corridors and strategic economic centers, and enhance travel and tourism opportunities
- Work with agencies to ensure employment and commercial centers are easily accessible via all modes of transportation.
- Support the reliable and safe movement of freight and goods.
- Prioritize equity in regional transportation decision-making to mitigate and eliminate barriers related to access, safety, affordability, and health outcomes experienced by people of color, low income populations, older adults, people with disabilities, and other historically marginalized communities.
- Target demand-response services toward communities with higher concentrations of older adults and those with poor access to essential services.
- Explore alternative delivery methods for first/last mile deliveries, including cargo bikes, micromobility devices, and personal delivery vehicles.
- Support efforts to expand, as appropriate, transportation facilities with regional or statewide significance that maintain the economic vitality of local communities while minimizing encroachment of incompatible land uses.

Accessibility and Mobility

GOAL

Plan for an equitable transportation system that is maintained, operated, and coordinated to better enable inclusive, reliable, easy, accessible, and seamless travel across the region.

OBJECTIVES

- Prioritize equity in transportation and workplace access opportunities for all populations, regardless of age, ability, race, ethnicity, income level, or protected class.
- Improve safety and accessibility for all travel modes, especially public and active transportation, for all users.
- Support implementing roadway management and operations strategies to improve travel reliability, mitigate congestion, improve safety, and further support all travel modes.
- Prioritize transportation improvements to facilitate intermodal connectivity and the incorporation of complete streets elements.
- Support community-based and private-initiative services and programs to meet first- and last-mile, reverse commute, and other non-traditional transportation needs.
- Foster regionwide applications of advanced technologies to the transportation system infrastructure.

Sustainability and Resiliency

GOAL

Design and maintain a resilient transportation system that will protect and enhance the natural environment.

OBJECTIVES

- Work with agency partners to enhance the transportation network's resiliency by increasing travel options and redundancies.
- Consider and mitigate the impacts of the transportation system on the natural and built environment.
- Work with local agencies to efficiently manage limited roadway capacity to mitigate congestion and vehicular emissions.
- Promote TDM and the use of active travel modes (walking, bicycling, micromobility devices, and transit) to reduce environmental (climate, natural) impacts related to transportation.
- Promote low- and zero-emission, energy-efficient alternatives, including electric and alternative fuel vehicles.
- Encourage the design and development of communities that make walking and biking more viable for more people and increase opportunities for active travel for all ages.
- Support local and state efforts for transportation network resiliency, reliability, and climate adaptation and develop transportation designs that incorporate these trends.
- Promote effective actions to reduce greenhouse gases, such as VMT reduction, conversion to renewable energy systems in transportation and the built environment (e.g., electrification).
- Develop a mechanism to promote regional coordination on emergencies and long-term responses to systemwide climate impacts.