

Washington State Transportation Carbon Reduction Strategy

November 15, 2023



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Prepared by



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Executive Summary

FHWA Carbon Reduction Program

In 2021, the federal government established the Carbon Reduction Program (CRP)¹ as part of the Bipartisan Infrastructure Law (BIL). The Federal Highway Administration (FHWA) will allocate approximately \$6.4 billion of CRP funds over five years to states to plan for and implement projects and programs to reduce carbon emissions from the transportation sector. The CRP funds may be used for a range of activities identified in the legislation including, but not limited to, public transit investment, transportation alternatives projects, congestion pricing, and port electrification.



Estimated Funding Amounts FY22-26

All CRP Funds: \$6.4 Billion

WA State Funds: \$110 Million

Carbon reduction strategy

The CRP requires each state to develop a carbon reduction strategy (CRS) in consultation with the state's metropolitan planning organizations (MPOs) to identify projects and strategies that reduce carbon emissions from transportation. The CRS is to be tailored to the state's population density and context to ensure appropriate projects, strategies, and investments. States must submit their strategies to FHWA by November 15, 2023, and update them at least once every four years thereafter. States and MPOs are encouraged to obligate CRP funding for projects that support implementation of the CRS.²

Washington State Transportation Carbon Reduction Strategy

In response to this requirement, the Washington State Department of Transportation (WSDOT), in partnership with MPOs and regional transportation planning organizations (RTPOs), as well as state agencies, tribes, local agencies, industry, and community groups, developed this Washington State Transportation Carbon Reduction Strategy (TCRS).

This 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 state statutory GHG emissions limits. Recent and planned projects are listed to demonstrate the types of work the state is undertaking.

The TCRS serves three main purposes:

- This TCRS aids Washington in implementing the Federal CRP, which will provide about \$110 million to Washington over the course of federal fiscal years 2022-2026. This TCRS helps WSDOT and MPOs across the state identify and select eligible transportation investments appropriate to Washington's population and context.
- 2. As an educational tool, the TCRS summarizes ongoing actions to reduce transportation carbon emissions in Washington. It helps inform transportation-related organizations and

¹ FHWA's Bipartisan Infrastructure Law factsheet on the Carbon Reduction Program. Available at https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm.

² Information Memorandum: Carbon Reduction Program (CRP) Implementation Guidance based on 23 U.S.C. 175, from Gloria M. Shepherd, Associate Administrator Office of Planning, Environment, and Realty to Division Administrators Directors of Field Services, April 21, 2022. https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/crp/2022/crp-quidance.pdf

decision-makers about the state's goals, policies, priorities, and strategies to decarbonize transportation.

3. The document also 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. WSDOT will update the TCRS every four years in compliance with federal law.

Washington context

The State of Washington is committed to tackling human contributions to climate change and has set ambitious goals to reduce greenhouse gas (GHG) emissions. Washington's first statewide GHG limits were established in 2008. In 2020, the state updated these limits to reflect advancements in climate science:³

- By 2030 45 percent below 1990 levels
- By 2040 70 percent below 1990 levels
- By 2050 95 percent below 1990 levels and net zero emissions

Washington also has parallel statutory goals for reducing per capita VMT to reduce GHG emissions.⁴

The most recent statewide GHG emissions inventory reports 2019 emissions. In that year, Washington emitted 102.1 million metric tons (MMT) of carbon dioxide equivalent (CO₂e), a 9.3 percent increase above the 1990 baseline. In 2019, the transportation sector was the largest contributor, accounting for 39 percent of all GHG emissions.

To achieve the state's emissions limits, Washington must move aggressively on multiple fronts, including the transportation sector.

For planning purposes, Washington is applying the state limits proportionally to the transportation sector, i.e., assuming the transportation sector needs to meet the same percentage reductions as established for the entire state. Because transportation emissions have increased since 1990, emissions must decline by 50 percent in the 7 years between now and 2030 and the entire transportation sector (trains, planes, autos, trucks, ferries, and other marine vessels) must decline to net zero in one generation. Figure ES-1 shows Washington's historic transportation GHG emissions (1990-2019) and the proportional emission reductions for this sector.

³ Washington State Legislature, RCW 70A.45.020: Greenhouse gas emissions reductions—Reporting requirements. Available at: https://apps.leg.wa.gov/rcw/default.aspx?cite=70A.45.020

⁴ Washington State Legislature, RCW 47.01.440: Adoption of statewide goals to reduce annual per capita vehicle miles traveled by 2050. Available at: https://apps.leg.wa.gov/rcw/default.aspx?cite=47.01.440

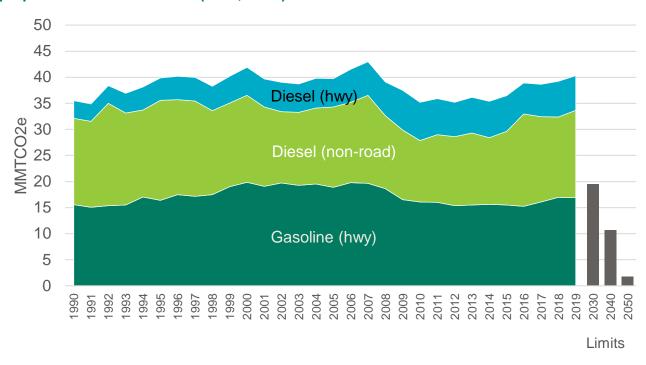


Figure ES-1. Washington's historical on-road transportation GHG emissions with proportional emission limits (MMT, CO₂e)

Note the change in horizontal scale after year 2019. [Source: generated from data in Ecology's GHG Emissions Inventory⁵ with proportional emission limits.].

State framework

The 2021 <u>State Energy Strategy</u> is Washington's blueprint for achieving comprehensive decarbonization across all economic sectors. The transportation chapter of the State Energy Strategy identifies two overarching strategies that work together to reduce transportation GHG emissions:

- Move people and goods more efficiently and equitably.
- Electrify vehicles and switch to low-carbon fuels.

The TCRS builds on this two-part strategy to describe how Washington is addressing GHG emissions from transportation.

Since the State Energy Strategy was published, two key programs have been enacted that provide overarching direction for the state to decarbonize equitably:

The <u>Healthy Environments for All</u>⁶ (HEAL) Act is Washington's cornerstone environmental justice legislation, creating a coordinated state approach toward identifying and addressing environmental and health disparities for overburdened communities and vulnerable populations. The two key objectives of the HEAL Act are to:

⁵ Washington State Greenhouse Gas Emissions Inventory: 1990–2019. Stacey Waterman-Hoey, Washington State Department of Ecology, Olympia, Washington, December 2022, Publication 22-02-054. Available at: https://apps.ecology.wa.gov/publications/documents/2202054.pdf

 $^{^{6}\ \}underline{\text{https://doh.wa.gov/community-and-environment/health-equity/environmental-justice}}$

- Promote the equitable distribution of environmental benefits while investing in communities that experience the greatest environmental and health burdens.
- Reduce environmental and health disparities among overburdened communities and vulnerable populations in Washington and improve the health of all residents.
- The <u>Climate Commitment Act</u> (CCA)⁷ creates a carbon cap and invest program, capping large emitters and directing the proceeds from auction allowances to investments that transition the state to a low-carbon economy. Most transportation fuels⁸ are included in the program. Approximately \$5.4 billion in auction receipts are directed towards transportation carbon reduction investments over 16 years through the Move Ahead Washington transportation funding package.⁹

While WSDOT has a key role in leading efforts to address emissions from users of the transportation network and the network itself, the complex nature of transportation and transportation emissions requires coordination across the state. The state legislature's role is critical – enabling action, providing direction, and allocating funding. WSDOT and other agencies work under the Governor's leadership. Two other state agencies – Ecology and Commerce – also play important roles as they lead the state's efforts to decarbonize fuels used in the transportation sector and oversee land use planning. Other partners make important local decisions (e.g., land use), build infrastructure, and provide transportation services.

Strategic actions

Guided by these overarching state policies from the State Energy Strategy, across the state numerous strategies are being implemented to reduce emissions. These strategies can be grouped into the two categories identified in the State Energy Strategy: **move people and goods more efficiently and equitably** and **reduce the carbon intensity of transportation**.



Strategies to move people and goods more efficiently and equitably:

- Land use strategies improve multimodal accessibility and safety, reduce the distance single occupancy vehicles must travel, and enhance freight efficiency.
- Active transportation strategies make walking, biking, and using transit, attractive, practical, and safe to use.
- Transit and rideshare incentives and strategies, including supportive infrastructure, such as bus lanes, bus shelters, and park and ride facilities, encourage more efficient trips.
- The internet and the corresponding availability of broadband services can reduce the need for some trips.
- Efficient system operations and user fee strategies reduce congestion and manage traffic flow in high-volume areas.

Washington State Department of Ecology, Climate Commitment Act. Available at https://ecology.wa.gov/Air-Climate/Climate-Commitment-Act

⁸ Exceptions are identified in RCW 70A.65.080 (https://app.leg.wa.gov/RCW/default.aspx?cite=70A.65.080) and WAC173-446-050 (https://app.leg.wa.gov/WAC/default.aspx?cite=173-446-040)

⁹ http://leap.leg.wa.gov/leap/Budget/Detail/2022/ctLEAPDocument2022-A-030922.pdf

- Fleet operations management by freight and other partners optimize travel efficiency.
- Vehicle efficiency improvements reduce the energy needed for and emissions from each mile traveled.



Strategies that reduce the carbon intensity of transportation:

- **Electric vehicle strategies**, such as charging infrastructure, public outreach, incentives, grants, and vouchers, reduce emissions per mile traveled.
- Green hydrogen and low-carbon fuels, such as biodiesel and renewable diesel, in construction equipment, long-haul freight, marine, rail, and aviation, provide lower carbon options while longer term options are developed.
- Strategies to reduce the embodied emissions in transportation infrastructure, such as
 using environmental product declarations (EPDs) to track lifecycle material impacts in
 construction projects, will lead to making more informed decisions about the emissions in
 transportation infrastructure.

Outreach and engagement

Just as this strategy builds on the State Energy Strategy, the outreach and engagement efforts for the TCRS build on engagement conducted during the development of the State Energy Strategy.

Recognizing the importance of collaborative decision-making and inclusive planning, WSDOT conducted extensive outreach activities to engage partner representatives from tribes, state agencies, MPOs and RTPOs, industry partners, community-based organizations, and highly impacted communities. This engagement is documented in Appendix B.

Throughout the development process, WSDOT used various outreach methods such as focused partner meetings, mailings and email, surveys, publicly posted materials, and webinars. These diverse approaches provided our partners with multiple opportunities to contribute their insights. WSDOT reached out to over 600 partner organizations and all 29 federally recognized tribes in Washington. Two webinars were conducted to share information about the TCRS development with partners and stakeholders, including tribes, environmental justice groups, unions, chambers of commerce, and economic development organizations.

A public comment period from July 17 through August 16, 2023, provided partners and the public an opportunity to review and comment on a draft version of the TCRS.

These efforts provided opportunities for partners to share their perspectives, data, ideas, and priorities related to carbon emissions reductions in transportation. The engagement activities fostered a collaborative environment and helped shape the TCRS and ensure its alignment with the state's goals and priorities.

Next steps

The TCRS is one step in an ongoing process. It brings together the extensive work underway in Washington to reduce transportation GHG emissions and shows the breadth of policies, plans, programs, and projects in place to move the state toward the GHG goals. As such, this strategy joins

the family of strategies and plans that WSDOT prepares. WSDOT will continue working with our partners to implement the strategies outlined here.

Federal law requires that states submit the next carbon reduction strategy to FHWA in 2027. WSDOT will begin the update process in 2026. The update will discuss the state's work on closing the gap between the outcomes of our existing programs and our emission limits.

WSDOT will work to expand community engagement efforts and develop additional tools to support the strategy update. The complex nature of transportation emissions requires collaborative work with partners; WSDOT will continue to engage with partners on how best to coordinate efforts.

Ongoing work needs to include:

- Supporting strong collaboration Meeting state transportation GHG reduction targets requires partnerships to implement solutions across the state. Collaboration will be needed to incorporate the information from many partners in subsequent planning efforts, from local comprehensive plans, to MPO and RTPO regional efforts, to other WSDOT plans.
- Expeditiously implementing existing policies and programs and track progress To be successful, the state needs to ensure that efforts are fully implemented, which will require funding, staffing, and effort over time. Regularly assessing the effects of investments on emission reductions, equity, and travel efficiency is necessary for evaluating policy and program effectiveness and progress toward these overarching goals.
- **Filling policy gaps** Additional policies are needed to meet state reduction limits. Three key efforts will provide additional information on how the state can address specific areas of carbon reduction:
 - Vehicle Miles Traveled (VMT) Targets Final Report
 - Transportation Electrification Strategy (TES)
 - Green Electrolytic Hydrogen Study
- Understanding the emission gaps The Transportation Carbon Reduction Technical Report¹⁰ shows that current emission reduction policies are insufficient to meet state GHG limits. Closing these gaps will require additional analysis to provide a framework for making informed choices as the state continues to reduce emissions.
- Tracking and adopting innovation New technologies and improvements continue to emerge that help make the changes needed to meet statewide GHG reduction limits. The state and partners should support promising new research and be ready to fund pilot and demonstration projects. This work is especially important for medium- and heavy-duty vehicles, rail, marine, and aviation.
- Tracking emerging issues The transportation landscape in Washington State continues
 to evolve. Work to reduce transportation carbon emissions requires that emerging issues be
 identified and addressed in a timely manner so that challenges do not grow and opportunities
 can be expanded upon. Three issues warrant attention as the state works on transportation
 decarbonization: transportation network companies, online shopping and home delivery, and
 population growth.
- **Identifying funding gaps** Many of the strategies identified throughout this report have historically had low funding. The Climate Commitment Act is providing a new revenue source

¹⁰ Washington State Transportation Carbon Reduction Technical Report: Transportation Carbon Emissions Scenario Modeling, November, 2023.

and is being used to increase investments in transit, active transportation, electric vehicle charging infrastructure, and other programs that reduce GHG emissions. Even with this implementation, the state will need to assess and identify which strategies and programs require further investment to meet state transportation GHG emissions reduction, equity, and efficiency goals.

 Updating the Transportation Carbon Reduction Strategy – Federal law requires states to update their carbon reduction strategies every four years. The first update of this strategy is due in November 2027; work on the strategy update will begin in 2026. In the meantime, WSDOT will continue working with partners on engagement and implementation.

Additional work to support strategic emission reduction implementation

In addition to the above efforts that are underway to fill policy gaps, and parallel to the TES, the state would benefit from a **statewide multimodal transportation efficiency strategy** to accelerate transportation efficiency improvements. This work would identify preferred policies to reduce per capita vehicle miles traveled (VMT), meet greenhouse gas (GHG) limits, minimize the need for transportation energy infrastructure investments, and improve equitable access. This strategy would need to be developed in close collaboration with partners and would support future legislative policy development and investment decisions.

As noted above, the Transportation Carbon Reduction Technical Report¹¹ shows that current emission reduction policies are insufficient to meet state GHG limits. Closing these gaps will require additional analysis to provide a framework for making informed choices as the state continues to reduce emissions. Specific needs include:

- Analysis of transportation efficiency improvements an analysis of transportation
 efficiency opportunities and measures is needed to support the development of a statewide
 multimodal transportation efficiency strategy. This analysis would identify how efficiency
 improvements contribute to emissions reductions and the support needed for their strategic
 implementation. This analysis must account for different types of communities (urban,
 suburban, small city, rural) and different types of travel (commutes, recreational, errands,
 etc.).
- Opportunities analysis for high-capacity inter-city transit and passenger rail identify
 the types of service that best meet traveler needs across the state and where they can be
 most efficiently implemented throughout the state, expanding beyond the central Puget
 Sound area and I-5 corridor. This analysis would evaluate efficiency improvements between
 communities: identifying demand, identifying service levels to meet that demand, and
 establishing priorities for implementation.
- Freight analysis (rail, marine, aviation, and on-road freight) work with industry partners
 to characterize emissions and identify opportunities and challenges to improving efficiency
 from freight to inform the development of effective and efficient policies and programs that
 address freight-related emissions, specifically:
 - Baseline emissions profile develop a baseline emissions profile of freight and off-road modes to characterize the emissions from these sectors.

¹¹ Washington State Transportation Carbon Reduction Technical Report: Transportation Carbon Emissions Scenario Modeling, November, 2023.

- Opportunity analysis for freight efficiency improvements identify opportunities, challenges, and potential policy and programmatic supports to improve efficiency across all freight modes.
- Evaluate the role of reducing VMT in lowering energy requirements and associated
 costs While it is generally understood that fewer miles traveled requires less energy, an
 analysis of the infrastructure and energy cost savings from improved transportation efficiency
 would support state vehicle electrification efforts and may help direct efforts for the most
 effective implementation.



Chapter 1. Introduction

1.1. FHWA Carbon Reduction Program

The 2021 Bipartisan Infrastructure Law (BIL) established the Carbon Reduction Program.

The Federal Highway Administration (FHWA) notes that, "The purpose of the Carbon Reduction Program (CRP) is to reduce transportation emissions through the development of state carbon reduction strategies and by funding projects designed to reduce transportation emissions," where, "transportation emissions means carbon dioxide emissions from on-road highway sources of those emissions within a State." The CRP provides states with funds for projects designed to reduce carbon emissions from transportation sources.

1.1.1. Carbon Reduction Program funding

The Federal CRP will provide an estimated \$110 million to Washington State for the federal fiscal years 2022-2026.¹⁴ These funds will be distributed among the state and metropolitan planning organization (MPO) partners according to the CRP formula set by law,¹⁵ with 65 percent apportioned to MPOs based on population, and the remaining 35 percent available in any area of the state.¹² WSDOT Local Programs will provide allocations to the MPOs for regional CRP projects.

The BIL identifies numerous project types eligible for funding. 16 These include but are not limited to:

- Public transportation
- Transportation infrastructure for pedestrians, bicyclists, and other nonmotorized forms of transportation
- Replacing street lighting and traffic control devices with energy-efficient alternatives
- Projects to support the deployment of alternative fueled vehicles
- Projects to quantify embedded carbon emissions in the state's transportation facilities

1.1.2. Carbon Reduction Strategy requirement

Under the CRP, by November 15, 2023, states must develop a Carbon Reduction Strategy (CRS) document, in consultation with MPOs, to identify projects and strategies that reduce transportation carbon emissions.¹⁷ FHWA guidance requires the CRS to:

- A. Support efforts to reduce transportation emissions.
- B. Identify projects and strategies to reduce transportation emissions, which could include

¹⁶ USDOT FHWA, Carbon Reduction Program. Available at https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm

¹² Information Memorandum: Carbon Reduction Program (CRP) Implementation Guidance based on 23 U.S.C. 175, from Gloria M. Shepherd, Associate Administrator Office of Planning, Environment, and Realty to Division Administrators Directors of Field Services, April 21, 2022. https://www.fhwa.dot.gov/environment/sustainability/energy/policy/crp_guidance.pdf.

 $^{^{13}}$ Consistent with this definition, the terms Greenhouse Gas (GHG) emissions, Carbon Dioxide emissions, and carbon emissions are used synonymously in this document.

¹⁴ USDOT FHWA, 5-year Carbon Reduction Program by State, Available at https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_5year_funding_by_state.cfm

¹⁵ 23 U.S.C. 175(e)

¹⁷ U.S.C. 175(d) (info from guidance) under CRS.

projects and strategies for safe, reliable, and cost-effective options:

- to reduce traffic congestion by facilitating the use of alternatives to single-occupant vehicle trips, including public transportation facilities, pedestrian facilities, bicycle facilities, and shared or pooled vehicle trips within the state or an area served by the applicable MPO, if any;
- ii. to facilitate the use of vehicles or modes of travel that result in lower transportation emissions per person-mile traveled as compared to existing vehicles and modes; and
- iii. to facilitate approaches to the construction of transportation assets that result in lower transportation emissions as compared to existing approaches.
- C. Support the reduction of the state's transportation emissions.
- D. Quantify (at the state's discretion) the total carbon emissions from the production, transport, and use of materials used in transportation construction within the state.
- E. Align with the state's population density and context, including MPOs designated within the state.

1.1.3. Washington State approach

This Washington State Transportation Carbon Reduction Strategy (TCRS) was prepared to meet the CRP requirements and support Washington State's efforts to reduce transportation greenhouse gas (GHG) emissions. The strategy summarizes statewide carbon reduction efforts in transportation and related priorities in a single document. This information will guide investment decisions and future work by partners statewide to help meet Washington's aggressive targets. The document also provides a baseline from which to build additional efforts.

1.2. Content and development overview

This TCRS document is based on a combination of research, engagement, and analysis from December 2022 through November 2023:



Research: GHG emissions reduction policy research identified nearly 500 transportation GHG reduction strategies from more than 100 organizations in Washington State. These strategies form the basis of the TCRS strategies presented in Chapter 3. Appendix A provides additional details on the research methodology and a detailed list of the strategies identified.



Transportation partner engagement: A comprehensive engagement plan to solicit input from a diversity of partners facilitated productive discussion among stakeholders. Partners included state, federal, transit and local agencies, tribes, WSDOT staff, MPOs and regional transportation planning organizations (RTPOs), community organizations, freight stakeholders, aviation stakeholders, and interested individuals. The engagement included surveys, mailings and email, public meetings, interviews, webinars, and publicly posted materials. The information collected informed the identified strategies. Appendix B describes the engagement process and summarizes the information collected.



Developing Washington's Transportation Carbon Reduction Strategy: This strategy provides a comprehensive snapshot of transportation decarbonization efforts statewide, identifying the policy framework, strategic actions, and types of programs and projects

taking place. This information provides context and examples for planners using CRP funds.

1.3. How to use this document

This is Washington's first TCRS. It provides a consolidated overview of the state's vision for transportation decarbonization and serves the following purposes:

1.3.1. Carbon Reduction Program implementation

Washington intends for CRP funded investments to support reducing GHG emissions. The TCRS supports the state's work to implement the CRP by identifying strategies consistent with both federal and state priorities. It will help MPOs and the State select and prioritize eligible strategies by providing information on current efforts, gaps, and relevant examples.

1.3.2. Education

As the first document to compile all actions being undertaken to reduce transportation carbon emissions within Washington State, the TCRS serves as a principal reference for the state's goals, policy framework, priorities, strategic actions, programs, and projects for reducing transportation emissions. As such, it is intended to provide information on how the state is reducing transportation carbon emissions and to inform decision makers about the level of effort and resources needed to decarbonize transportation in Washington State consistent with State GHG reduction goals.

Chapter 3 and Appendix A of this document summarize the nearly 500 strategies identified from over 100 organizations, showing the breadth of strategies and investments underway statewide. Current CRP funded investments are identified at the end of Chapter 3 and projects currently programmed in the Statewide Transportation Improvement Program (STIP) that support transportation emission reductions are listed in Appendix D.

1.3.3. Future development

Federal law¹⁸ requires states to update their Transportation Carbon Reduction Strategy on a four-year cycle. Washington's first TCRS document establishes a baseline for the state's actions on decarbonization and provides a foundation for prioritizing next steps. Future iterations of the TCRS will reflect work accomplished over this first planning period.

1.4. The changing climate

Since the Industrial Revolution, <u>human activities</u> have released large amounts of carbon dioxide and other <u>greenhouse gases</u> into the atmosphere, changing the earth's climate. These gasses are rapidly accumulating and have so far raised the global average temperatures by approximately <u>2 degrees Fahrenheit</u> since 1880. This warming is altering natural cycles in Washington State and around the world.

In Washington and across the planet, oceans are warming and becoming more acidic, glaciers are receding, ice caps are melting, and the sea level is rising. Many places, including <u>Washington</u>, are experiencing changes in rainfall, resulting in more floods, droughts, or intense rain, as well as more frequent and severe heat waves.

¹⁸ 23 U.S.C. 175(d)(3) and (4)

These changes present unprecedented challenges to our society and environment. Economic impacts of climate change include increasing risks to property and communities from flooding and wildfire, and potential losses of income in the forestry and agricultural sectors due to increasingly severe and frequent droughts. Everyone is directly or indirectly affected by these changes.

1.5. Washington State emissions context

1.5.1. Washington State emissions and limits

Washington State is a leader in curtailing GHG emissions and has established <u>statutory</u>¹⁹ GHG emission limits based on scientific evidence that identifies the emission reductions needed to avoid the worst climate change impacts:

- By 2030 45 percent below 1990 levels
- By 2040 70 percent below 1990 levels
- By 2050 95 percent below 1990 levels and net zero emissions

Progress toward meeting these limits is reported every two years in the <u>Washington State</u> Greenhouse Gas Emissions Inventory. Washington uses this inventory to track progress

toward meeting emissions limits and design policies that reduce GHG emissions. During development of this strategy, the most recent inventory available was from 2019.²⁰ The state's GHG emissions inventory begins with 1990; it does not predict future trends.

In 2019, total emissions from all sectors were 102.1 million metric tons (MMT) of carbon dioxide equivalent (CO_2e), 9.2 percent above the 1990 baseline level of 93.5 MMT CO_2e .

Figure 1 shows Washington's total GHG emissions by sector. The transportation sector is the largest single contributor, in 2019 emitting 40.3 MMT of CO₂e, or 39 percent of all emissions.

Figure 2 shows the statewide GHG emissions by sector since 1990 and statewide GHG emission limits.²¹



Figure 1. 2019 statewide GHG emissions in Washington by sector [Source: Ecology20]

At the same time, the state is working to reduce total GHG emissions, state population is growing. This means that per capita emissions need to decrease more than the percentage reductions in statue. In other words, meeting expanding mobility needs must happen simultaneously with reducing emissions.

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¹⁹ RCW 70A.235.020

²⁰ Washington State Greenhouse Gas Emissions Inventory: 1990–2019. Stacey Waterman-Hoey, Washington State Department of Ecology, Olympia, Washington, December 2022, Publication 22-02-054. Available at: https://apps.ecology.wa.gov/publications/documents/2202054.pdf

²¹ Washington State Legislature, Greenhouse gas emissions reductions—Reporting requirements. Available at https://apps.leg.wa.gov/rcw/default.aspx?cite=70A.45.020

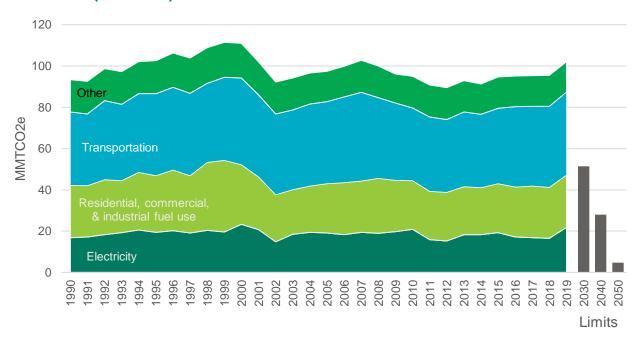


Figure 2. Washington's total GHG emissions by sector, 1990-2019 (MMT, CO₂e). Future year emission limits (State total) are shown for reference

Note the scale change after year 2019. [Source: Ecology²⁰ with emission limits superimposed.]

1.5.2. Washington transportation emissions

The transportation sector is the largest source of GHG emissions in Washington State, contributing approximately 39 percent of the state's carbon emissions. Washington's abundant hydropower means that the state's electricity sector is smaller than the national average, leaving the transportation sector to make up a larger proportion of the state's emissions.

Although emissions have gone up and down since 1990, in 2019, the transportation sector's CO₂e emissions were 40.3 MMT, 14 percent above the 1990 level. Emissions have not decreased overtime as needed to begin meeting emission limits.

The Washington State Legislature has not set sector-specific limits. In planning efforts, the state is applying the economy-wide reduction percentages proportionally to the transportation sector. This approach results in sector CO_2 e emission limits for transportation of 19.5 MMT by 2030, 10.7 MMT by 2040, and 1.8 MMT by 2050. **Table 1** shows the statewide historic emissions and future emission limits for the state, the transportation sector, and transportation's on- and off-road components.

²² Washington State Department of Ecology Green House Gas Inventory (2018-2019). Available at https://apps.ecology.wa.gov/publications/documents/2202054.pdf.

Table 1. Historic GHG emissions and future GHG emission limits

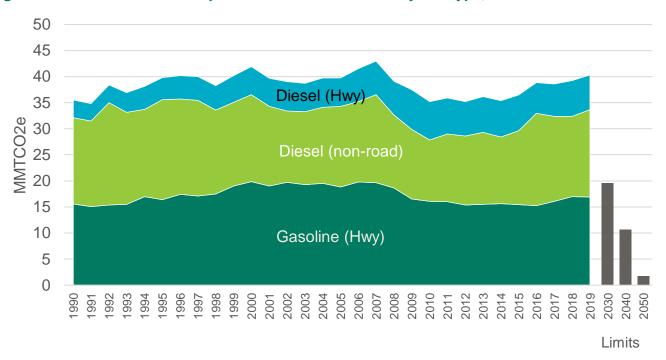
	Emissions (MMT CO₂e) Emission lir			on limits (MM ⁻	mits (MMT CO₂e)	
Category	1990	2019	Change since 1990 (percent)	2030	2040	2050
Total state emissions	93.5	102.1	9.2%	51.4	28.1	4.7
Transportation sector	35.5	40.3	13.5%	19.5	10.7	1.8
On-road transportation	19.0	23.5	23.7%	10.5	5.7	1.0
Off-road transportation	16.6	16.7	0.1%	9.1	5.0	0.8

Note: numbers may not add due to rounding.

[Source: generated from data in Ecology's GHG Emissions Inventory²⁰]

Figure 3 further breaks down transportation sector emissions by fuel type and use: highway gasoline, highway diesel, and non-road use. On-road diesel emissions come largely from medium- and heavy-duty trucks, whereas gasoline is primarily used by light-duty vehicles and some smaller trucks. Non-road emissions come from aviation, marine, rail, agricultural, and construction equipment. Most importantly, emissions have increased since 1990. To meet state limits, emissions need to decline significantly in the coming years.

Figure 3. Historic on-road transportation sector emissions by fuel type, 1990-2019



Note the change in horizontal scale after year 2019. [Source: Ecology²⁰.]

1.6. Transportation equity

Washington's transportation system does not meet everyone's needs and some bear more of the negative effects than others. Transportation system burdens, such as air pollution, and benefits, such as easy access, have historically been unevenly distributed; overburdened communities and vulnerable populations have often been further marginalized by these transportation system effects.

The State Energy Strategy identified the need to reduce emissions in a manner that addresses historical inequities. The Healthy Environments for All (HEAL) act creates a coordinated approach toward identifying and addressing environmental and health disparities for overburdened communities and vulnerable populations.

Addressing historical inequities in the transportation system requires systemic modifications that both reduce emissions and ensure that everyone has the access they need while no one bears a disproportionate burden. Additionally, the transition of the transportation system to clean fuels must be done equitably. This means ensuring that overburdened communities and vulnerable populations directly receive the benefits of this transition through improved air quality and access to clean transportation options. This can be done through specifically designated programs, apportionment goals in benefit distributions, and other requirements; this work requires continued attention and tracking.

1.7. Washington State carbon reduction roles

In Washington State many entities play a role in reducing transportation carbon emissions, including tribes, state government, local governments, private entities, community organizations, and individuals.

1.7.1. Washington State government

The Washington State Legislature establishes overarching policy, sets requirements, and appropriates funding. State agencies implement these policies and programs using the funds provided by the Legislature. The Departments of Ecology, Commerce, and Transportation play key roles in executing the state's carbon reduction efforts.

As a regulatory agency, Ecology is implementing the Climate Commitment Acts cap and invest program and the Clean Fuels Standard. They establish the rules for these key programs as well as administer the programs' implementation and track statewide progress toward meeting emission limits through the state's biennial greenhouse gas inventory.

Commerce provides policy expertise and grant administration to move transportation carbon reduction efforts forward. Their policy experts support the generation of statewide policies such as the Strategy. They are also co-leading the development of the Transportation Electrification Strategy. The Legislature has provided significant funding for different types of carbon reduction and energy efficiency grants that Commerce administers, including transportation electrification.

WSDOT's greenhouse gas reduction focus is on transportation emissions. While WSDOT does not regulate emissions, the agency plays an important role in reducing transportation emissions. Agency activities important to greenhouse gas reductions include developing policy, designing and constructing infrastructure, maintaining and operating the state highway and ferry system, administering funding, preparing transportation plans, and collecting data.

The Washington State Legislature has established six policy goals for the state's transportation

system: preservation, safety, stewardship, mobility, economic vitality, and environment. WSDOT's climate work is an example of how the agency implements these goals across the state.

1.7.2. Tribes

Tribal governments are responsible for planning and implementing transportation investments, building and maintaining roads, establishing local zoning regulations, and operating transit services. Tribal governments also work with the state through consultation when transportation projects affect tribal communities, artifacts, or lands.

1.7.3. Regional and local governments and agencies

Regional and local governments and agencies include public entities like MPOs, RTPOs, cities, counties, and transit providers. MPOs and RTPOs work with members and stakeholders to identify transportation investment priorities, develop transportation plans, and secure funding for transportation infrastructure and services. Certain federal funds for transportation projects and programs are channeled through MPOs, that award them to local agencies, transit agencies, and other entities. Cities and counties also have planning functions, build and maintain roads, and establish local land use regulations. Transit services are provided by cities, counties, transit agencies, and community organizations.

1.7.4. Utilities

Utility providers, particularly electric utilities, play an important role in vehicle electrification and charging infrastructure. These entities must plan for providing the additional energy needed for vehicles and some are implementing programs such as curbside electric vehicle charging and supporting transit electrification. State decarbonization goals for the electric utility industry are established through the <u>Clean Energy Transformation Act</u>, and work in tandem with the TCRS as part of the comprehensive State Energy Strategy.

1.7.5. Community organizations

Community organizations include a variety of groups working to address transportation greenhouse gas emissions and improve the quality of life for the people in the area they serve. The work these organizations do varies, including advocacy, direct service, educating and empowering their community, and ensuring their membership's or community's needs are considered and met.

1.7.6. Private sector

The private sector includes companies that provide transportation services or use transportation facilities as part of their business, such as delivering goods. The private sector also provides passenger transportation services, including taxis, ridesharing, airlines, and passenger rail.

1.7.7. Individuals

Every individual in Washington plays a role in reducing transportation carbon emissions. Individuals make decisions about where to live and when and how to move about. Not everyone has the same options to choose from, but most can choose between options with varying emissions effects. Over time, the options to meet individual and family travel needs will change as more electric vehicles, new bike infrastructure, and safer pedestrian spaces become available.

Chapter 2. Statewide Transportation Decarbonization Policy Framework

Washington State is taking a multifaceted approach to reducing transportation sector GHG emissions and addressing environmental justice and equity. Foremost in this effort is the State Energy Strategy.²³ Published in 2021, the State Energy Strategy serves as Washington's blueprint for actions and strategies to achieve deep decarbonization across the state's economy.

The State Energy Strategy recognizes that "no sector is as important as transportation to achieving decarbonization, nor as complex in its operation and governance." It provides a roadmap to reducing transportation GHG emissions to achieve aggressive carbon emissions reductions using, "multiple policies to achieve comprehensive benefits, including improved public health from reduced co-pollutants, increased physical activity, reductions in traffic-related injuries, greater economic opportunities (from lower costs and more mobility choices), and increased quality of life in both urban and rural areas."

Within this framework two recent acts provide cross-sector policy direction. The Healthy Environments for All (HEAL) Act provides overarching direction on environmental justice and the Climate Commitment Act (CCA) establishes an emissions cap and invest program and generates revenue for a variety of carbon reduction programs.



The <u>2021 State Energy Strategy</u> provides a roadmap for meeting the state GHG reduction limits across all sectors: buildings, electricity, industry, and transportation. The State Energy Strategy makes priority recommendations that represent a significant and intentional transition for the state's economy, while recognizing that overburdened communities and vulnerable populations must gain the

overburdened communities and vulnerable populations must gain the most from the transition and have the most at risk from worsening climate impacts.

Because the transportation sector produces almost 40 percent of GHG emissions in the state, decarbonizing the transportation sector is critical to achieving Washington's emissions limits.

In addition, transportation is a major contributor to local air pollution, especially for overburdened communities close to transportation facilities such as roadways, airports, marine ports, industrial activity, and railways. To operate more equitably, Washington's transportation system must reduce air pollution, improve public health, provide economic mobility, and improve quality of life statewide.

The State Energy Strategy transportation recommendations highlight specific activities to advance the state's energy goals and address historic inequities impacting overburdened communities and vulnerable populations throughout Washington. These actions are grouped into two categories:

²³ 2021 State Energy Strategy - Washington State Department of Commerce. Available at https://www.commerce.wa.gov/growing-the-economy/energy/2021-state-energy-strategy/

- Move people and goods more efficiently and equitably. Transportation efficiency can be improved in two ways:
 - o Reduce the need for travel by shortening the travel distance (e.g., through improved urban design) or avoiding the need for trips altogether (e.g., via telemedicine).
 - Shift travel to more efficient modes to move more passengers or goods per trip, such as active transportation, public transit, or maritime freight transport.

Although certain approaches may be more relevant in urban, suburban, or rural environments, comprehensive implementation will result in widespread equity and efficiency benefits.

Electrify vehicles and switch to low-carbon fuels

Decarbonizing transportation requires that vehicles use zero-emission fuels. Making
the transition to these vehicles demands accessible and affordable charging and
refueling infrastructure, sufficient incentives to support rapid adoption, and education
and outreach so that Washingtonians have the information to choose their mobility
future.

Commerce prepares a biennial energy update to report on State Energy Strategy implementation. The <u>2023 Biennial Energy Report</u> identified significant accomplishments including passing the HEAL Act and the CCA. These two acts provide overarching direction guiding Washington's implementation of transportation GHG reduction efforts. The report also identifies next steps by economic sector.

2.1.1. Healthy Environment for All Act

Passed in 2021, the <u>Healthy Environment for All (HEAL) Act</u> is Washington's cornerstone environmental justice legislation, creating a coordinated state approach toward identifying and addressing environmental and health disparities for overburdened communities and vulnerable populations.

The two key objectives of the HEAL Act are to:

- Promote the equitable distribution of environmental benefits while investing in communities that experience the greatest environmental and health burdens.
- Reduce environmental and health disparities among overburdened communities and vulnerable populations in Washington and improve the health of all residents.

The HEAL Act created the Environmental Justice (EJ) Council to provide recommendations to the Governor and the Legislature, track state progress, and provide guidance to state agencies. The EJ Council must track, measure, and report on EJ implementation. Likewise, identified agencies, including Commerce, Ecology, and WSDOT, are required to develop EJ implementation plans, metrics to track agency EJ goals, and equitable funding strategies to ensure that EJ is incorporated into agency decision making.

HEAL Act strategic actions most relevant to this TCRS include:

Engagement – Each agency must create a community engagement plan that describes how
it will engage with overburdened communities and vulnerable populations as it evaluates new
and existing activities and programs. Each agency is also required to develop a framework to
engage with and conduct formal consultation processes with tribal governments addressing
tribal considerations regarding environmental and health disparities.

- Reporting and metrics Each agency must report annually on the development and implementation of environmental justice in agency strategic plans, funding decisions, and other engagement activities related to EJ.
- Budgets and funding Each agency must incorporate EJ principles into its decision processes for budget development, making expenditures, and granting or withholding environmental benefits. Agencies must equitably distribute funding and expenditures to overburdened communities and vulnerable populations while providing meaningful opportunities for inclusive public participation in agency expenditure decisions and set goals for directing funds to these communities.

2.1.2. Climate Commitment Act

Enacted in 2021, the <u>Climate Commitment Act (CCA)</u> directs Ecology to implement a capand-invest program for carbon emissions. The program sets a limit on carbon emissions from large emitters, including transportation fuel suppliers,²⁴ and auctions emissions allowances to capped entities. Over time the number of available carbon allowances decline, requiring capped entities to reduce their emissions.

In 2023, section 70A.65.030²⁵ of the CCA was amended, adding the requirement that agencies must conduct an EJ assessment consistent with the requirements of RCW 70A.02.060 of the HEAL Act when allocating funds or administering grants or programs funded by certain accounts.

The CCA directs the revenue raised through the auction to state programs that reduce emissions, improve equity, and increase climate resilience. At least 35 percent of funds must benefit overburdened communities, with a minimum of 10 percent allocated to tribal communities. Additionally, the EJ Council makes recommendations to the Legislature on how auction revenue should be used. Agencies using funding from CCA revenue must report their progress toward EJ goals.

The CCA revenue is a significant new source of funding for transportation projects and programs that reduce emissions. The use of these funds illustrates the state's multifaceted approach to address carbon reductions. An estimated \$5.4 billion²⁶ is expected to be invested in transportation emission reduction efforts over a 16-year span (fiscal years 2023 to 2038). The first two quarterly auctions raised \$856 million.²⁷

2.2. Move people and goods more efficiently and equitably

The State Energy Strategy identifies two overarching approaches to reducing transportation GHG emissions – the first is to move people and goods more efficiently and equitably. Improving efficiency takes several forms, each supporting decarbonization in a slightly different, but important, way.

While eliminating the need for some trips directly cuts the energy used for transportation, improving trip efficiency reduces the amount of energy needed for a trip.

The State Energy Strategy identified that as the state seeks to decarbonize transportation, improving efficiency is fundamental to reducing the cost of the transition to alternative fuels.

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²⁴ Exceptions are identified in RCW 70A.65.080 (https://app.leg.wa.gov/RCW/default.aspx?cite=70A.65.080) and WAC173-446-050 (https://app.leg.wa.gov/WAC/default.aspx?cite=173-446-040)

²⁵ SB 5187

²⁶ Washington State Legislature, Move Ahead Washington Climate Commitment Act Spending. Available at http://leap.leg.wa.gov/leap/Budget/Detail/2022/ctLEAPDocument2022-A-030922.pdf

²⁷ Learn more from the Department of Ecology: https://ecology.wa.gov/Air-Climate/Climate-Commitment-Act/Cap-and-invest/Auctions-and-market .

The State Energy Strategy states that, "By reducing energy use through energy efficiency, the state will reduce the need for investment in infrastructure resulting in cost savings." In other words, needing less energy to meet our transportation needs means less energy infrastructure to meet those needs.

Reducing the amount of travel also reduces transportation infrastructure needs, which, in turn, avoids the embodied emissions associated with construction. The state is also looking at ways to reduce embodied emissions associated with its construction activities through careful consideration of materials used, materials suppliers, and construction practices.

The State Energy Strategy identifies the categories below for efficiency actions; relevant state policies and programs are identified.

2.2.1. Set clear and ambitious targets

An important first step in improving transportation system efficiency is for the state to establish targets and milestones that provide clear direction and identify trends.

Per capita Vehicle Miles Traveled (VMT) Targets Proviso

Washington State established per capita VMT targets in 2008. In the 2021 Transportation Budget, the "VMT Targets Proviso" directed WSDOT to work with Commerce in developing per capita VMT targets for counties meeting specific population criteria in partnership with local jurisdictions, regional transportation planning organizations, and other stakeholders. An initial technical report, an interim report, and the final report document the findings from this work:

- <u>Technical Report</u> (2021) provides background on the VMT proviso, identifies included counties, and describes the existing per capita VMT reduction benchmark.
- <u>Interim Report</u> (2022) describes work to date, including foundational analysis and stakeholder engagement results.
- <u>Final Report</u> (2023) defines a process for developing targets at a region scale (RTPO/MPO), the costs associated with carrying the work forward, and provides 24 potential changes to laws and rules for the legislature's consideration.

2.2.2. Improve land use transportation system planning and coordination, prioritizing VMT reduction

To improve Washington's transportation system's efficiency and equity, the state is taking steps to set statewide priorities for land use planning, infrastructure development, and service improvements. The state provides resources to enhance the capacity of local jurisdictions and community groups to pursue those priorities. Strategy, design, and deployment must reflect each community's needs. To achieve transportation efficiency targets, the state must set clear priorities for local jurisdictions to follow.

This direction reflects the fundamental shifts in land use planning that are needed to create communities that are truly walkable and bikeable by focusing growth in diverse, compact communities.

Effective inter-jurisdictional coordination is essential for successful VMT-reducing measures, including developing transit systems, walking and cycling infrastructure, and multimodal

²⁸ Washington State Department of Commerce, Washington 2021 State Energy Strategy. Available at https://www.commerce.wa.gov/wp-content/uploads/2021/01/WA_2021SES_Chapter-B-Decarbonization-Modeling.pdf, page 20

connections. Existing transportation systems planning tools, such as the <u>Statewide Human Services Transportation Plan</u>, the <u>State Public Transportation Plan</u>, and the <u>State Active Transportation Plan</u>, support this coordination and identify gaps in infrastructure and service throughout the state.

Amending the Growth Management Act

In place since 1990, the Washington State <u>Growth Management Act (GMA)</u> requires some cities and counties to develop comprehensive plans and development regulations for their communities. The GMA has undergone periodic updates with recent updates addressing climate change and emission reductions.

In 2021, the Legislature directed Commerce²⁹ to <u>develop guidance</u> for counties and cities to address climate change issues within their comprehensive plans. Over the course of this multiyear project, Commerce, in partnership with WSDOT and other state agencies, developed guidance that covers both GHG reduction and resilience in preparation for adverse effects from climate change. The GHG guidelines include a set of actions that counties and cities may take through updates to their comprehensive plans and development regulations that have a demonstrated ability to reduce per capita VMT and are achievable throughout the state, including in small cities and rural cities. This guidance is now available.

The 2023 Legislature amended GMA³⁰ by adding new climate change and resiliency planning requirements for some cities and counties. For the subset of local governments fully planning under the GMA, these changes include adding GHG emission reductions and per capita VMT reductions to the transportation goal, requiring the land use element to consider urban planning approaches that reduce per capita VMT, and changes to the transportation element planning requirements that encourage the development of efficient multimodal transportation systems that reduce GHG and per capita VMT. The legislation directs Commerce (in consultation with WSDOT) to publish guidelines that specify measures counties and cities may implement via comprehensive plan updates and development regulations. The measures included must have the demonstrated ability to increase housing capacity within urban growth areas or reduce GHG emissions and consider emissions reductions achieved through statewide programs. The guidelines must prioritize measures benefitting overburdened communities, including communities that have experienced disproportionate harm due to air pollution, drawing upon the most recent Department of Health disparities data. These guidelines must be consistent with applicable requirements of the HEAL Act. The work completed in early 2023 will be revised to meet the new 2023 legislative requirements.

In support of this work, each year WSDOT must provide per capita VMT for each city in the state and for the unincorporated areas of each county.

Increasing housing density

Washington State recognizes the importance of housing development patterns in addressing transportation GHG emissions. Increasing housing density typically reduces travel distance and makes alternatives to driving alone more viable. Several bills to address housing needs and increase housing density came out of the 2023 legislative session:

 HB 1110 – Increasing middle housing in areas traditionally dedicated to single-family detached housing – establishes minimum development densities in residential zones and creates requirements for certain cities to allow multiple dwelling units on residential lots. Commerce will provide technical assistance to cities implementing the requirements.

²⁹ (<u>SB 5092</u>) (Sect. 129(126))

³⁰ HB 1<u>181</u>

- HB 1337 Expanding housing options by easing barriers to the construction and use
 of accessory dwelling units modifies GMA for accessory dwelling units (ADU) within
 urban growth areas by requiring cities and counties planning under chapter 36 to adopt
 regulations providing for ADUs and places limits on these regulations.
- SB 5058 Exempting buildings with 12 or fewer units that are no more than two stories from the definition of multiunit residential building – modifies the definition of a multiunit residential building. In effect, this changes state requirements for smaller residential buildings.
- SB 5412 Reducing local governments' land use permitting workloads requires cities and counties to exempt all residential housing projects within cities and middle housing project in county urban growth areas from the State Environmental Policy Act (SEPA) if the project is consistent with all development regulations.

Community-centered carbon reduction strategies

To ensure that overburdened communities have adequate resources to participate in and address GHG reductions in their communities, the 2023 Transportation Budget includes \$3 million for WSDOT to develop and implement a community outreach, education, and technical assistance program. This program will support overburdened communities and their partners in developing community-centered carbon reduction strategies that make meaningful community impacts and help gain access to available funding to implement these strategies, where applicable. The legislation allows WSDOT to provide appropriate compensation to members of overburdened communities who provide solicited community participation and input needed by WSDOT to implement and administer the program.

2.2.3. Expand and align transportation funding with emissions and equity goals

Building a more efficient and equitable transportation system in Washington requires investments to develop and maintain new infrastructure while ensuring that existing infrastructure is safe and functional. Funding must be prioritized to align investments with per capita VMT reduction and equity targets.

Climate Commitment Act funding

The CCA, described above, is generating new revenue through allowance auctions. Per the CCA, a portion of this revenue is directed to transit and active transportation investments. Although many of the funded programs pre-date the CCA, the level of funding is increasing with CCA funds.

Passed in 2022, the Move Ahead Washington transportation funding package allocates \$5.4 billion dollars from the CCA for transportation investments over 16 years.³¹ The bill will provide significant investments for active and public transportation.

Over the term of Move Ahead Washington, active transportation investments total over \$1.2 billion and include funding for Safe Routes to Schools, school-based bike programs, bike and pedestrian grants, bike and pedestrian projects, Complete Streets, and connecting communities grants. Over \$164 million is provided in the 2023-2025 biennium.

Public transportation investments in Move Ahead Washington total just over \$3.0 billion. These investments include transit support grants, transit projects, tribal transit mobility grants, transit coordination grants, special needs transit grants, bus and bus facility grants, green transit grants, and transportation demand management investments. In addition, funding is

³¹ http://leap.leg.wa.gov/leap/Budget/Detail/2022/ctLEAPDocument2022-A-030922.pdf

provided to support the new 18 and under fare-free policy for the ferry system and rail. In the 2023-2025 biennium, CCA funding includes about \$406 million for public transportation operating support and capital expenses, including electrifying transit vehicles, across the state.

2.2.4. Remove barriers to transit, walking, and cycling

Boosting transit ridership and the use of active transport options requires a comprehensive approach involving land use change, transit service expansion, high occupancy vehicle infrastructure,³² and travel-demand management measures implemented at local and regional levels. To be effective and mutually supportive, transit systems, sidewalks, and bike infrastructure need to be complete networks.

New funding supports opening these modes to those who might otherwise not be able to access them through bike subsidies and free transit. The <u>State Active Transportation Plan</u> (2020) notes that the state's active transportation network is still incomplete and additional funding is needed to expand the network and fill gaps. The state's <u>Transportation Demand Management Strategic Plan 2019-2023</u> explains how the state and partner organizations are expanding travel options across the state.

The CCA is providing needed funding to expand both transit and active transportation options. Additional funding is making public transit safer, faster, more reliable and convenient, and more accessible to increase ridership while reducing emissions. High occupancy vehicle lanes allow transit vehicles to operate efficiently in congested areas.

Rail

<u>2019 Washington State Rail Plan</u> provides a framework for future actions and meets federal and state requirements. This plan analyzes existing rail systems, identifies trends, suggests strategies, and sets forth an investment plan for infrastructure and equipment for both freight and passenger rail transportation.

Complete Streets

<u>Complete Streets</u> is a multifaceted roadway design approach for safe and accessible streets for all users, including public transportation and vulnerable roadway users, like pedestrians, cyclists, and persons with disabilities. The Move Ahead Washington transportation funding package includes a Complete Streets requirement.³³ In July 2022, WSDOT began incorporating Complete Streets principles into the design of projects costing more than \$500,000 that are located within population centers, removing barriers to access for pedestrians, bicyclists, and transit users.

Travel Washington Intercity Bus

This intercity bus service connects rural communities to major transportation hubs and urban centers; fills gaps in the public transportation network; and makes travel more accessible, reliable, and convenient. <u>Travel Washington</u> typically provides more than 30,000 trips per year, serving some of the most rural parts of the state.

 $^{^{32}}$ WSDOT has established and has plans to expand a high-occupancy vehicle network: $\underline{\text{https://wsdot.wa.gov/travel/roads-bridges/hov-lanes/hov-system-map}}$

³³ RCW 47.24.060

Youth ride free

The Move Ahead Washington transportation funding package created the Transit Support Grant program. To be eligible to receive these grant funds, transit agencies must have a documented fare-free policy for riders 18 years and under.³⁴ The Washington State Ferry system has also been funded for the fare-free policy for those 18 and under riding as a passenger in a vehicle or walking onto a ferry.35

E-bike subsidies

The 2023-2025 Transportation budget provides \$5 million to establish an e-bike subsidy program for individuals 16 years or older. Individuals with household incomes at or below 80 percent of the county median income can receive a rebate up to \$1,200 on the sale of an ebike and qualifying equipment and services. For all others, the rebate is up to \$300.

Bike and pedestrian facilities as public facilities

In the 2023 session, the legislature provided local governments with increased flexibility to use impact fees to fund alternative commuting modes and apply those fees for "bike and pedestrian facilities designed with multimodal commuting as an intended use."36

Intercity Rail

Amtrak Cascades provides regular service between Vancouver, BC and Eugene/Springfield, OR. BNSF Railway owns the tracks; Washington State owns the train cars; and Amtrak operates the trains. WSDOT has started the process to update the Amtrak Cascades Service Development Plan,37 including developing service option rider forecasts. Work on the preliminary plan is anticipated by December 2023.

Amtrack also provides daily east-west service across the state on the train that travels between Seattle and Chicago.

Frequent Transit Service Study (2023)

In its 2022 session, the Legislature directed WSDOT to study and report on statewide transit service benchmarks. The report:

- Identifies gaps in accessible, frequent fixed-route transit.
- Presents funding scenarios that address identified gaps.
- Analyzes gaps for disparities in race, age, and disability.
- Recommends further studies to measure access to all forms of public transportation.
- Discusses the expansion of fixedroute transit and other forms of public transportation (e.g., demand response, micromobility, ridesharing).

Ultra high-speed rail

WSDOT is studying how ultra-high-speed rail might serve as a catalyst to transform the Pacific Northwest. During the 2023 legislative session, the Legislature allocated \$4 million for continued analysis and the development of an expanded framework for ultra high-speed rail between Vancouver, British Columbia and Portland, Oregon. The Legislature also authorized \$50 million to be used as matching funds to leverage federal funding opportunities. WSDOT is

³⁴ WSDOT news, https://wsdot.wa.gov/about/news/2022/youth-can-ride-transit-free-most-washington

³⁵ WSDOT news, https://wsdot.wa.gov/about/news/2022/state-ferries-says-welcome-aboard-free-youth

³⁷ https://wsdot.wa.gov/construction-planning/statewide-plans/passenger-rail-plans/amtrak-cascades-service-development-plan

working with a policy committee to determine the next phase of work and how it will be undertaken. In keeping with legislative direction, that work will include:

- Developing an organizational framework
- Developing a public engagement approach
- Preparing and applying for potential future federal, state, and provincial funding opportunities
- Beginning work on scenario analysis
- Recommending the structure and membership of a formal coordinating entity

Park and ride lots

Over 350 park and ride lots across the state offer travelers designated places to park their cars to take transit or meet a carpool or vanpool.

2.2.5. Support measures to optimize freight VMT

Freight moves a wide variety of goods through international transport and long-haul trucking to individual home and business deliveries. It is a multimodal system that moves goods on public and private infrastructure, with the private sector making most operational decisions. Because freight and digital commerce are expected to grow as the state's population increases, WSDOT will need to continue collaborating with the freight industry to support efficient movement of goods. This work will necessarily include exploring available options to minimize the number of vehicle-miles needed for transport and delivery.

The <u>2022 Washington State Freight System Plan</u> was developed collaboratively with public and private partners and will inform future freight transportation policies, programs, and investments.

The <u>VMT Targets – Final Report</u> recommends that heavy-duty vehicle VMT is monitored, estimated, and forecasted to better understand changes over time and inform state, MPO and RTPO, and local partners. This report also notes that, "heavy-duty vehicles deserve special acknowledgement that this travel is non-discretionary and closely associated with economic activities."³⁸

Freight mobility prioritization

In HB 1084 – Concerning freight mobility prioritization, the Legislature recognized that the negative impacts of freight transportation do not fall equally on all residents of Washington; historically, the negative impacts have been concentrated or felt most acutely within overburdened communities. Freight mobility improvement efforts must prevent or minimize community impacts in areas of high freight travel and engage the community in early planning for proposed public and private infrastructure investments. The Legislature also recognized that because freight GHG emissions contribute to global climate change, mobility efforts must transition toward zero emissions technology and proposed public and private infrastructure investments must align with this transition.

To address these issues, this legislation directs the Freight Mobility Strategic Investment Board (FMSIB) to develop a six-year investment program of the highest priority freight mobility projects across the state and across modes. These projects must include planning for

³⁸ WSDOT Vehicle Miles Traveled (VMT) Targets - Final Report, June 2023, page 41. Available at https://wsdot.wa.gov/sites/default/files/2023-06/VMT-Targets-Final-Report-June2023.pdf

sufficient engagement with affected overburdened communities and evaluate alternatives to address effects on these communities.

Truck Parking

Per state and federal law, truck drivers must take prescribed safety rest breaks. Currently, in many parts of the state, finding places to park large vehicles during rest periods is difficult, which results in idling and additional miles driven. The state is working to expand truck parking options. The Legislature provided direction and funding for several efforts in the 2023 session:

- Reconfiguring existing locations to accommodate more vehicles and provide adjacent facilities, such as restrooms
- Coordinating with local governments to identify sites and develop recommendations
- Pursuing federal grant opportunities to develop and implement parking availability information systems
- Planning for additional solutions identified through the above efforts

2.2.6. Reducing embodied emissions from transportation infrastructure

Embodied emissions in infrastructure development are the emissions released during the construction of the infrastructure and manufacturing materials of the materials used. WSDOT recently contracted with the University of Washington's Carbon Leadership Forum to determine the composition of WSDOT's supply-chain construction-related GHG emissions. This analysis shows that the three largest contributors of GHG emissions from roadway construction materials are asphalt, concrete, and steel. WSDOT is working with the Carbon Leadership Forum, with funding from a FHWA Climate Challenge Grant, to build the capacity of WSDOT and industry partners to use environmental product declarations (EPDs) to track supply-chain construction-related GHG emissions during project development and construction.

Recycled concrete

RCW 70A.205.700 requires WSDOT and its implementation partners to collaboratively establish objectives and strategies for the reuse and recycling of construction aggregate and recycled concrete aggregate. This statute also requires the annual use of 25 percent recycled construction aggregates and concrete materials on WSDOT projects unless recycled products are not readily available or cost effective. Annually, WSDOT reports to the Legislature on the status of this requirement and the use of recycled concreate aggregate on WSDOT projects.

2.3. Electrify vehicles and switch to low-carbon fuels

Industry is making rapid advancements on battery electric vehicles (EV), fuel cell technology (fuel cell vehicles, or FCVs), and low-carbon liquid and gaseous fuels. In the EV market, upfront costs are declining as range increases and the market matures; electrification of medium- and heavy-duty vehicles is advancing but lagging behind passenger vehicles.

A better understanding of the energy needs and specifications across non-road transportation segments is critical to successfully expand decarbonization to off-road travel such as rail, marine, and aviation. Aviation electrification still faces challenges and complexities that need to be addressed. For example, for short-haul trips, electrification is a promising alternative while long-haul trips will likely be better suited for alternative liquid or gaseous fuels. Shore power for marine vessels is becoming increasingly common as is electrification for short

distance vessels, such as ferries. Marine, rail, and freight operators in Washington have strategies underway to support the adoption of zero emission technology innovation by 2050.

Clean Energy Transformation Act (CETA)

A supply of clean electricity is fundamental to reducing transportation emissions by ensuring the upstream emissions from electric vehicles are eliminated by 2050.

Enacted in 2019, the Clean Energy Transformation Act (CETA)³⁹ commits Washington to a zero-emission electricity supply by 2045. The law requires utilities to phase out coal-fired electricity from their state portfolios by 2025. By 2030, their portfolios must be GHG emissions neutral; they may use limited amounts of electricity generated from natural gas if it is offset by other actions. By 2045, utilities must supply Washington customers with electricity that is 100 percent renewable or non-emitting with no provision for offsets.

CETA also requires that equity considerations become an explicit part of utility planning; decision makers must assess potential impacts on vulnerable populations and overburdened communities.

2.3.1. Set clear and ambitious statewide targets

Phasing out gasoline- and diesel-powered vehicles by mid-century is key to achieving Washington's emissions limits. To meet state GHG reduction limits, the pace of alternative fuel vehicle adoption must accelerate. Targets for EVs, low-carbon fuels, and associated infrastructure send an important signal to regulatory agencies, the public, and the private sector, demanding focused planning and increased coordination. Targets must be realistic in considering market, technological, and legal constraints, with ongoing progress reports increasing accountability and shaping policy development.

Washington's Motor Vehicle Emission Standards

The Washington Motor Vehicle Emissions Standards – Zero-Emission Vehicles law directed Ecology to adopt California's Advanced Clean Cars (ACC II) and Advanced Clean Trucks (ACT) regulations. In Washington, these are known as the Zero Emission Vehicle Standard (ZEV standard) and the Advanced Clean Truck Programs (ACT).

The ZEV standard requires 100 percent of light-duty vehicles sales to be zero-emission vehicles by 2035. This requirement scales down emissions from light-duty passenger cars, pickup trucks, and SUVs starting from model year 2026 through 2035 by requiring an increasing number of zero-emission vehicles be sold over that period. In addition, the standard sets increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce criteria pollutant emissions.⁴⁰

The Advanced Clean Truck regulation is a manufacturer ZEV sales requirement. From 2024 through 2035 model years, an increasing percentage of medium- and heavy- duty vehicles must be ZEVs. The percentage varies from 40 percent to 75 percent in 2035, depending on the vehicle type.⁴¹

⁴⁰ California Air Resources Board, Advanced Clean Cars Program. Available at https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-ii

³⁹ https://www.commerce.wa.gov/growing-the-economy/energy/ceta/

⁴¹ California Air Resources Board, Advanced Clean Trucks, Final Regulation Order. Available at https://ww2.arb.ca.gov/sites/default/files/2023-06/ACT-1963.pdf

Washington clean cars target

The Washington State 2022 supplemental operating budget⁴² established an additional state target that all light-duty vehicles sold, purchased, or registered in Washington of model year 2030 or later be electric vehicles. Effectively, this goal moves up the date for this class of vehicles to be all ZEVs by five years from the broader CA standards described above. As of this report, this is a target, not a regulatory requirement.

Improve planning and oversight of EV charging and FCV fueling infrastructure

The State Energy Strategy recommended that Washington create a state-level entity to oversee charging and fueling infrastructure planning and development. This entity should clearly identify roles and responsibilities for stakeholders and jurisdictions involved in infrastructure planning and development, including public and private utilities, MPOs and RTPOs, local governments, tribes, public and private vehicle fleet owners, equity advisors, overburdened communities and vulnerable populations, and others. By providing needed accountability and communication, this entity would help ensure the equitable, efficient, coordinated, and timely implementation of capital projects needed to deploy EV charging and FCV fueling infrastructure to support the fleet transition required by the ZEV and Clean Truck standards.

In 2022, the Legislature created the Interagency EV Coordinating Council (EV Council) to coordinate the state transportation electrification efforts. The EV Council, which is co-led by Commerce and WSDOT, will ensure the state is leveraging state and federal resources to the best extent possible and ensure zero emissions incentives, infrastructure, and opportunities are available and accessible to all Washingtonians.

Statewide Transportation Electrification Strategy (TES)

The Washington State 2022 supplemental operating budget directs the EV Council to prepare a statewide Transportation Electrification Strategy to ensure market and infrastructure readiness for all new electric vehicle sales. The plan is due at the end of 2023, with specific targets including:

- 100 percent of new passenger vehicles sold in the state ZEVs by 2030 and 2035 (targets for state ZEV goal and state mandate)
- 30-50 percent of medium-duty and heavy-duty vehicles sold in the state must be ZEVs by 2030 depending on vehicle class

The TES will provide recommendations to ensure access to electric vehicle incentives and infrastructure to all state residents, with clear consideration given to ensuring access for overburdened communities and vulnerable populations, as outlined in the HEAL act.

Washington State Plan for Electric Vehicle Infrastructure Deployment

Washington expects to invest \$71 million in National Electric Vehicle Infrastructure (NEVI) Formula Program funds and almost \$18 million in non-federal matching funds over five years. In July 2022, WSDOT submitted the required Washington State Plan for Electric Vehicle Infrastructure Deployment to access these funds. The annual plan update was completed in July 2023. This plan serves as the blueprint for a statewide network of charging stations along state and federal-aid highways to support efforts to meet statewide electrification goals. The

⁴² ESB 5974. https://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/Senate/5974-S.SL.pdf?q=20231010091559.

plan identifies benefits to overburdened communities and efforts to reduce the cost burden of electric vehicles for disadvantaged communities.

Washington identified initial investments in fast charging along the state's existing <u>Alternative Fuel Corridors</u>. Priority deployments include completing I-5 and I-90 to the federally defined build out standards. Secondary priorities for investments include completing the I-82/I-182 and US 395 corridors, followed by US 101 and US 195.

ZEV Mapping and Forecasting Tool

In 2021, the Legislature directed WSDOT to develop a Zero Emission Vehicle Mapping and Forecasting Tool "to enable coordinated, effective, efficient, and timely deployment of charging and refueling infrastructure necessary to support statewide and local transportation electrification efforts that result in emissions reductions" consistent with state goals. WSDOT contracted with the Washington State University's Energy Program and University of Washington's Sustainable Transportation Lab to assess options for such a tool. The Implementing a Mapping and Forecasting Tool for Zero-Emission Vehicle Infrastructure in Washington report identified tool requirements, considered existing tools and data, suggested a path forward. WSDOT is currently scoping the tool, scheduling the work, and accessing data sources. A publicly available release is expected late summer 2024.

2.3.2. Accelerate the market for BEVs and FCVs

The pace of alternative fuel vehicle adoption, in the near term for passenger vehicles and over a longer timeframe for medium- and heavy-duty vehicles, will need to accelerate to meet GHG reduction limits. A range of parallel and complementary policies will push the market further and ensure equitable and affordable access.

Washington's Clean Fuel Standard

Passed in 2021, Washington's low carbon fuel standard, known as the <u>Clean Fuel Standard</u>⁴³ requires fuel suppliers to incrementally reduce the lifecycle carbon intensity of transportation fuels to 20 percent below 2017 levels by 2034. Refer to **Figure 4**.

⁴³ RCW 70A.535

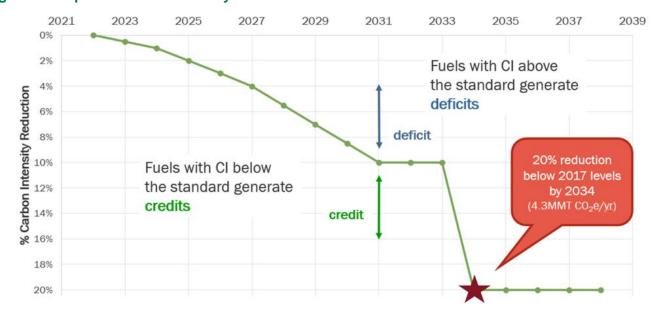


Figure 4. Required carbon intensity reduction under the Clean Fuel Standard

[Source: Ecology⁴⁴]

Fuel suppliers can achieve these reductions in several ways:

- Improving the efficiency of their fuel production processes
- Producing or blending low-carbon biofuels into the fuel they sell
- Purchasing credits generated by low-carbon fuel providers, including electric vehicle charging providers

Under the Clean Fuel Standard, the state assesses fuels to determine lifecycle carbon intensity. Fuels with a carbon intensity below the standard will generate credits, which can be kept or sold to producers of high-carbon fuels. Fuels with a carbon intensity above the standard will generate deficits. Fuel producers with deficits must buy enough credits to meet the carbon-intensity limit for that year. The allowable carbon intensity decreases over time, ensuring overall transportation fuel emissions decline.

While many efforts to reduce transportation emissions focus on tailpipe emissions, the Clean Fuels Standard evaluates the carbon intensity of fuels based on their lifecycle emissions, both the tailpipe emissions and the upstream emissions released during fuel production and transportation.

The enabling legislation directs three types of credit generators to reinvest credit revenue to further reduce transportation emissions:

- Electric utilities investing in electric vehicle charging infrastructure
- Investments funded from an Omnibus Transportation Appropriation Bill
- Backstop aggregators of electricity credits not otherwise claimed

⁴⁴ Washington Department of Ecology Clean Fuel Standard. See: https://ecology.wa.gov/Air-Climate/Reducing-Greenhouse-Gas-Emissions/Clean-Fuel-Standard

Under the Clean Fuels Standard, backstop aggregators are non-profit organizations promoting transportation electrification within the state and prioritizing projects that directly benefit disproportionately impacted communities.⁴⁵

Tax incentives

Tax incentives to reduce the financial burden of purchasing alternative fuel vehicles and charging and refueling infrastructure are offered by both the federal and the state government. Washington state currently offers incentives on vehicles and on charging infrastructure for households. Additional incentives are available for commercial entities and installations.

Climate Commitment Act funding

The CCA, as noted above, is generating significant new revenue, with a portion directed to vehicle electrification and alternative fuel investments. Current biennium, fiscal years 2023-2025, funding allocations are noted in parentheses below.

Funding for light-duty EV charging includes the <u>Zero-emissions Access Program</u> (ZAP) (\$2.8 million) that funds zero-emission carshare pilot programs in underserved and low- to moderate-income communities that do not have sufficient access to transit, and the <u>Zero-emission Vehicle Infrastructure Partnership</u> (ZEVIP) grant (\$30 million) for installation of new electric vehicle charging equipment and hydrogen fueling infrastructure along priority corridors. Both are administered by WSDOT.

Funding is also provided to Commerce for community electric vehicle adoption support, including light-duty vehicle point-of-sale incentives (\$50 million), community charging infrastructure development (\$168 million). The WA EV charging46 website provides a variety of resources and information to assist interested entities in applying for grant funds.

In addition, funding is also provided for the mapping and forecasting tool to provide future locations and information on available charging and refueling infrastructure (\$17 million).

Additional funds support grants and demonstration projects for other vehicle types and modes, including commercial vehicle infrastructure (\$120 million), hydrogen refueling infrastructure (\$3 million), electrification of port cargo handling equipment (\$2.5 million), and clean off-road equipment incentives (\$5 million).

CCA funding is also supporting <u>electrification of the Washington State Ferry system</u>. The 2023-2025 budget includes funding toward terminal electrification, converting existing vessels to diesel electric hybrid, and a new diesel electric hybrid vessel.

2.3.3. Advance clean fuels

Washington is advancing electrification for many applications; however, electrification is not currently suitable for some transportation uses. The state has several efforts underway to advance other clean fuels options.

Clean Fuels Standard

As described above, under the Clean Fuel Standard the state assesses fuels to determine lifecycle carbon intensity to ensure compliance with declining carbon intensity requirements. To meet these requirements, in addition to investing in vehicle electrification, fuel suppliers

⁴⁵ WAC 173-424-220. https://app.leg.wa.gov/WAC/default.aspx?cite=173-424-220.

⁴⁶ https://waevcharging.org/

can produce or blend low-carbon biofuels into their fuels. The Clean Fuel Standard also has provisions to encourage in-state production of biofuels.

This option is expected to increase the availability of lower carbon fuels in the state at a price competitive with petroleum fuels.

Increasing the supply of biofuels available is expected to help reduce emissions from vehicles that are harder to electrify. Biofuels can serve as a bridge fuel until other technology options become more available.

Aviation Clean Fuels Research

Move Ahead Washington funds are supporting the development of an applied sustainable aviation evaluation center where Snohomish County and Washington State University will conduct research on technologies to minimize the impact of aviation on human health and the environment, including sustainable aviation fuel, hydrogen, and battery electric storage mechanisms.

Separate funding is provided for sustainable aviation grants for pilot projects demonstrating mobile battery charging technology, hydrogen electrolysers and storage, electric ground equipment, and hanger charging technology.

Alternative Jet Fuel

Legislation enacted in 2023 provides multiple financial and policy supports for the production and use of alternative jet fuels in Washington:

- Ecology must provide at least one carbon intensity pathway for alternative jet fuel in the Clean Fuels Program by December 31, 2023.
- Washington State University must convene a workgroup to further the development of alternative jet fuel as a productive industry in Washington. The workgroup must report to the Governor and Legislature on pertinent recommendations in December 2024, 2026, and 2028.
- Alternative jet fuels are added to the fuel types under the purview of Commerce's office of renewable fuels.
- To encourage the production and use of alternative jet fuels, the state has established fuel tax incentives for alternative jet fuels that take effect July 1, 2024.

Green Electrolytic Hydrogen and Renewable Fuels Study

Commerce is overseeing the Green Electrolytic Hydrogen and Renewable Fuels Study to develop a series of recommendations for state decision-makers to consider regarding the deployment of hydrogen and renewable fuels. Recommendations will include production factors, siting considerations, and permitting efforts, with the goal of advancing the State Energy Strategy, emission reductions, and economic and EJ responsibilities.

Key outcomes of the study will be projections of hydrogen and renewable fuel potential end uses and supplies, a resource input analysis assessment that describes the electricity and water required, a Washington hydrogen end use priorities tool, and recommendations for phasing hydrogen development. The final report is due December 1, 2023.

Pacific Northwest Hydrogen Hub

The Pacific Northwest Hydrogen Association is a public-private partnership that brings together key players in the emerging hydrogen industry, including utilities, environmental groups, tribes, labor unions, users, government, and industry to advance hydrogen in the region. The regional hydrogen hub proposal includes projects in the Pacific Northwest including Washington, Oregon, and Montana. The association has been selected for negotiation with US DOE to receive federal funding as a Regional Clean Hydrogen Hub. The Hub will leverage the abundant clean power and innovative technology companies in the Pacific Northwest to accelerate the transition to clean hydrogen production and focus on decarbonizing the region's hard-to-electrify heavy-duty transportation, long-duration energy storage, ports, agriculture, and industrial operations.

2.4. From policies to implementation

Washington State has numerous policies in place to reduce carbon emissions from transportation while improving the equity of the state's transportation system. Together the Climate Commitment Act and the Healthy Environments for All Act form the backbone of the state's efforts. The Clean Fuels Standard, along with zero emission vehicles sales requirements, supported by implementation funding from the CCA and guided by equity considerations through the HEAL act will transform the vehicle fleet over time. At the same time, changing land use, investing in infrastructure that improves the bikeability and walkability of neighborhoods, and providing ready transit services together will reduce the need for single occupancy vehicle travel.

However, implementation does not end with state actions. As noted in the introduction, everyone plays a role in transitioning Washington to a clean and equitable transportation system. All partners must work together in these efforts, including state agencies, the state legislature, tribes, MPOs and RTPOs, local jurisdictions and agencies, industry partners, community-based organizations, and highly impacted communities.

The next chapter describes the types of strategies and identifies projects being implemented across the state.



Chapter 3. Strategic Actions and Projects for Transportation Decarbonization

Chapter 2 described the policies Washington State has adopted to enable State Energy Strategy implementation. State agencies, tribes, MPOs and RTPOs, local governments, and industry and community partners are leveraging existing and new programs and state and federal funding to improve transportation system equity and efficiency while decarbonizing transportation fuels.

This chapter summarizes strategies being implemented through a variety of project types across the state to reduce transportation carbon emissions and make progress toward the state GHG emissions limits. Each strategy type includes highlights of implementation efforts as examples of the breadth of work being undertaken across the state. Finally, the chapter provides a framework for how the identified strategies relate to CRP project eligibility and identifies current projects receiving CRP funds. Appendices provide additional details:

- Appendix A includes a list of strategies being pursued statewide.
- Appendix C provides a list of funding opportunities available at the time this report is completed.
- Appendix D includes a list of investments in the current State Transportation Improvement Program (STIP) that support GHG reduction.

3.1. Strategy categories

Like the policies above, the strategies below are organized by the overarching State Energy Strategy categories of **move people and goods more efficiently and equitably** and **electrify vehicles and switching to low-carbon fuels.** Within these broad categories, strategies are further sub-grouped by similar types of actions. While not exhaustive, these categories illustrate the diverse actions needed to reduce transportation GHG emissions. Examples illustrate implementation in the state.

3.1.1. Move people and goods more efficiently and equitably

Moving people and goods more efficiently and equitably means maximizing the use of our transportation infrastructure and reducing emissions while improving access for those who have historically been underserved. The patterns of our built environment and operational improvements to the transportation system can reduce both the number and distance of trips by creating shorter or more efficient routes and facilitating non-single occupancy vehicle trips. Strategies in this category reduce the need for travel, shorten the travel distance, substitute more efficient modes, and improve system and vehicle efficiency.

Land Use strategies reduce the need for single occupancy vehicle travel. Planning for future growth must reflect fundamental shifts in land use that are needed to create communities that are truly walkable and bikeable by focusing growth in diverse, compact communities.

Compact development, such as comingling housing, commercial, employment, and other types of development, reduces travel distances. Policies such as parking management (e.g., eliminating parking requirements) and transit-oriented or mixed-use development encourage the use of transit or shorten the distance between home and destinations. Additionally, zoning and development standards can support active transportation, transit ridership, and urban design patterns that minimize the need to drive.

Affordable housing must be available within compact developments. Intermixing housing for all income levels creates mixed communities that provide access to jobs, services, and goods for all.

Co-benefits of land use strategies include reduced time for travel, reduced need to own a personal vehicle, and increased access for those who do not drive. Research identified approximately 33 strategies; examples are presented below.

- The City of Tacoma's Climate Action Plan (2019) highlights updating zoning and development standards that support active transportation, transit ridership, and integrated public and private spaces that minimize parking needs. Making active transportation and transit more available and accessible and discouraging single occupancy vehicle use work together to shift transportation use away from vehicles.
- The Port of Everett's Climate Change Strategy (2020) supports continued mixed-use development at Waterfront Place Central. The development includes housing, restaurants, retail, commercial and office space, as well as outdoor amenities such as play areas, viewpoints, trails, and an outdoor performance venue. When fully realized, Waterfront Place is expected to support 2,075 family-wage jobs. The project's expected \$550 million in public/private development investment will generate \$8.6 million annually in state and local sales taxes. Recent Port investments include more than \$50 million in completed projects at the development's Fisherman's Harbor district, one of five districts at the Port.
- The Thurston Climate Mitigation Plan (2020) calls for reevaluating long-term plans to prioritize walking and biking by setting goals and plans for mode shift, such as developing car-free corridors in commercial and mixed-use areas.

Active transportation replaces vehicle travel with walking, biking, e-biking, and e-scooters. In addition to accessing nearby destinations, active transportation can connect travelers with transit services. These trips are more feasible in areas where trips are shorter. Actions in this area include identifying and filling network gaps, expanding the network, increasing the safety and comfort for active transportation modes, as well as programs that make bikes and e-bikes available, either temporarily through bikeshare programs, or permanently through subsidies for underserved communities. Active transportation has a positive public health influence by increasing physical activity. Research identified approximately 39 strategies, including examples below.

- The Northeast Washington Regional Council's Regional Transportation Plan 2042
 (2021) calls to convert former railroad rights-of-way to trails for public use. On trails
 separated from roads, cyclists typically feel more comfortable, thus more people are
 likely to choose biking as an alternative to driving.
- The Benton-Franklin Council of Governments' (BFCOG) Regional Active Transportation Plan (2020) proposes to develop criteria for pedestrian circulation serving public facilities, transit systems, and housing complexes including sidewalks as a first-last mile strategy. The plan calls for developers to be required to provide sidewalks where appropriate. BFCOG is also developing the area's first Regional Safe Routes to School plan.
- Jamestown S'Klallam Tribe's Carbon Neutral Plan (2022) raises the idea of subsidizing bicycle purchases for tribal members and employees.
- The Lummi Nation's 2016-2026 Climate Change Mitigation Plan (2016) introduces the
 concept of designating Priority Planning Areas, including those to promote walking and
 biking by identifying areas that have both a high vulnerability to climate change impacts
 and high risk for nonmotorized travelers or can benefit the most from a single action.
- The City of Tacoma's Climate Action Plan mentions the development and implementation of a funding program to prioritize and complete the city's sidewalks (including ADA improvements) and cycling network as well as Safe Routes to School improvements by 2050.



Transit, vanpool, and carpool⁴⁷ improve travel efficiency by increasing the number of occupants in a vehicle. Longer-range transit includes ferries and intercity travel (bus and rail). These modes work most efficiently in or between dense areas where there are more potential riders.

Policy actions supporting public transportation include expanding both transit service and transit facilities. Expanding transit can take a variety of forms:

- New and expanded service new routes, more frequent service
- Beyond commuter service transit service outside traditional commuter hours
- Incentives that provide equitable access to public transportation services for all
- Supportive infrastructure rail lines, bus shelters, high occupancy vehicle (HOV), lanes, and business access and transit (BAT) lanes support transit and transit users
- Community shuttles and specialized services where fixed route transit is not feasible provide access for those who do not drive

Ride share vehicles are often coordinated through employers, although do not need to be. In Washington state, ferries also provide public transportation, both where marine travel is the only way to get somewhere, as well places where water travel is more efficient than driving.

Co-benefits of increasing vehicle occupancy include greater affordability, potential for compact development, a more equitable transportation system, more accessible transportation for people of all abilities, congestion relief, and potential cost savings for travelers. The following are some specific examples.

⁴⁷ Appendix A contains 51 strategies in this category.

- The Island Regional Transportation Planning Organization's Regional Transportation Plan (2019) includes a strategy to establish a web-based One-Stop Traveler Information Portal to make it more convenient for people to use alternatives to driving alone to meet their mobility needs.
- King County's Strategic Climate Action Plan (2020) incorporates community-driven
 planning approaches that engage BIPOC communities in the transit design process as
 the agency seeks to improve transit options and infrastructure in underserved
 communities.
- The Peninsula Regional Transportation Planning Organization Regional Transportation Plan 2040 identifies engaging local communities and employers to increase the number of people who ride transit, carpool, vanpool, bicycle, walk, telework, and shift their work schedules to off-commute times as a way to reduce demand on state transportation facilities in their area. This work is an example of strategies that have been used in larger communities being applied in smaller and rural communities.
- The Move Ahead Washington transportation funding package provides funds for Transit Support Grants, which support 18-and-under fare-free programs; funds are distributed based on formula.
- Kitsap Transit offers passenger-only direct ferry service from Kingston, Southworth, and Bremerton to downtown Seattle.

Rail is typically more energy efficient per passenger or ton-mile of freight than road travel, thus switching from roads to rail can reduce emissions. In addition, moving some transportation from the roads to rail, reduces congestion on the road.

 The Washington Grain Train is jointly managed by WSDOT with the ports of Walla Walla and Moses Lake, and with Whitman County. The program has 125 grain cars that the 2,500 members of the cooperative use to move thousands of tons of grain to deep-water ports along the Columbia River and Puget Sound to ships bound for Pacific Rim markets. Operations began in 1994 to address shortages in available rail cars to transport Washington-grown grain. The internet⁴⁸ and the corresponding availability of broadband services can eliminate some trips altogether. Teleworking and telemedicine provide connections without travel. Online education provides access to educational opportunities not otherwise available. Policy actions include expanding high speed broadband connections to all communities and households across the state and providing support for employers to establish teleworking programs for work that can be done remotely. Remote connectivity provides the co-benefits of saving travel time and having access to goods, services, education, and employment that may not be available locally. The following are some examples.

- Governor's Inslee's "Building a Modern Work Environment" Executive Order 16-07 directs state agencies to maintain policies for teleworking noting that, "it's what you do, not where you do it."
- The Washington State Broadband Office is developing a Five-Year Action Plan and a State Digital Equity Plan. These two plans will establish eligibility for federal funding to deliver significant investments for the expansion of broadband access and to help close the digital divide in the state.
- The King County Strategic Climate Action Plan describes efforts to investigate how strategies such as teleworking or other evolutions in the workplace could help to decrease overall VMT, using lessons learned from the COVID-19 pandemic.

Efficient system operations⁴⁹ increase the amount of travel supported by existing transportation infrastructure and can improve vehicle efficiency, as well. System operations strategies include intelligent transportation solutions (ITS), transportation demand management (TDM), variable speed limits, and first-last mile connectivity. Additional policy actions include developing corridor prioritization to invest in speed and reliability improvements that benefit public transit in areas with greatest needs, facilitating collaboration between transit and local jurisdictions to improve speed and reliability of bus service through dedicated bus lanes and right-of-way improvements, and implementing policies to prioritize routes that balance emission reductions with ridership and equity needs. For vehicles on the road, variable speed management can keep traffic moving at optimal speeds and incident response services help clear crashes or other disruptions as quickly as possible. High occupancy vehicle lanes (HOV) improve travel times for transit and high occupancy vehicles and encourage the use of these modes. Many of these strategies fall within umbrella transportation systems management and operations (TSMO). WSDOT provides TSMO resources⁵⁰ for agency staff and partners.

When the transportation system operates efficiently, freight also benefits by not being stuck in congestion. This allows truck to operate at more efficient speeds in addition to reducing their travel time. Maximizing the person throughput of existing infrastructure reduces the need for additional infrastructure, which is not only costly, but also causes additional emissions.

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⁴⁸ Appendix A includes 9 strategies in this category.

⁴⁹ Appendix A includes roughly 89 system operation strategies identified during research.

⁵⁰ https://tsmowa.org

- WSDOT is using transit improvements and user fees to manage traffic and reduce congestion on the state highway system. These improvements include allowing buses to travel in the shoulder at peak times to bypass congestion and designing interchanges to include transit stops with quick access on and off a freeway. Express toll lanes allow individual drivers to access high-occupancy lanes by paying a toll.
- Seattle's Climate Action Plan describes building a Shared Mobility Hubs program to aggregate transportation connections, travel information, and other mobility amenities into a seam-less, understandable, and on-demand travel experience. For example, Shared Mobility Hubs can provide improved connections to public transit via electrically powered shared mobility services such as car share and ride-hail services.
- Vancouver Area Smart Trek, the VAST Program, is a coalition of state, regional, and local agencies that have been actively working together for over 10 years implementing ITS and operations solutions to address regional transportation needs. The operational projects include traveler information, transit signal priority, freeway and arterial management, and coordinated incident management.

User fees generate revenue, influence decisions about travel, and determine who bears the cost of transportation. Policies in this area include imposing fees on fuel use, vehicle registration fees, road usage charges, and parking fees. Co-benefits of user fees include financial incentives to use other modes. Following are two examples: Appendix A includes 11.

- In March of 2023, the City of Seattle increased on-street paid parking rates. The City seeks to price parking to maintain one or two open parking spaces on each block. They analyze parking conditions multiple times a year and adjust rates as needed.
- A road use charge (RUC) is a per mile charge drivers would pay instead of a gas tax. Since 2012 the Washington State Transportation Commission has been working to determine if a RUC is feasible. Their <u>2020 Road Use Charge Assessment Final</u> <u>Report</u> documents their findings and recommendations that a RUC is feasible in the state.

Fleet operations management can eliminate some trips or shorten and ensure the most efficient travel options are used to meet travel needs. Freight and other partners do this as a matter of business to save employee time and reduce fuel and vehicle expenses. Opportunities include reducing business travel emissions by promoting virtual meetings, telework, and alternative modes. For organizations that operate a vehicle fleet, careful fleet management offers opportunities to reduce emissions through vehicle selection, maintenance, and operations. Truck parking facilities that ensure drivers can conveniently take mandatory breaks support efficient truck transport. Co-benefits can be time and cost savings. Two examples follow: Appendix A includes 14.

- A common theme found in the 2016 Puget Sound Maritime Emissions Inventory is increasing fuel efficiency through the use of idle reduction equipment by rail operators (e.g., Tacoma Rail) and ports (e.g., Port of Tacoma).
- BNSF Railway is replacing outdated locomotives with better technology, including newer fuel-efficient locomotives, and using rail lubricants to increase fuel efficiency.

Vehicle efficiency determines how far a vehicle can go on a given amount of energy. Improving vehicle efficiency directly reduces the amount of energy needed and associated emissions. Vehicle efficiency standards, often referred to as CAFE (corporate average fuel economy) standards, are established by the federal government (and California) to set minimum vehicle fuel efficiencies. However, everyone, from the individual vehicle owner to the largest corporation, can make the choice to drive the most efficient vehicle available that meets their needs and to operate the vehicle efficiently. Co-benefits of vehicle efficiency include cost savings through lower fuel use and a reduction in other pollutants. The box below provides two examples: Appendix A lists 26.

- King County's Strategic Climate Action Plan (2020) calls for fleet and workforce
 efficiencies such as right-sizing vehicles, pooling equipment, and expanding
 employee remote work options.
- The 2021 Washington State Truck Parking Workshop brought stakeholders together to both identify primary truck parking challenges and identify public and private sector practices for managing these challenges. The workshop built a collective set of potential truck parking strategies and funding options for Washington.

3.1.2. Reduce the carbon intensity of transportation fuels

Reducing the carbon intensity of transportation fuels is critical to meeting the state's GHG reduction limits. Options for reducing fuels' carbon content varies by use and vehicle type. Options will continue to evolve over time as technology and the market evolve. As described in Chapter 2, Washington's Clean Fuel Standard requires fuel suppliers meet declining limits on their fuels' carbon intensity. This program supports the transition to electric vehicles and is expected to increase the cost-effectiveness of alternative fuels, like renewable diesel. In addition to transitioning to electric vehicles and using low-carbon fuels, the state can reduce emissions by addressing the carbon intensity of our transportation infrastructure.

Electric vehicles rely on electricity instead of gasoline or diesel fuels. While they have no tailpipe emissions, generating the electricity they run on can release GHG emissions. Still, analysis shows that electric vehicles produce fewer GHGs per mile than gasoline or diesel vehicles.⁵¹ In Washington State, the abundance of hydropower contributes to relatively low emissions from electricity generation. As the electric grid increasingly supplies more renewable power, the emissions associated with charging electric vehicles will further

⁵¹ Environmental Protection Agency, Electric Vehicle Myths, https://www.epa.gov/greenvehicles/electric-vehicle-myths#Myth1

decrease. The Clean Energy Transformation Act (CETA) requires power suppliers in Washington provide 100 percent renewable energy by 2045.

To rapidly transition to electric vehicles, the state is advancing a combination of charging infrastructure, public outreach, incentives, grants, tax incentives, sales restrictions, and fuel regulations statewide. While some of these actions must be carried out at the state level, many are best implemented locally.

The <u>Encouraging High-Consumption Fuels Users to Use Electric Vehicles</u> report, prepared by the Washington State Joint Transportation Committee, confirms that encouraging high-consumption fuel users to adopt EVs faster than the general population would speed the displacement of GHG emissions. The report identifies policy options and barriers.

Revenue from the Climate Commitment Act's cap and invest program, as well as federal funds, are being invested in new electric vehicle charging infrastructure. Similarly, programs to make EVs accessible and affordable for all are also being funded.

The following are some examples promoting electric or other alternative fuel technologies.

- During the 2021-2023 biennium, the state's Zero-Emissions Access Program
 awarded \$2.2 million dollars to nonprofits or local governments for carshare pilot
 programs in underserved and low- to moderate-income communities that have
 limited access to public transportation or are in areas where emissions exceed
 state or federal standards. For example, Lopez Island Community Land Trust has
 implemented a carshare program for its housing co-op community. The program
 has helped people who rarely have a chance to drive off the island venture out for
 family visits, healthcare needs, and leisure.
- The 2040 Regional Transportation Plan (2017) for the Okanogan Region calls for strategically developing a robust EV charging network along the region's scenic highways and other key corridors.
- The Thurston Climate Mitigation Plan (2020) recommends partnering with dealerships to provide purchase incentives for residents, including a group purchase program to provide deep discounts on alternative fuel or electric vehicles.
- The Ports of Tacoma and Seattle are installing shore power infrastructure at marine terminals to reduce emissions from ships while berthed at port. The Port of Everett is leveraging CMAQ funding to invest in electrical shore power infrastructure for vessels.
- South Whidbey School District received an EPA Clean School Bus grant for an electric school bus and charging station.

Green hydrogen and low-carbon fuels,⁵² such as biodiesel and renewable diesel, produce fewer lifecycle GHG emissions than gasoline and diesel. The availability of liquid biofuels fuels is key where electric or hydrogen vehicles are not yet available – for construction equipment, long-haul freight, marine, rail, and aviation. The Clean Fuel Standard is expected to improve the cost effectiveness of these fuels and increase their availability in the state. The following are examples.

- The City of Tacoma's Climate Action Plan (2019) includes expanding bulk renewable fuel purchases for city fleet vehicles to fully meet projected needs.
- The Seattle-Tacoma International Airport is exploring opportunities to transition their bus fleet to operate with renewable natural gas (RNG) and advance the use of electric ground support equipment (eGSE).

Embodied emissions in infrastructure development are the emissions released during materials manufacturing and infrastructure construction. For example, consider the steel used in construction: the ore is mined, processed to form the steel, formed into products, transported to the construction site, and installed. Each step uses energy that produces emissions.

The data to track and evaluate emissions from this supply chain is becoming increasingly available through "environmental product declarations" (EPD), as are tools to consider the myriad combinations of design and material options. Embodied emissions reduction policies require suppliers to report and collect data and construction projects to use this information to help meet emission targets. The following is an example.

• WSDOT recently contracted the University of Washington's Carbon Leadership Forum to determine the composition of WSDOT's supply-chain construction-related GHG emissions. This analysis shows that the three largest contributors of GHG emissions from roadway construction materials are asphalt, concrete, and steel. WSDOT is now working the Carbon Leadership Forum, with funding from a FHWA Climate Challenge Grant, to the build capacity of WSDOT and industry partners to use EPDs to track supply-chain construction-related GHG emissions during project development and construction. Assessing the composition of and developing the capacity to track supply-chain construction-related GHG emissions are first steps in considering how to reduce these emissions.

3.2. Relationship between categories and the federal carbon reduction program

The Bipartisan Infrastructure Law (BIL) lists project types explicitly eligible for CRP funding.⁵³ These project types include, but are not limited to, public transportation; infrastructure for pedestrians, bicyclists, and other nonmotorized forms of transportation; replacing street lighting and traffic control devices with energy-efficient alternatives; and projects to support

⁵² Appendix A lists over 45 strategies in this category.

⁵³ USDOT, FHWA, Carbon Reduction Program, https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm

the deployment of alternative fueled vehicles. In their Implementation Guidance,⁵⁴ FHWA notes that other projects may be eligible if they can demonstrate reductions in transportation emissions; they provide the following examples: sustainable pavements and construction materials, climate uses of right of way (such as renewable energy installations), and projects supporting mode shift.

The FHWA Guidance states that CRP funded projects must be identified in a regional Transportation Improvement Program (TIP), included in the Statewide Transportation Improvement Program (STIP), and be consistent with the applicable Metropolitan Transportation Plan and the Long-Range Statewide Transportation Plan.

3.2.1. Recent investments

Across Washington State, the state, tribal governments, local jurisdictions, and numerous agencies are using a variety of funds to construct, maintain, and operate an increasingly efficient and equitable transportation system. Expenditures are going to building active transportation infrastructure and expanding transit, to electrifying buses and ferries, and to expanding electric vehicle charging across the state.

Appendix C provides a list of funding opportunities available at the time this report is completed.

2021-2023 Investments

Over the 2021-2023 biennium, WSDOT invested over \$375 million in transit, active transportation, and electrification projects. Figure 5 breaks down this funding by investment type. Much of this funding was passed onto local partners through grant programs: transit, active transportation, EV charging, and sustainable aviation funds. This amount only includes projects expressly funded for these purposes; other projects may include active or transit elements but are not included in this total. Appendix D provides a comprehensive list of projects programmed in the 2023-2026 STIP that include active transportation, transit, and electrification elements.

Figure 5. 2021-2023 biennium carbon reduction investments

Investment Type	Amount
Active Transportation	90,500,000
EV Charging Infrastructure	13,009,000
Ferry Vessel Electrification	9,425,000
Passenger Rail Planning	500,000
Sustainable Aviation Grants	10,000
Transit Operations	241,290,000
Transit Electrification	20,849,000
Transportation Efficiency Planning (VMT Proviso)	500,000
Total	376,083,000

⁵⁴ USDOT FHWA Carbon Reduction Program (CRP) Implementation Guidance. Available at https://www.fhwa.dot.gov/environment/sustainability/energy/policy/crp_quidance.pdf

A few example projects funded in during the 2021-2023 biennium demonstrate the breadth of emissions reduction work Washington State is undertaking:

- Transit expansion South Whidbey Transit Center (\$7.5 million) WSDOT received funding for the design, engineering, and construction of the South Whidbey Transit Center, located in Island County. The new transit hub will include six bus bays, allowing the transit agency to expand zero emission bus service and connect residents to ferry service, trails, and businesses in South Whidbey Island.
- Passenger Vehicle Charging Infrastructure (\$8.8 million) grants funded 11 new DCFC stations and upgraded 12 DCFC stations across the state:
 - Cascade Loop Corridor Three new DCFC stations serving the Cascade Loop National Scenic Byway (Twisp, Pateros, Newhalem)
 - West Sound Ferry Cluster Six new DCFC stations serving the western termini of 5 state ferry routes (Port Townsend, Poulsbo, Bainbridge, Gig Harbor, Kingston, Port Orchard)
 - West Coast Electric Highway modernizing the 12 original DCFC stations along the West Coast Electric Highway (Bellingham, Burlington, Sultan, Skykomish, Snoqualmie, Leavenworth, Wenatchee, Cle Elum, Tumwater, Centralia, Castle Rock, and Ridgefield)
 - Renton One new DCFC station
 - Kent One new DCFC station
- Spokane, Shaw Middle School Garland Ave Pathway (\$1,228,528) Funds support pedestrian improvements in Spokane, WA, including curb extensions, marked crosswalks, lane width reductions, median channelization and turn restrictions, parking lane removal, ADA curb ramp retrofits, audible pedestrian signal, leading pedestrian intervals, shared-use path, and trail/driveway crossing.
- Union Gap Main Street Pedestrian Crossing Improvements (\$393,009) Funds supported pedestrian improvements in Union Gap, including lane width reduction, stop signs, ADA curb ramp retrofits, and a sidewalk with curb and buffer.
- Skokomish Indian Tribe, SR 106/Reservation Road Sidewalk Extension (\$318,465) This project included ADA ramp retrofits, a sidewalk with curb, a walkway with bio-swale and ditch buffer, and pedestrian-scale lighting to improve safe access to the Hood Canal Elementary School.
- Lakewood, Farwest Drive SW (\$1,336,000) Funds support pedestrian and bicyclist improvements in Lakewood, including pedestrian lighting, road reconfigurations, ADA curb ramp retrofits, sidewalk, and bike lanes.

2023-2025 Biennium Investments

Looking forward, Washington is expanding emission reduction investments. The Climate Commitment Act (CCA) is generating significant revenue that is being directed to emission reduction investments, including transportation. The 2022 Moving Ahead Washington transportation funding package outlines how CCA funding directed towards transportation will be invested over 16 years. Funds are supporting five broad categories of improvements:⁵⁵

http://leap.leg.wa.gov/leap/Budget/Detail/2022/ctLEAPDocument2022-A-030922.pdf

- Active transportation \$1.2 billion
- Transit programs and Projects \$3.0 billion
- Alternative Fuel and Electrification \$517 million
- Ferries \$435 million
- Rail \$162 million

In addition to state funds, Washington is using federal funds to support investments to reduce carbon emissions. To date, about \$16.4 million in Carbon Reduction Program funds have been programmed. Figure 6 identifies currently programed CRP funded projects. In addition, significant amounts of other federal funding types are being invested to support emission reductions. In particular, many roadway projects include an active transportation element and the NEVI program is supporting electric vehicle charging infrastructure.

A list of projects programmed in the current STIP (2023-2026) is in Appendix D. It should be noted that not all transportation investments are programed through the STIP.

Figure 6. Currently programmed Carbon Reduction Program funds

Project Type	Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Active transportation	Boblett St Traffic Channelization and Corridor Improvements	395,288		61,693	456,981
Active transportation	CDTC Interurban Pathways Plan	986,100		153,900	1,140,000
Active transportation	Fish Lake Trail Connection to Centennial Trail Phase 1	2,291,720		703,992	2,995,712
Active transportation	Fish Lake Trail Connection to Centennial Trail Phase 2	650,250		199,750	850,000
Active transportation	Millwood Trail - Children of the Sun Trail to Fancher	237,405		119,595	357,000
Active transportation	Pedestrian Path on Pacific Highway	520,000			520,000
Active transportation	SE 34th Street Safety & Mobility Project	300,000		80,000	380,000
Active transportation	SR 544 S. Everson Sidewalk Improvements	452,642		70,644	523,286
Active transportation	Telegraph Road Multimodal Safety Improvements	641,294		100,086	741,380
Transit	Boeing Access Rd Infill Station	6,250,916			6,250,916
Transit	Highway 99 Bus Rapid Transit	1,500,000			1,500,000
Intersection improvements	Birch Bay Lynden Rd & Blaine Rd Intersection Improvements – adds a roundabout to reduce delay	121,396		18,947	140,343
Intersection improvements	E. Smith & Hannegan Road Intersection Improvements – adds a roundabout to reduce delay	452,642		97,358	550,000
Intersection improvements	NE 119 th Street/NE 152 nd Avenue Intersection – improve safety – adds a roundabout	975,000			975,000

Intersection improvements	Develop and implement traffic signal timing plans along priority arterials within Clark County	658,413		
Total		16,433,066	1,605,965	18,039,031



Chapter 4. Next Steps

This first Washington State Transportation Carbon Reduction Strategy (TCRS) describes the many statewide policies, strategies, programs, and projects addressing transportation GHG reductions across the state.

Yet, there is more to do. These next steps highlight actions needed to ensure the existing framework is working effectively, gaps are filled, and progress continues.

4.1. Support strong collaboration

As this strategy documents, meeting state transportation GHG reduction targets requires partnerships to implement solutions across the state. Regional and local transportation jurisdictions must scale this strategy to their local context. Collaboration will be needed to incorporate the information in this document in subsequent planning efforts, from local comprehensive plans, to MPO and RTPO regional efforts, to other WSDOT plans.

While developing this strategy, WSDOT clearly heard that, when initiating transportation decarbonization efforts, the state must provide engagement support and resources for small jurisdictions, overburdened communities, vulnerable populations, and rural communities to participate in the work.

To help address these needs, the 2023-2025 budget includes funding for WSDOT to create a community outreach, education, and technical assistance program for overburdened communities and their partners to develop meaningful community-centered carbon reduction strategies, and to help communities access available funding to implement these strategies, where applicable.⁵⁶

Collaborating with transportation industry partners is also critical to ensure all parts of the transportation sector decarbonize rapidly.

4.2. Expeditiously implement existing policies and programs and track progress

Chapters 2 and 3 show the breadth of existing policies and programs across Washington to reduce transportation GHG emissions. These efforts will reduce emissions, particularly from the light-duty fleet. To be successful, the state needs to ensure that efforts are fully implemented, which will require funding, staffing, and effort over time.

Regularly assessing the effects of investments on emission reductions, equity, and travel efficiency is necessary for evaluating policy and program effectiveness and progress toward these overarching goals.

Similarly, the State Energy Strategy recommends setting "clear and ambitious targets" as the first step toward both improving efficiency and shifting to electric vehicles and alternative fuels. Having targets helps determine if the state is making timely progress, if additional resources or supports are needed, or if the state needs to consider other pathways. The State Energy Strategy recommends targets in several areas:

- Per capita VMT
- Transit and active transportation

⁵⁶ 1125-S.PL.pdf (wa.gov) Sect 219(13)

- Broadband
- EV and low-carbon fuel adoption, by vehicle class and aligned with interstate agreements⁵⁷
- EV charging and alternative fuel infrastructure development

4.3. Fill policy gaps

Although implementation of existing policies and programs is making progress on reducing transportation GHG emissions, additional measures are needed to meet the state reduction limits. In addition to what is in the State Energy Strategy, additional analysis and planning efforts are underway to provide more refined recommendations. Three key efforts will provide additional information on how the state can address specific areas of carbon reduction. In particular, the state and partners should begin incorporating the findings from these three reports when they come available:

- Vehicle Miles Traveled (VMT) Targets Final Report released in June 2023, this report
 completes the work carried out under the "VMT Proviso." The report includes a series of
 recommendations, including that local per capita VMT targets be set at the regional scale.
 Additional recommendations address monitoring, modeling, and data acquisition at different
 levels of government.
- Transportation Electrification Strategy (TES) will identify EV incentives and infrastructure needs to make electric vehicles accessible to everyone in the state. The final report is due in December 2023.
- Green Electrolytic Hydrogen Study will develop a series of recommendations for state
 decision-makers to consider regarding the deployment of hydrogen and renewable fuels,
 including production factors, siting, and permitting, with the goal of advancing the 2021 State
 Energy Strategy and statewide emissions reductions.

In addition to the above efforts underway, and parallel to the TES, the state would benefit from a **statewide multimodal transportation efficiency strategy** to accelerate transportation efficiency improvements. This work would identify preferred policies to reduce per capita VMT, meet GHG limits, minimize the need for transportation energy infrastructure investments, and improve equitable access. This strategy would need to be developed in close collaboration with partners and would support future legislative policy development and investment decisions.

4.4. Understand the emission gaps

The Transportation Carbon Reduction Technical Report⁵⁸ shows that current emission reduction policies are insufficient to meet state GHG limits. The analysis considered zero-emission vehicle scenarios, both existing law and a potential addition, and the effect of transportation efficiency improvements to reduce vehicle miles traveled.

Closing these gaps will require additional analysis to provide a framework for making informed choices as the state continues to reduce emissions. Specific needs include:

Analysis of transportation efficiency improvements – an analysis of transportation
efficiency opportunities and measures is needed to support the development of a statewide
multimodal transportation efficiency strategy. This analysis would identify how efficiency
improvements contribute to emissions reductions and the support needed for their strategic

⁵⁷ State Energy Strategy, p 63.

⁵⁸ Washington State Transportation Carbon Reduction Technical Report: Transportation Carbon Emissions Scenario Modeling, November, 2023.

implementation. This analysis must account for different types of communities (urban, suburban, small city, rural) and different types of travel (commutes, recreational, errands, etc.).

- Opportunities analysis for high-capacity inter-city transit and passenger rail identify
 the types of service that best meet traveler needs across the state and where they can be
 most efficiently implemented throughout the state, expanding beyond the central Puget
 Sound area and I-5 corridor. This analysis would evaluate efficiency improvements between
 communities: identifying demand, identifying service levels to meet that demand, and
 establishing priorities for implementation.
- Freight analysis (rail, marine, aviation, and on-road freight) work with industry partners to characterize emissions and identify opportunities and challenges to improving efficiency from freight to inform the development of effective and efficient policies and programs that address freight-related emissions, specifically:
 - Baseline emissions profile develop a baseline emissions profile of freight and off-road modes to characterize the emissions from these sectors.
 - Opportunity analysis for freight efficiency improvements identify opportunities, challenges, and potential policy and programmatic supports to improve efficiency across all freight modes.
- Evaluate the role of reducing VMT in lowering energy requirements and associated
 costs While it is generally understood that fewer miles traveled requires less energy, an
 analysis of the infrastructure and energy cost savings from improved transportation efficiency
 would support state vehicle electrification efforts and may help direct efforts for the most
 effective implementation.

4.5. Track and adopt innovation

New technologies and improvements continue to emerge that help make the changes needed to meet statewide GHG reduction limits. Examples include advancements in vehicle batteries, hydrogen fuel cells and refueling, and other alternative fuels, as well as tools and approaches to address embodied emissions.

The state and partners should support promising new research and be ready to fund pilot and demonstration projects. This work is especially important for medium- and heavy-duty vehicles, rail, marine, and aviation.

To accelerate the transportation sector's ability to reduce embodied carbon in building materials and construction, potential policies must support materials suppliers' data reporting and collecting, as well as requirements that construction projects use this information and meet emission targets. This emerging practice will require tracking to identify how emissions can best be considered in transportation construction.

4.6. Track emerging issues

The transportation landscape in Washington State continues to evolve. Work to reduce transportation carbon emissions requires that emerging issues be identified and addressed in a timely manner so that challenges do not grow and opportunities can be expanded upon. In particular, three issues warrant attention as the state works on transportation decarbonization:

• Transportation network companies (TNC) (e.g., Uber, Lyft) provide a new transportation and employment model. While these services have replaced transit use in some areas, they also have the potential to fill in gaps in the transportation network. They may be well suited to

providing access to transit, as well as having the potential to provide access for individuals and communities that have historically been underserved by transportation. State and local governments need to work strategically to encourage the use of these services to enhance other modes rather than replace them.

- Online shopping and home delivery have increased over time, and dramatically so during
 the pandemic. Like TNCs, if managed carefully, home delivery providers have the potential to
 reduce carbon emissions, but currently are likely operating in a less efficient manner. Also,
 like TNCs, home delivery services can provide access to goods for households that are
 underserved by transportation.
- **Population** in Washington State's is growing and expected to continue to grow. The state is currently home to almost eight million people and expected to reach almost 10 million by 2050.⁵⁹ Where and how communities add housing and jobs will affect transportation needs for both new and current residents. Adding housing in areas already built up is an opportunity to increase density, which can make transit, walking, and biking more viable.

4.7. Identify funding gaps

Many of the strategies identified throughout this report have historically had low funding. The Climate Commitment Act is providing a new revenue source and being used to increase investments in transit, active transportation, electric vehicle charging infrastructure, and other programs that reduce GHG emissions. Even with this implementation, the state will need to assess and identify which strategies and programs require further investment to meet state transportation GHG emissions reduction, equity, and efficiency goals.

4.8. Update the Transportation Carbon Reduction Strategy

Federal law requires that states update their carbon reduction strategies every four years. The first update of this strategy will be due in November 2027, with work on the strategy update kicking off in 2026. The update will review progress to determine what is working, where additional intervention is needed, and what updated information must be incorporated. The TCRS update will also build on planning work WSDOT and other agencies complete in the interim. In the meantime, WSDOT will continue working with partners on engagement and implementation.

⁵⁹ <a href="https://ofm.wa.gov/washington-data-research/population-demographics/population-forecasts-and-projections/state-population-forecasts-and-projections-and-projections-and-projections-and-projections-and-projections-and-projections-and-projections-and-projections-and-projection-graphics-and-projection-grap



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Washington State Transportation Carbon Reduction Strategy

Appendix A: Identified Strategic Actions and Project Types



Appendix A. Identified Strategic Actions and Project Types

A.1. Overview

The state initiated development of this Transportation Carbon Reduction Strategy (TCRS) with research to capture the current state and federal policy landscape and Washington's existing efforts to curb transportation emissions. To conduct this research, the state considered publications dated within the last 15 years. Washington selected this period to align with the Legislature's first emission limits in 2008⁶⁰ and Washington's adoption of greenhouse gas (GHG) standards for light-duty vehicles starting with model year 2009.

WSDOT extracted, compiled, and reviewed strategies for transportation-sector GHG reductions from various documents, articles, and other literature. WSDOT identified documents through web searches using specific keywords (e.g., the name of the entity + "greenhouse gas", "emissions"), keyword searches ("emissions", "transportation", "greenhouse gas") on key entity websites, and documents provided to the agency. Documents include materials from state, regional (MPO / RTPO), freight/ports (maritime, air, rail)/clean air agencies, tribes, and local jurisdictions (cities, counties, etc.).

Generally, the state's approach was to search for strategies, not specific documents, while also emphasizing state plans. For example, with a recurring plan, the team reviewed only the most recent version. Because of this, WSDOT may not have included strategies from older plans, but this report list would be the most current. WSDOT also conducted a survey seeking information presented in Appendix B. Our search strategy emphasized actionable strategies related to GHG reduction. Thus, comprehensive, or other transportation plans would only be captured if they specifically included relevant strategies. Due to limited time, our approach focused on identifying a comprehensive set of relevant, actionable strategies being implemented statewide, with an emphasis on state-level documents (and did not include every plan in the state).

WSDOT reviewed the resulting literature to identify relevant emission reduction strategies, which are those where:

- Reducing GHG emissions is explicitly mentioned in an actionable strategy,
- GHG emissions are addressed as a goal and actionable strategies that are related to transportation are listed, or
- The document was relevant for GHG reduction in general.

For instance, strategies expected to support GHG reduction such as mode shift to transit, active transportation, or transportation demand management were added to the inventory.

Presented in the following sections of this appendix are:

- Organizations included in the review of documents
- Strategy categories used in the strategies section
- Documents reviewed
- Carbon reduction identified

⁶⁰ Washington Greenhouse Gas Emission Reduction Limits, Report prepared under RCW 70.235.04. Washington State Dept. of Ecology, Publication no. 14-01-006, December 2014. https://apps.ecology.wa.gov/publications/documents/1401006.pdf

A.2. Organizations included for review

Documents from the following organizations included transportation GHG reduction strategies.

Agency Level	Entity Name
State	
	Department of Ecology
	US Department of Energy (Referencing State strategies)
	Office of Program Research, Washington State House of Representatives
	Environmental Justice Council
	Office of Financial Management
	Department of Commerce
	Transportation Commission
	Department of Transportation
Tribes	
	Jamestown S'Klallam Tribe
	Lummi Nation
	Puyallup Tribe of Indians
MPO / RTPO	
	Benton-Franklin Council of Governments
	Chelan-Douglas Transportation Council
	Island Regional Transportation Planning Organization
	Northeast Washington Regional Transportation Planning Organization
	Okanogan Council of Governments
	Palouse Regional Transportation Planning Organization
	Peninsula Regional Transportation Planning Organization
	Puget Sound Regional Council
	Skagit Council of Governments
	Southwest Washington Regional Transportation Planning Organization
	Spokane Regional Transportation Council
	Thurston Regional Planning Council
	Walla Walla Metropolitan Panning Organization
	Whatcom Council of Governments
	Yakima Valley Conference of Governments
City, County, Trai	
zing, county, rran	City of Bellevue
	City of Olympia
	City of Seattle
	City of Tacoma
	King County
	Okanogan County Transit Authority
Freight / Ports / C	i i
o.g	King County International Airport
	Port of Anacortes
	Port of Bellingham
	Port of Coupeville
	Port of Edmonds
	i oit oi Editionas

Port of Everett
Port of Longview
Port of Olympia
Port of Port Angeles
Port of Seattle
Northwest Seaport Alliance
Port of Tacoma
Port of Vancouver USA
Vancouver Fraser Port Authority
Puget Sound Clean Air Agency
Puget Sound Maritime Air Forum (includes Port of Everett, Port of Olympia, WSDOT, PSRC, Port of Tacoma, Northwest Clean Air Agency, Port of Port Angeles among others)
SeaTac (airport)

A.3. Categories

Level 1 Category	Level 2 Category	
Clean Fuels and Vehicles		
	Electrification/ZEV	
	Alternative Fuels	
	Incentives/Grants	
	Taxes/Sales Restrictions	
	Fuel Economy Improvements	
	Fuel Composition Regulations	
	GHG Limits	
	Supportive Infrastructure	
	Public Outreach	
VMT Reduction		
	Mode shift (transit)	
	Mode shift (pedestrians and cyclists)	
	Mode shift (new mobility, shared mobility ⁶¹ , micromobility)	
	Mode shift (multiple)	
	Transportation Demand Management	
	Incentives	
	Taxes/Pricing	
	GHG Limits	
	Telework/Alternative work arrangements	
	Reduction Targets	
	Complete Streets	
System Operation (reduce	duce congestion, idling, etc.)	
	Intelligent Transportation Solutions (ITS)	
	Transit Infrastructure and Service Enhancements	
	Pricing	

⁶¹ Included here. However, shared mobility such as private transit services or TNCs may increase total VMT in some cases.

	Transportation Options	
	Pollution Restrictions	
	Parking Management/Strategies	
	Efficient Use of Fuels	
	First/Last Mile Connectivity	
Land Use		
	Transit Oriented Development (TOD)	
	Infill/Mixed-use Development	
	Parking Requirements	
Business Operations		
	General Strategic Planning	
	GHG Tracking	
	Fleet Management	

A.4. Documents Reviewed

Agency Level	Entity Name	Document or Website Page Name	Link (if available):
City/ County	City of Bellevue	Bellevue's Comprehensive Plan	https://cobgis.maps.arcgis.com/apps/MapSeries/inde x.html?appid=6b17a256e0a94991b40029f35c204cf8
City/ County	City of Olympia	Transportation Master Plan (pg. 16-17)	https://cms7files.revize.com/olympia/Document_cent_er/Services/Transportation/Plans.%20Studies%20an_d%20Data/Transportation%20Master%20Plan/Transportation-Master-Plan.pdf
City/ County	City of Seattle	Seattle Climate Action	http://greenspace.seattle.gov/wp- content/uploads/2018/04/SeaClimateAction_April20 18.pdf
City / County	City of Tacoma	Climate Action Plan	https://www.cityoftacoma.org/UserFiles/Servers/Server_6/File/cms/enviro/Sustain/CAP%20Final/Tacoma_ %20CAP%20Sections.pdf
City/ County	King County	Implementation Plan for a Carbon Neutral King County Government	https://kingcounty.gov/~/media/services/environment/climate/documents/190228-operational-carbon-neutral-plan.ashx?la=en
City/ County	King County	Strategic Climate Action Plan	https://your.kingcounty.gov/dnrp/climate/documents/ scap-2020-approved/2020-king-county-strategic- climate-action-plan.pdf
Freight/ Ports/ Clear Air	King County International Airport	Work Plan for Certification in the Airport Carbon Accreditation Program	https://kingcounty.gov/~/media/services/airport/documents/environment/techmemo.ashx?la=en
Freight/ Ports / Clear Air Agencies	Port of Anacortes	MARINE TERMINAL MODERNIZATION PLAN	https://www.portofanacortes.com/wp-content/uploads/Marine Modernization Report final .pdf
Freight/ Ports / Clear Air Agencies	Port of Anacortes	Port of Anacortes Greenhouse Gas Inventory 2019-2021	https://www.portofanacortes.com/wp- content/uploads/Results-of-POA-GHG-Inventory- FINAL_20220830_report-format.pdf
Freight/ Ports / Clear Air Agencies	Port of Bellingham	2013 Sustainability Report	https://www.portofbellingham.com/DocumentCenter/ View/2792/Sustainability-Report-July2013- Final?bidld=
Freight/ Ports / Clear Air Agencies	Port of Bellingham	Roadmap to a Climate Action Plan	https://www.portofbellingham.com/DocumentCenter/ View/9496/PoB Climate Roadmap-Final?bidId=

Agency Level	Entity Name	Document or Website Page Name	Link (if available):
Freight/ Ports / Clear Air Agencies	Port of Coupeville	Port of Coupeville Resolution No. 286	https://portoc.org/wp- content/uploads/2021/10/Resolution-286- Greenhouse-Gas-Policy-signed.pdf
Freight/ Ports / Clear Air Agencies	Port of Edmonds	Environmental Policy	https://www.portofedmonds.org/marina/environment al-resources/
Freight/ Ports / Clear Air Agencies	Port of Everett	Climate Change Strategy	https://www.portofeverett.com/environment/climate_ change.php
Freight/ Ports / Clear Air Agencies	Port of Everett	Environmental Stewardship & Sustainability Report 2020	https://cms9files.revize.com/everett/Document%20Center/Your%20Port/Document%20Center/Environment/2020StewardshipSustainabil.pdf
Freight/ Ports / Clear Air Agencies	Port of Longview	Port of Longview Newsletter, April 2019 (Section on 'No Idling')	https://www.portoflongview.com/DocumentCenter/View/1132/April-2019?bidId=
Freight/ Ports / Clear Air Agencies	Port of Olympia	2017 GHG Emissions Inventory Report	https://portolympia.com/wp- content/uploads/2021/01/2017-Port-of-Olympia- GHG-Emissions-Inventory.pdf
Freight/ Ports / Clear Air Agencies	Port of Port Angeles Washington	Strategic Plan 2009-2013	https://portofpa.com/DocumentCenter/View/58/Strategic-Plan-129-17-2012?bidId=
Freight/ Ports / Clear Air Agencies	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan	https://www.portseattle.org/sites/default/files/2021- 11/MCAAP November 2021 20210928 LowRes.p df
Freight/ Ports / Clear Air Agencies	Port of Seattle	Measuring Greenhouse Gas Emissions at Port of Seattle	https://www.portseattle.org/page/measuring- greenhouse-gas-emissions-port-seattle
Freight/ Ports / Clear Air Agencies	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser	Northwest Ports Clean Air Strategy 2020	https://www.portseattle.org/sites/default/files/2021- 04/NWP_CAS_Report_2012_WEB%20%28002%29 .pdf
Freight/ Ports / Clear Air Agencies	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser	Northwest Ports Clean Air Strategy: 2021-2025 Implementation Plan	https://www.portseattle.org/sites/default/files/2021- 04/NWP CAS Report 2012 WEB%20%28002%29 .pdf
Freight/ Ports / Clear Air Agencies	Port of Tacoma	2021 Puget Sound Maritime Emissions Inventory Development	Internal - Provided by WSDOT
Freight/ Ports / Clear Air Agencies	Port of Tacoma	Environmental Action Plan: Tacoma Harbor	https://player.flipsnack.com/?hash=QkM5QUVEODh CN0ErdTNmNmpwendiMQ%3D%3D&p=1
Freight/ Ports / Clear Air Agencies	Port of Vancouver	Climate Action Plan	https://www.portvanusa.com/assets/Final-CAP-11- 12-21 SCREEN.pdf
Freight/ Ports / Clear Air Agencies	Puget Sound Clean Air Agency	Candidate Actions to Reduction Transportation Greenhouse Gas Emissions Evaluation Report	https://www.pscleanair.gov/DocumentCenter/View/3 314/Evaluation-Report Transportation- Actions June2018?bidId=
Freight/ Ports / Clear Air Agencies	Puget Sound Maritime Air Forum (includes Port of Everett, Port of Olympia, WSDOT,	2016 Puget Sound Maritime Emissions Inventory - Revised 2018	https://pugetsoundmaritimeairforum.files.wordpress. com/2018/10/final-2016-psei-report-19-oct-2018- scg.pdf
Freight/ Ports / Clear Air Agencies	SeaTac (airport)	"How Seattle-Tacoma International Airport leveraged RNG for thermal use"	https://www.usgain.com/wp- content/uploads/2021/10/Seattle-Tacoma- International-Airport-Leveraged-RNG-for-Thermal- Use.pdf

Agency Level	Entity Name	Document or Website Page Name	Link (if available):
Freight/ Ports / Clear Air Agencies	SeaTac (airport)	"SEA Steps on the (Renewable) Gas to Halve Carbon Emissions"	https://www.portseattle.org/blog/sea-steps- renewable-gas-halve-carbon-emissions
MPO / RTPO	Benton-Franklin Council of Governments	Regional Active Transportation Plan	https://static1.squarespace.com/static/60f0b327ca36 d35991be43b4/t/620fd5d97a52ff4c9951955c/16452 04998929/Regional+Active+Transportation+Plan+- +Adopted+18SEP20.pdf
MPO / RTPO	Benton-Franklin Council of Governments	Transition 2045 Metropolitan Transportation Plan	BFCOG+MTP+-+Adopted+May+2022.pdf (squarespace.com)
MPO / RTPO	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update	RTP UPDATE 2020 Reduced 2.pdf (squarespace.com)
MPO/ RTPO	Chelan-Douglas Transportation Council	Coordinated Mobility Plan	CDTC COORDINATED MOBILITY PLAN FINAL APPROVED.pdf (squarespace.com)
MPO / RTPO	Island Regional Transportation Planning Organization	Regional Transportation Plan for the Island Region	islandcountywa.gov/DocumentCenter/View/3447/20 19-Regional-Transportation-Plan-pdf
MPO / RTPO	Northeast Washington Regional Transportation Planning Organization	Northeast Washington Regional Transportation Plan 2042	https://teddonline- my.sharepoint.com/personal/srappe_teddonline_co m/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fs rappe%5Fteddonline%5Fcom%2FDocuments%2FR
MPO / RTPO	Okanogan Council of Governments	2040 Regional Transportation Plan for the Okanogan Region	2040 Regional Transportation Plan for the Okanogan Region by TransRants - Issuu
MPO / RTPO	Okanogan County Transit Authority	Transit Development Plan 2022- 2027	http://okanogantransit.com/wp-content/uploads/2022/08/2022_2027%20Transit%20 Development%20Plan%20Approved%208.17.2022.pdf
MPO / RTPO	Palouse Regional Transportation Planning Organization	Palouse 2040 Regional Transportation Plan	Palouse RTP 2040 final adopted March 13 2018.pdf (palousertpo.org)
MPO / RTPO	Peninsula Regional Transportation Planning Organization	Regional Transportation Plan 2040	PRTPO+Regional+Transportation+Plan+2040.pdf (squarespace.com)
MPO / RTPO	Puget Sound Regional Council	Regional Transportation Plan 2022-2050	Regional Transportation Plan Puget Sound Regional Council (psrc.org)
MPO / RTPO	Puget Sound Regional Council	Vision2050	https://www.psrc.org/sites/default/files/ 2022-11/vision-2050-plan.pdf
MPO / RTPO	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan	https://www.scog.net/MTP- RTP/2021/Skagit2045RTP-Amended.pdf
MPO / RTPO	Southwest Washington Regional Transportation Planning Organization	Coordinated Public Transit – Human Services Transportation Plan	https://www.cwcog.org/wp-content/uploads/bsk-pdf-manager/2022/11/SWRTPO-2022-HSTP-11-16-2022-Final-Draft-w-Res.pdf
MPO / RTPO	Spokane Regional Transportation Council	Horizon 2045 Spokane Metropolitan Transportation Plan	https://www.srtc.org/wp- content/uploads/2022/01/Horizon2045.pdf
MPO / RTPO	Thurston Regional Planning Council	Thurston Climate Mitigation Plan	https://www.trpc.org/909/Thurston-Climate- Mitigation-Plan
MPO / RTPO	Walla Walla Metropolitan Planning Organization	2045 Plan	https://wwvmpo.org/uploads/3/5/3/8/35381422/2045 _plan_adopted_02-03-2021.pdf

Agency Level	Entity Name	Document or Website Page Name	Link (if available):
MPO / RTPO	Whatcom Council of Governments	Way to Go, Whatcom	https://waytogowhatcom.org/strategies/
MPO / RTPO	Yakima Valley Conference of Governments	YVTP 20/45	Microsoft Word - Section1-Revised DLL 1-25-2016 (yvcog.org)
State	Department of Ecology, State of Washington	Clean Fuel Standard Cost Benefit Analysis Report	https://ecology.wa.gov/DOE/files/22/22790fe6-fc3a- 414d-b3ba-036af0975258.pdf
State	Department of Ecology, State of Washington	Clean Fuel Standard	https://ecology.wa.gov/Air-Climate/Reducing- Emissions/Clean-Fuel-Standard
State	Department of Ecology, State of Washington	Climate Commitment Act	https://ecology.wa.gov/Air-Climate/Climate- Commitment-Act
State	US Department of Energy, (for the State of Washington)	Alternative Fuels Data Center - Washington Laws and Incentives	https://afdc.energy.gov/laws/all?state=WA
State	Evolved Energy Research	Washington State Energy Strategy Decarbonization Modeling: Final Report	Internal - Provided by WSDOT
State	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings- December 2022	Internal - Provided by WSDOT
State	State Environmental Justice Council	Environmental Justice Council Meeting Materials November 18, 2022 Special Meeting	Internal - Provided by WSDOT
State	Washington Office of Financial Management	Governor's Climate Commitment Act investments to benefit overburdened communities and tribes	Internal - Provided by WSDOT
State	Washington State Department of Commerce	Clean Transportation	https://www.commerce.wa.gov/growing-the- economy/energy/clean-transportation/
State	Washington State Department of Commerce, WSDOT	Interagency Electric Vehicle Coordinating Council	Internal - Provided by WSDOT
State	Washington State Department of Commerce	Fleet Electrification	https://www.commerce.wa.gov/growing-the- economy/energy/state-efficiency-and-environmental- performance-seep-archive/ev-fleet-electrification/
State	Washington State Department of Commerce	Green Electrolytic Hydrogen and Renewable Fuels: Recommendations for Deployment in Washington State	_Internal - Provided by WSDOT
State	Washington State Department of Commerce	State Energy Strategy	https://www.commerce.wa.gov/growing-the- economy/energy/2021-state-energy-strategy/
State	Washington State Department of Commerce	Washington Transportation Electrification Strategy (TES)	https://www.commerce.wa.gov/growing-the- economy/energy/clean-transportation/ev- coordinating-council/transportation-electrification- strategy/
State	Washington State Transportation Commission	Washington Transportation Plan: 2040 and Beyond	https://wstc.wa.gov/wp- content/uploads/2020/03/WTP-2040-and- Beyond.pdf

Agency Level	Entity Name	Document or Website Page Name	Link (if available):
State	WSDOT	2016 Washington State Public Transportation Plan	https://wsdot.wa.gov/sites/default/files/2021-10/PT-Report-WashingtonStatePublicTransportationPlan-2016.pdf
State	WSDOT	2017-2027 Grain Train Strategic Plan	https://wsdot.wa.gov/sites/default/files/2021-10/Nov- 2017-Grain-Train-2017-2027-Strategic-Plan.pdf
State	WSDOT	2019 Washington State Rail Plan	https://wsdot.wa.gov/sites/default/files/2021- 10/2019-2040-State-Rail-Plan.pdf
State	WSDOT	2020 WSDOT Greenhouse Gas Emissions Fact Sheet	Internal - Provided by WSDOT
State	WSDOT	2021 Summary of Public Transportation	https://wsdot.wa.gov/publications/manuals/fulltext/M 3079/spt.pdf
State	WSDOT	2021 Washington State Truck Parking Workshop	https://wsdot.wa.gov/sites/default/files/2021- 12/Synopsis-2021-WA-Truck-Parking-Workshop.pdf
State	WSDOT	2022 Public Transportation Mobility Report	https://wsdot.wa.gov/sites/default/files/2022- 11/2022-Public-Transportation-Mobility-Report.pdf
State	WSDOT	Active Transportation Plan	https://wsdot.wa.gov/construction- planning/statewide-plans/active-transportation-plan
State	WSDOT	Draft WSDOT Transportation Sector GHG Actions	Internal - Provided by WSDOT
State	WSDOT	Interagency Electric Vehicle Advisory Council	_Internal - Provided by WSDOT
State	WSDOT	Interagency Electric Vehicle Advisory Council	_Internal - Provided by WSDOT
State	WSDOT	Expanding Travel Options: Faster, Smarter and More Affordable A 2019-2023 Strategic Plan	https://wsdot.wa.gov/sites/default/files/2021-10/PT-Report-TransportationDemandManagementStrategicPlan-2018.pdf
State	WSDOT	Palouse River and Coulee City Rail System 2015 to 2025 Strategic Plan	https://wsdot.wa.gov/sites/default/files/2021- 10/2015-PCC-Strategic-Plan.pdf
State	WSDOT	Sustainable Transportation Website	https://wsdot.wa.gov/construction- planning/protecting-environment/sustainable- transportation
State	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1	https://tsmowa.org/sites/default/files/public/resources /WSDOT-TSMO-ProgramPlan-r20-8-26-22.pdf
State	WSDOT	Vehicle Miles of Travel Reduction Proviso	https://wsdot.wa.gov/sites/default/files/2022-06/VMT- Targets-Interim-Report-June2022_0.pdf https://wsdot.wa.gov/sites/default/files/2022-01/VMT- Targets-Technical-Report-December2021.pdf
State	WSDOT	Washington State Department of Transportation Greenhouse Gas Reduction Plan	Internal - Provided by WSDOT

Agency Level	Entity Name	Document or Website Page Name	Link (if available):
State	WSDOT	Washington State Electric Vehicle Action Plan 2015-2020	WA_EV_ActionPlanFebruary2015.pdf (westcoastgreenhighway.com)
State	WSDOT	Washington State Ferries System Electrification Plan	https://wsdot.wa.gov/sites/default/files/2021- 11/WSF-SystemElectrificationPlan- December2020.pdf
State	WSDOT	Washington State Ferries Transit Asset Management Plan	https://wsdot.wa.gov/sites/default/files/2021- 10/WSF-TransitAssetManagementPlan.pdf
State	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment	https://wsdot.wa.gov/sites/default/files/2022- 08/Electricvehicle-plan-infastructuredeployment.pdf
State	WSDOT	WSDOT Transportation Asset Management Plan (MAP-21)	https://wsdot.wa.gov/sites/default/files/2021- 10/Washington-State-DOT-Transportation-Asset- Management-Plan.pdf
Tribes	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022	Internal - Provided by WSDOT
Tribes	Lummi Nation	Climate Change Mitigation and Adaptation Plan	https://mrsc.org/getmedia/8172b625-e724-4036- a1d3-40a28c8d78a2/m58libcclimate.pdf
Tribes	Puyallup Tribe of Indians	Climate Change Impact Assessment and Adaptation Options	http://www.puyallup- tribe.com/tempFiles/PuyallupClimateChangeImpactA ssessment 2016 FINAL pages.pdf

A.5. Carbon reduction strategic actions identified

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Land Use	Develop the transportation system in Bellevue to minimize environmental and neighborhood impacts, while addressing the city's long-term transportation and land use objectives	City of Bellevue	Comprehensive Plan (pg. 203)
Move People and Goods More Efficiently and Equitably	Land Use	Promote transit-oriented development to support walking, biking, and transit use	City of Bellevue	Comprehensive Plan (pg. 247)
Move People and Goods More Efficiently and Equitably	Land Use	Increase transit, walking, and biking options and design compact, livable neighborhoods	City of Bellevue	Comprehensive Plan (pg. 247)
Move People and Goods More Efficiently and Equitably	Land Use	Promote a land use pattern to support an integrated multimodal transportation system	City of Bellevue	Comprehensive Plan (pg. 53)
Move People and Goods More Efficiently and Equitably	Land Use	Create places where people feel it makes the most sense to walk, bike, or use transit by emphasizing the urban corridors planning concept which integrates land use and transportation along our arterials with higher-frequency transit	City of Olympia	Transportation Master Plan (pg. 16-17)
Move People and Goods More Efficiently and Equitably	Land Use	Continue to update zoning and development standards to ensure that new development supports active transportation, transit ridership, and integrated public and private urban design that minimizes parking requirements and parking management strategies to meet City affordability and sustainability goals	City of Tacoma	Climate Action Plan (pg. 50)
Move People and Goods More Efficiently and Equitably	Land Use	Focus more than 98.5 percent of new residential development and growth in urban areas connected to the region's growing transit and trail systems	King County	King County Strategic Climate Action Plan
Move People and Goods More Efficiently and Equitably	Land Use	Develop and implement both a countywide and a Metrospecific Equitable Transit-Oriented Communities policy and implementation plan	King County	King County Strategic Climate Action Plan (pg. 61)
Move People and Goods More Efficiently and Equitably	Land Use	Develop more mixed-use dense land use with affordable housing and affordable commercial space with access to high-capacity transit	King County	King County Strategic Climate Action Plan (pg. 69)
Move People and Goods More Efficiently and Equitably	Land Use	Update King County Countywide Planning Policies that result in local jurisdictions taking transit supportive actions, including prioritizing right-of-way for transit, increased zoning capacity, reducing parking requirements, increasing affordable housing, and minimizing displacement near transit	King County	King County Strategic Climate Action Plan (pg. 76)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Land Use	Update King County Centers framework to focus growth in countywide designated centers that are zoned for transit-supported densities	King County	King County Strategic Climate Action Plan (pg. 76)
Move People and Goods More Efficiently and Equitably	Land Use	All new buildings should be strong modes of cost-effective, energy efficient design	Port of Coupeville	Port of Coupeville Resolution No. 286 (pg. 1)
Move People and Goods More Efficiently and Equitably	Land Use	Continue development of the Waterfront Place Central mixed-use development	Port of Everett	Climate Change Strategy (pg. 1)
Move People and Goods More Efficiently and Equitably	Land Use	Emphasize compact urban development and mixed land use promotes active transportation as a feasible choice for short trips	Benton-Franklin Council of Governments	Regional Active Transportation Plan (pg. 31-32)
Move People and Goods More Efficiently and Equitably	Land Use	Commit to a Transit Focused Regional Growth Strategy that plans for 65% of the population growth and 75% of the job growth to occur near planned high-capacity transit investments	Puget Sound Regional Council	Regional 2030 Climate Analysis – Background Documentation and Analysis Results Review Draft
Move People and Goods More Efficiently and Equitably	Land Use	Prioritize investments in transportation facilities and services in the urban growth area that support compact, pedestrianand transit-oriented densities and development	Puget Sound Regional Council	Vision 2050 (pg. 105)
Move People and Goods More Efficiently and Equitably	Land Use	Promote land uses that reduce VMT and promote transit, biking, and walking	Puget Sound Regional Council	Vision 2050 (pg. 61)
Move People and Goods More Efficiently and Equitably	Land Use	Reduce transportation GHG emissions through mixed-use growth and development	Puget Sound Regional Council	Vision 2050 (pg. 63)
Move People and Goods More Efficiently and Equitably	Land Use	Promote cooperation and coordination among transportation providers, local government, and developers to ensure that joint- and mixed-use developments are designed to reduce the impacts of climate change on the natural and built environments	Puget Sound Regional Council	Vision 2050 (pg. 67)
Move People and Goods More Efficiently and Equitably	Land Use	Support land use patterns that reduce travel demands for single-occupant vehicles	Yakima County Conference of Governments	YVTP 20/45 (pg. 47)
Move People and Goods More Efficiently and Equitably	Land Use	Take steps to incentivize and remove barriers that restrict Transit Oriented Development (TOD)	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 55)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Land Use	Link cross-jurisdictional coordination and community engagement with funding related to the planning and implementation of land use policies, TOD, transportation demand management (TDM) measures (including vehicle usage charges or similar policies), transit and active transport infrastructure development and other measures designed to reduce VMT and enhance accessibility and mobility	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 55)
Move People and Goods More Efficiently and Equitably	Land Use	Fund WSDOT and Commerce to provide centralized assistance for jurisdictions to support development and implementation of model code related to corridor planning, "smart growth" zoning and land use policies, TOD and related infrastructure development	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 55)
Move People and Goods More Efficiently and Equitably	Land Use	Explore ways for transit and state agencies to collaborate more effectively with land developers to create efficient mixed-use centers in the vicinity of multimodal transportation hubs	Washington State Transportation Commission	Washington Transportation Plan: 2040 and Beyond (pg. 61)
Move People and Goods More Efficiently and Equitably	Land Use	Pilot efforts to further integrate access to transit and land use in planning, environmental review and permitting	WSDOT	2016 Washington State Public Transportation Plan (pg. 63)
Move People and Goods More Efficiently and Equitably	Land Use	Infill distribution centers closer to where goods need to go	WSDOT	Vehicle Miles of Travel Reduction Proviso Presentation (Slide 14)
Move People and Goods More Efficiently and Equitably	Land Use	Land Use – implement the Vision 2050 Regional Growth Strategy; advance transit-oriented development and focus growth around high-capacity transit	Puget Sound Regional Council	Regional Transportation Plan, adopted May 2022
Move People and Goods More Efficiently and Equitably	Land Use	Encourage efficient use of urban land by optimizing the development potential of existing urban lands and increasing density in the urban growth area in locations consistent with the Regional Growth Strategy.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Land Use	Attract 65% of the region's residential growth and 75% of the region's employment growth to the regional growth centers and high-capacity transit station areas to realize the multiple public benefits of compact growth around high-capacity transit investments. As jurisdictions plan for growth targets, focus development near high-capacity transit to achieve the regional goal.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Land Use	Focus a significant share of population and employment growth in designated regional growth centers.	Puget Sound Regional Council	Vision 2050

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Land Use	Focus a significant share of employment growth in designated regional manufacturing/industrial centers.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Land Use	Encourage growth in designated countywide centers.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Land Use	Avoid increasing development capacity inconsistent with the Regional Growth Strategy in regional geographies not served by high-capacity transit.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Active Transportation	Promote the use of new transportation technology, including ride-hailing, micromobility, drones, CAVs, and etc.	City of Olympia	Transportation Master Plan (pg. 131-139)
Move People and Goods More Efficiently and Equitably	Active Transportation	Invest in transit and bike and pedestrian infrastructure to reduce single occupant vehicle (SOV) use in Seattle	City of Seattle	Seattle Climate Action (pg. 8)
Move People and Goods More Efficiently and Equitably	Active Transportation	Develop and implement a plan to fund, prioritize, and complete the City's network of sidewalks, curb ramps, Safe Routes to School improvements, and bike connections by 2050	City of Tacoma	Climate Action Plan (pg. 47)
Move People and Goods More Efficiently and Equitably	Active Transportation	Increase staffing and funding for community programming that provides easy entry opportunities for community members to access active transportation and transit (i.e. open streets events, InMotion residential outreach programs, e-bikes for essential workers, micromobility access, play streets, parklets, etc.	City of Tacoma	Climate Action Plan (pg. 48)
Move People and Goods More Efficiently and Equitably	Active Transportation	Strengthen internal policies to require Complete Streets implementation on all projects that impact the street, including repaving, chip sealing, and re-striping projects.	City of Tacoma	Climate Action Plan (pg. 49)
Move People and Goods More Efficiently and Equitably	Active Transportation	Seek federal and state grant funding to support electric vehicle and e-bike use in low and very low opportunity neighborhoods	City of Tacoma	Climate Action Plan (pg. 50)
Move People and Goods More Efficiently and Equitably	Active Transportation	Improve safe and non-motorized access to transit via walk, roll and bike	King County	King County Strategic Climate Action Plan (pg. 69)
Move People and Goods More Efficiently and Equitably	Active Transportation	Enhance opportunities to walk, roll, and bike safely and convenient to transit by providing secure bike parking at transit locations and partnering with jurisdictions to design and construct pedestrian and bike connections	King County	King County Strategic Climate Action Plan (pg. 72)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Active Transportation	Enhance bicycle and pedestrian infrastructure to provide alternative and sustainable modes of transportation	Benton-Franklin Council of Governments	Regional Active Transportation Plan (pg. 31-32)
Move People and Goods More Efficiently and Equitably	Active Transportation	Develop criteria for pedestrian circulation serving public facilities, transit systems, and housing complexes	Benton-Franklin Council of Governments	Regional Active Transportation Plan (pg. 32)
Move People and Goods More Efficiently and Equitably	Active Transportation	Add planned bikeways during all preservation, reconstruction, and striping to support a connected and efficient multimodal transportation system	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update (pg. 2-5)
Move People and Goods More Efficiently and Equitably	Active Transportation	Add sidewalks during all road reconstruction to support a connected and efficient multimodal transportation system	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update (pg. 2-5)
Move People and Goods More Efficiently and Equitably	Active Transportation	Pursue grants to implement standalone sidewalk and bicycle projects to support a connected and efficient multimodal transportation system	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update (pg. 2-5)
Move People and Goods More Efficiently and Equitably	Active Transportation	Add pedestrian and bike crossing at Bridge St. over the BNSF right of way connecting to the Columbia River Pedestrian and Bike Bridge	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update (pg. 3-2)
Move People and Goods More Efficiently and Equitably	Active Transportation	Encourage biking and walking through provision of bikeway and sidewalk networks	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update (pg. 3-7)
Move People and Goods More Efficiently and Equitably	Active Transportation	Convert former railroad rights-of-way to trails for public use	Northeast Washington Regional Transportation Planning Organization	Northeast Washington Regional Transportation Plan 2042 (pg. 44)
Move People and Goods More Efficiently and Equitably	Active Transportation	Advance 'Safe Routes to Schools' measures that increase opportunities for children to bike and walk to school while increasing their physical activity	Okanogan Council of Governments	2040 Regional Transportation Plan for the Okanogan Region (pg. 30)
Move People and Goods More Efficiently and Equitably	Active Transportation	Support walking and biking as a means to improve overall public health while reducing impacts on the natural environment	Okanogan Council of Governments	2040 Regional Transportation Plan for the Okanogan Region (pg. 30)
Move People and Goods More Efficiently and Equitably	Active Transportation	Expand and integrate a regional transit network, active transportation and other multimodal investments	Puget Sound Regional Council	2030 GHG Analysis and Climate Implementation Strategy (pg. 19)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Active Transportation	Promote and incorporate bicycle and pedestrian travel as important modes of transportation by providing facilities and navigable connections	Puget Sound Regional Council	Vision 2050 (pg. 106)
Move People and Goods More Efficiently and Equitably	Active Transportation	Invest in infrastructure to close gaps in the active transportation network and increase safety	Southwest Washington Regional Transportation Planning Organization	Coordinated Public Transit – Human Services Transportation Plan (Chapter 8-4)
Move People and Goods More Efficiently and Equitably	Active Transportation	Reevaluate long term plans and update to prioritize people walking and riding bikes. Set goals for mode shift and plans on how to achieve those goals like developing car-free corridors in commercial and mixed-use areas to encourage mode shift	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 87)
Move People and Goods More Efficiently and Equitably	Active Transportation	Coordinate bicycle and pedestrian plans of the cities and Thurston County into a large regional plan to expand walking and bicycling infrastructure, including separated and protected opportunities	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 87)
Move People and Goods More Efficiently and Equitably	Active Transportation	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	Whatcom Council of Governments	Way to Go, Whatcom (pg. 1)
Move People and Goods More Efficiently and Equitably	Active Transportation	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	Whatcom Council of Governments	Way to Go, Whatcom (pg. 1)
Move People and Goods More Efficiently and Equitably	Active Transportation	Implement ZAP—Zero-Emissions Access Program - \$2.4M	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Move People and Goods More Efficiently and Equitably	Active Transportation	Adopt new, discrete, near- and long-term targets for transit and active transportation	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 54)
Move People and Goods More Efficiently and Equitably	Active Transportation	Explore options for providing incentives for e-bikes and other electric transportation devices	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 58)
Move People and Goods More Efficiently and Equitably	Active Transportation	Adequately plan for and provide first- and last-mile access as a part of regional and statewide mobility strategies to support transit and freight transport	Washington State Transportation Commission	Washington Transportation Plan: 2040 and Beyond (pg. 56)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Active Transportation	Provide more than \$103 million in the 2021-2023 biennium for 48 projects to explore innovative ways to reduce congestion and improve connectivity between counties and regional population centers	WSDOT	2022 Public Transportation Mobility Report (pg. 3)
Move People and Goods More Efficiently and Equitably	Active Transportation	Complete a statewide active transportation network across jurisdictional boundaries	WSDOT	Active Transportation Plan (pg. 2)
Move People and Goods More Efficiently and Equitably	Active Transportation	Continue to refine and implement the Complete Streets Requirement (requires WSDOT projects over \$500,000 to incorporate the principles of Complete Streets into facilities that provide street access on state highways projects routed over city streets where the design phase of the project begins on or after July 1, 2022)	WSDOT	Draft WSDOT Transportation Sector GHG Actions (FY 2023 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Active Transportation	Promote improved access through low GHG emissions/ low VMT transportation options and choices, and minimize the need for travel through promoting Complete Streets, public transportation, active transportation	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Active Transportation	Promote improved access through low GHG emissions/ low VMT transportation options and choices, and minimize the need for travel through promoting efficient urban freight delivery and transportation efficient land use	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Active Transportation	Complete pedestrian and bicycle networks by installing sidewalks and bike lanes	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1 (pg. 13)
Move People and Goods More Efficiently and Equitably	Active Transportation	Integrate micromobility, such as bike sharing or scooter sharing programs coupled with location-based technology, to allow users to complete the last mile of their trip	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1 (pg. 13)
Move People and Goods More Efficiently and Equitably	Active Transportation	Develop Plan to Improve Multimodal Connectivity	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1 (pg. 24)
Move People and Goods More Efficiently and Equitably	Active Transportation	Implement a subsidized bicycle purchase program for Tribal Citizens and employees.	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022 (pg. 16)
Move People and Goods More Efficiently and Equitably	Active Transportation	Designate Priority Planning Areas, including those to promote walking and biking	Lummi Nation	Climate Change Mitigation and Adaptation Plan: 2016-2026 (pg. 79)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Develop and release a strategy to address congestion and transportation emissions through pricing, coupled with	City of Seattle	Seattle Climate Action (pg. 14)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
		investments in expanded transit and electrification in underserved communities		
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Increase staff capacity to coordinate on transit projects and implement the green transportation hierarchy, which prioritizes the movement of people over the movement of cars with pedestrians, bicyclists, and transit riders as the top priorities	City of Tacoma	Climate Action Plan (pg. 48)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Coordinate land use changes with high-capacity transit investments to support transit-oriented development	City of Tacoma	Climate Action Plan (pg. 48)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Improve transit options and infrastructure in frontline communities with the greatest need for sustainable public transportation	King County	King County Strategic Climate Action Plan (pg. 14)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Expand regional transit ridership on King County Metro Transit, Sound Transit, and City of Seattle services by 2040 to 398 million annually	King County	King County Strategic Climate Action Plan (pg. 60)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Reduce total passenger vehicle miles traveled 20 percent by 2030 and 28 percent by 2050 against 2017 baseline	King County	King County Strategic Climate Action Plan (pg. 61)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Develop corridor prioritization to invest in speed and reliability improvements that benefit public transit in areas with greatest needs	King County	King County Strategic Climate Action Plan (pg. 61)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	See transit and local jurisdictions collaborate to improve speed and reliability of bus service through dedicated bus lanes and right-of-way improvements	King County	King County Strategic Climate Action Plan (pg. 69)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Advocate and engage in regional conversation on transit service growth and service funding to achieve county climate goals	King County	King County Strategic Climate Action Plan (pg. 71)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Update Metro's policies, including Service Guidelines and METRO Connects, to reflect service priorities in routes that will reduce GHG emissions, balancing ridership and climate priorities with other investment needs, including equity	King County	King County Strategic Climate Action Plan (pg. 71)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Develop station area passenger facilities and guidelines that prioritize SOV access at Metro and partner agency transit stops and stations	King County	King County Strategic Climate Action Plan (pg. 72)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Provide a range of transit and mobility services that allow for seamless connections between modes and destinations, including on-demand, flexible services that leverage MAAS	King County	King County Strategic Climate Action Plan (pg. 72)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Provide sustained and increased transit frequency, as funding allows, to make it more convenient for people to use transit and get out of their cars	King County	King County Strategic Climate Action Plan (pg. 73)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Promote a fast and reliable transit system between complementary land uses [housing, employment, services, recreation]	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update (pg. 3-12)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Support additional transit transportation choices	Puget Sound Regional Council	2030 GHG Analysis and Climate Implementation Strategy (pg. 17)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Reduce roadway capacity where it interferes with transit	Puget Sound Regional Council	2030 GHG Analysis and Climate Implementation Strategy (pg. 19)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Promote a 2030 High-Capacity Transit Network, which reflects VISION 2050, the RTP and the region's vehicle fleet under current federal fuel economy standards	Puget Sound Regional Council	2030 GHG Analysis and Climate Implementation Strategy (pg. 8)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Extend Sound Transit's Link Light Rail to the University of Washington and Northgate	Puget Sound Regional Council	Regional Transportation Plan (pg. 138)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Increase the proportion of trips made by transportation modes that are alternatives to driving alone, especially to and within centers and along corridors connecting centers, by ensuring availability of reliable and competitive transit options	Puget Sound Regional Council	Vision 2050 (pg. 105)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Emphasize transportation investments that provide and encourage alternatives to single-occupancy vehicle travel and increase travel options, especially to and within centers and along corridors connecting centers	Puget Sound Regional Council	Vision 2050 (pg. 105)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Increase alternatives to driving alone	Puget Sound Regional Council	Vision 2050 (pg. 60)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Prioritize transportation investments that support achievement of regional greenhouse gas emissions reduction goals, such as by reducing vehicle miles traveled	Puget Sound Regional Council	Vision 2050 (pg. 61)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Align investment strategies with achievement of VMT and GHG reduction provisions	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Use GHG/VMT as criteria for funding and pursue new revenue sources to support transportation choices	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Pursue new revenue sources to support transportation choices, particularly transit operations	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Expand and enhance transit, rideshare and commuter choice	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Develop more park-and-ride and park-and-pool lots	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Develop actions to address congestion issues on the transit network (e.g., vehicle capacity, bus lanes, signal priority)	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Increase local public transit routes/frequency with a focus on ensuring the greatest number of riders have access to a low-carbon transportation option.	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 86)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Identify and implement first/last mile, low carbon solutions to connect neighborhoods without the population to support fixed routes transit options	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 86)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Maintain a fareless system for public transit	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 86)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Work with employers and transit agencies to develop ways to incentivize employee ridership (ex. rebates for employees who give up use of employer parking facilities)	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 86)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Use Climate Commitment Act Funds (Carbon Emissions Reduction Account) to support frequent and accessible public transportation services statewide	State Environmental Justice Council	Environmental Justice Council Meeting Materials November 18, 2022, Special Meeting (pg. 4)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Identify and establish stable funding mechanisms for maintenance, preservation and system improvements across all transportation modes	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 57)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Adopt incentive programs that offset the relative cost of transit and other alternative travel modes	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 58)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Explore options to make transit universally affordable, including creating a statewide transit pass option and means-tested transit subsidies for low- and no-income riders, or establishing fare-free transit statewide.	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 58)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Invest in transit infrastructure including lighting, covered stops and pedestrian crossings	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 58)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Promote development of a seamless, statewide transit fare system with interoperability between public transit, ferry systems, and mobility services providers across the state.	Washington State Transportation Commission	Washington Transportation Plan: 2040 and Beyond (pg. 56)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Plan for future demand on the commuter rail	WSDOT	2016 Washington State Public Transportation Plan (pg. 50)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Continue to develop practical solution methodologies to create a more integrated multimodal system	WSDOT	2016 Washington State Public Transportation Plan (pg. 64)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Gather and use data that provides a more complete picture of public transportation performance gaps and opportunities	WSDOT	2016 Washington State Public Transportation Plan (pg. 69)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Maximize the effectiveness of park and ride lots as part of the integrated multimodal system	WSDOT	2016 Washington State Public Transportation Plan (pg. 70)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Establish an interdisciplinary innovation center to foster and better support public transportation innovation and adaptation	WSDOT	2016 Washington State Public Transportation Plan (pg. 76)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Improve multimodal connectivity for passenger rail	WSDOT	2020 Washington State Rail Plan (pg. 65)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Implement more than \$3 billion in public transportation projects to expand and complete the public transportation network	WSDOT	2022 Public Transportation Mobility Report (pg. 3)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Begin implementation of expanded technical assistance to local agencies and tribes for [Safe Routes to School] planning and project development	WSDOT	Draft WSDOT Transportation Sector GHG Actions (FY 2023 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Promote improved access through low GHG emissions/ low VMT transportation options and choices, and minimize the need for travel through active transportation and transit	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
		planning [and] improving and expanding passenger rail system (including HSR)		
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Promote improved access through low GHG emissions/ low VMT transportation options and choices, and minimize the need for travel through collaborating on road usage charges and transit expansion	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Implement bus on shoulder (BOS) operations to support transit reliability	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1 (pg. 13)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	As related to rail, add enhancements for infrastructure modifications for larger passenger trains, adding passenger cars, and making modifications to platforms to accommodate additional ridership and reduce delays	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1 (pg. 15)
Move People and Goods More Efficiently and Equitably	Transit, Vanpool and Carpool	Implement bus rapid transit (BRT) to support transit on-time performance	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1(pg. 13)
Move People and Goods More Efficiently and Equitably	The Internet	Continue to support City staff telework to reduce commute trips	City of Olympia	Transportation Master Plan (pg. 152)
Move People and Goods More Efficiently and Equitably	The Internet	Investigate how strategies such as teleworking or other evolutions in the workplace could help to decrease overall VMT, using lessons learned from the COVID-19 pandemic	King County	King County Strategic Climate Action Plan (pg. 72)
Move People and Goods More Efficiently and Equitably	The Internet	Adopt virtual meetings, training, and other options where appropriate and possible to decrease transportation requirements	Port of Coupeville	Port of Coupeville Resolution No. 286 (pg. 1)
Move People and Goods More Efficiently and Equitably	The Internet	Encourage employees to find alternatives to driving alone to work, and offers remote working options as appropriate	Port of Everett	Climate Change Strategy (pg. 1)
Move People and Goods More Efficiently and Equitably	The Internet	Implement flexible work arrangements like teleworking or compressed work weeks to reduce the number of days employees must commute to work	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 49)
Move People and Goods More Efficiently and Equitably	The Internet	Reduce Emissions from Employee Commute	Port of Vancouver	Climate Action Plan (pg. 14-15)
Move People and Goods More Efficiently and Equitably	The Internet	Reduce Business Travel Emissions	Port of Vancouver	Climate Action Plan (pg. 14-15)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	The Internet	Increase opportunities for employee teleworking options and staggering workdays or schedules to reduce employees driving during peak traffic times	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 84)
Move People and Goods More Efficiently and Equitably	The Internet	Promote improved access through low GHG emissions/ low VMT transportation options and choices, and minimize the need for travel through promoting telework	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Incorporate environmental targets into the Mobility Implementation Plan (MIP) to align with the Environmental Sustainability Plan to reduce transportation-source greenhouse gas emissions	City of Bellevue	Comprehensive Plan (pg. 172)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Support means to reduce transportation-source greenhouse gas emissions	City of Bellevue	Comprehensive Plan (pg. 203)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Avoid, minimize or mitigate significant adverse impacts to air quality, noise, light/glare and other elements of the environmental in planning and implementing transportation projects	City of Bellevue	Comprehensive Plan (pg. 203)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Take corrective actions to reduce greenhouse gas emissions such as reducing energy consumption and vehicle emissions, and enhancing land use patterns to reduce vehicle dependency	City of Bellevue	Comprehensive Plan (pg. 257)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Implement transportation projects that provide significant air quality improvements to areas with existing air quality problems, even where the project does not bring all locations up to adopted standards, provided that the project is the best feasible solution and it significantly improves the air quality at each substandard location	City of Bellevue	Comprehensive Plan (pg. 262)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Shift traffic to less congested facilities nearby, provided this does not encourage cut-through traffic in neighborhoods	City of Bellevue	Comprehensive Plan (pg. 263)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Focus transportation demand management programs on the downtown and Capitol Campus, our largest employment centers	City of Olympia	Transportation Master Plan (pg. 150)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Utilize parking management to help reduce drive-alone trips	City of Olympia	Transportation Master Plan (pg. 151)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Build out a Shared Mobility Hubs program to aggregate transportation connections, travel information, and other	City of Seattle	Seattle Climate Action (pg. 9)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
		mobility amenities into a seamless, understandable, and on- demand travel experience		
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Expand bulk renewable fuel delivery at city facilities to the greatest extent needed	City of Tacoma	Climate Action Plan (pg. 186)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Increase communication about Metro's services to ensure that residents from all communities know about these services and how to use them	King County	King County Strategic Climate Action Plan (pg. 71)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Launch at least one TDM campaign per year	King County	King County Strategic Climate Action Plan (pg. 71)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Develop GHG Inventory Data Management Plan establishing methods and responsibilities	King County International Airport	Work Plan for Certification in the Airport Carbon Accreditation Program (pg. 2)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Engage third parties and collaborate with airline partners for additional GHG reduction opportunities	King County International Airport	Work Plan for Certification in the Airport Carbon Accreditation Program (pg. 3)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Strive to communicate with partners on a coordinated effort to reduce GHG emissions (e.g., cargo ships, PUD, City of Everett, etc.)	Port of Everett	Climate Change Strategy (pg. 1)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Assist with GHG mitigation planning and implementation efforts	Port of Everett	Climate Change Strategy (pg. 1)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Implement a "no idle" policy	Port of Longview	Port Talk: Port of Longview Newsletter (pg. 1)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Review and investigate the Port's emissions sources	Port of Olympia	2017 GHG Emissions Inventory Report (pg. 5-1)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Update employee commute benefits as new opportunities emerge to expand lower-emission commute options	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 50)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Expand communication and enhance employee education about commute options beyond driving alone	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 51)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Continue to advocate for more accessible multi-modal transportation options for Port Maritime workers.	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 51)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Support domestic and international efforts to phase out emissions from ocean-going vessels	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 70)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Continually increase equipment efficiency and replace old high-emitting engines	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 30)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Reduce emissions from diesel drayage truck fleet (independent truckers/companies)	Port of Tacoma	Environmental Action Plan: Tacoma Harbor (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Support efforts to reduce emissions from locomotives	Port of Tacoma	Environmental Action Plan: Tacoma Harbor (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Increase the fuel economy for Light-Duty Vehicles (LDVs) in the Puget Sound region	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Regional fuel economy requirement with revised schedule	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Implement a 'Cash for Clunkers' program (targeting 5% to 10% of vehicles with the lowest fuel economy)	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Create differential charges on vehicles based on fuel economy	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Install diesel particulate filters on port and terminal equipment	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Repower existing diesel forklifts with cleaner engines	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Repower harbor vessel engines with new cleaner engines	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Encouraged cleaner vehicle purchases	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Repower harbor vessel engines with new cleaner engines	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Promote Non-Motorized Elements in Transportation Demand Management (TDM) such as eliminating employee parking subsidies.	Benton-Franklin Council of Governments	Regional Active Transportation Plan (pg. 32)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Collect data to analyze performance measures such as: *use of TDM strategies like Vanpools and park and ride lots implemented in the region *fixed Route Transit utilization *Rates of SOV to HOV use, and non-motorized travel	Benton-Franklin council of Governments	Transition 2045 Metropolitan Transportation Plan
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Implement transportation demand management strategies to reduce peak capacity demand for cars on the transportation system by promoting incremental mode-shift away from automobiles to strike a balance amongst auto, bike, pedestrian, and transit capacity investments	Chelan-Douglas Transportation Council	2020 Chelan-Douglas Regional Transportation Plan Update (pg. 3-7)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Establish an online, One-Stop Traveler Information Portal to make it as convenient as possible for people to use alternatives to driving alone to meet their mobility needs as to minimize transportation impacts on the environment	Island Regional Transportation Planning Organization	Regional Transportation Plan for the Island Region (pg.44)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Utilize transportation demand management/commute trip reduction to engage local communities and employers to increase the number of people who ride transit, carpool, vanpool, bicycle, walk, telework and shift their work schedules to off-commute times	Peninsula Regional Transportation Planning Organization	Regional Transportation Plan 2040 (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Advocate and implement incentives for vehicle trip reduction strategies to reduce the growth in per capita vehicle miles traveled	Peninsula Regional Transportation Planning Organization	Regional Transportation Plan 2040 (pg. 11)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Complete the Puget Sound Regional Emissions Analysis Project which consists of seven agency partnership to update greenhouse gas inventories for each county (PSRC, PSCAA, King, Kitsap, Pierce, Snohomish Counties, City of Seattle and Seattle City Light) and includes forecast "wedge	Puget Sound Regional Council	2030 GHG Analysis and Climate Implementation Strategy (pg. 17)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
		analyses" for 2030 and 2050, understanding the contribution of all sources and potential levers to reduce emissions.		
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Establish mode split goals for these centers and identify strategies to encourage transportation demand management and alternatives to driving alone	Puget Sound Regional Council	Vision 2050 (pg. 80)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	An integrated regional transportation system shall be designed to minimize air pollution by promoting the use of alternative transportation modes, reducing vehicular traffic, maintaining acceptable traffic flow, and siting of facilities	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 42)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Provide incentives for vanpool and carpool programs	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Pursue additional non-VMT actions to reduce GHG emissions from the transportation sector, including increasing the use of rail for both the movement of passengers and freight	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Adopt fuel efficient technologies	Southwest Washington Regional Transportation Planning Organization	Coordinated Public Transit – Human Services Transportation Plan (Chapter 8-4)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Develop educational campaigns about benefits (reduced greenhouse gas emission, increase fuel efficiency, safety) of properly inflated tires, including signage at gas stations and local businesses and partnering with schools	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 84)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Improve air quality by promoting opportunities to reduce greenhouse gas emissions and single occupancy vehicle (SOV) travel	Walla Walla Metropolitan Panning Organization	2045 Plan (pg. 76)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Promote use of alternative travel modes and transportation demand strategies to reduce the need for widening or constructing new roadways	Yakima County Conference of Governments	YVTP 20/45 (pg. 47)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Direct proceeds from the Climate Commitment Act (CCA) allowance auctions must be invested in critical climate projects focused on improving clean transportation options	Department of Ecology, State of Washington	Climate Commitment Act
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Improve vehicle fuel economies	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 53)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Adjust and update state VMT reduction targets to reflect existing VMT levels and the state's greenhouse gas emission limits	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 54)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Consider transportation efficiency and emission targets to accompany updates to VMT reduction targets	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 54)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Expand transportation system policy goals to expressly address VMT reduction, efficiency, greenhouse gas emissions reductions and equity as a means to achieve accessibility and environmental stewardship objectives	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 57)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Expand the reach of and funding for Washington's Commute Trip Reduction (CTR) program	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 58)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Incentivize VMT and greenhouse gas reductions in freight operations	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 60)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Explore whether a state-run vehicle buyback program could cost-effectively and equitably contribute to near-term greenhouse gas reductions, and, if feasible and appropriate, adopt such a program	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 60)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Develop and implement integrated, multimodal system improvements that move more people in fewer vehicles and at least cost	WSDOT	2016 Washington State Public Transportation Plan (pg. 5)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Develop additional strategies for local jurisdictions and partners to reduce drive-alone vehicle trips	WSDOT	2016 Washington State Public Transportation Plan (pg. 63)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Support efforts to make it easier for customers to pay for transportation services and manage transportation payments, regardless of agency, organization or mode	WSDOT	2016 Washington State Public Transportation Plan (pg. 81)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Invest \$25M in Transportation Demand Management	WSDOT	2022 Public Transportation Mobility Report (pg. 6)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Develop a [b]aseline Inventory of Embodied GHG Emission in Transportation Infrastructure Projects	WSDOT	Draft WSDOT Transportation Sector GHG Actions (FY 2023 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Begin pilot projects with willing RTPOs/MPOs to set regional/local VMT targets	WSDOT	Draft WSDOT Transportation Sector GHG Actions (FY 2023 tab of spreadsheet)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Assess and build WSDOT's organizational capacity to lead in and implement GHG and Vehicle Miles Traveled (VMT) reduction measures	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Develop and update plans for Agency GHG emissions reductions and update policy, procedures, and tools to integrate GHG and VMT reductions into agency planning, design, construction, system management, operations, and maintenance	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	[Integrate] GHG and VMT reductions into transportation planning, design and system management	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	[Develop] a GHG reductions project prioritization tool, a state transportation GHG reduction strategy that builds on the State Energy Strategy, a framework and plan for reduction transportation sector emissions and VMT with associated metrics	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Promote improved access through low GHG emissions/ low VMT transportation options and choices, and minimize the need for travel through implementing transportation demand management	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Reduce demand for trucking using rail for freight	WSDOT	Palouse River and Coulee City Rail System 2015 to 2025 Strategic Plan (pg. 40)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Through TSMO practices, support safe and efficient movement of pedestrians, bicyclists, transit, freight haulers, ferries, aviation, and motor vehicles across the entire transportation system	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1 (pg. 12)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Install way-finding signs, maps, and landscape cues to direct pedestrians and bicyclists to the safest and most direct route	WSDOT	Transportation Systems Management & Operations Program Plan Phase 1 (pg. 13)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Develop vehicle miles traveled targets for the counties in Washington state with (a) a population density of at least 100 people per square mile and a population of at least 200,000; or (b) a population density of at least 75 people per square mile and an annual growth rate of at least 1.75 percent as determined by the office of financial management. Potentially include all vehicles in the targets, not only light-duty vehicles.	WSDOT	Vehicle Miles of Travel Reduction Proviso Presentation (Slide 11)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Promote efficient use of land for parking/curb use for heavy-duty vehicles	WSDOT	Vehicle Miles of Travel Reduction Proviso Presentation (Slide 6)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Renew the sales and use tax exemption for the purchase or lease of Clean Cars	WSDOT	Washington State Electric Vehicle Action Plan (pg. 23-25)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	"Increase the use of high-efficiency transportation options for commutes."	WSDOT and Washington State Commute Trip Reduction Board	Expanding Travel Options: Faster, Smarter and More Affordable A 2019- 2023 Strategic Plan (pg. 3)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	"Expand the availability and use of transportation options."	WSDOT and Washington State Commute Trip Reduction Board	Expanding Travel Options: Faster, Smarter and More Affordable A 2019- 2023 Strategic Plan (pg. 3)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	"Increase policy makers' support for TDM."	WSDOT and Washington State Commute Trip Reduction Board	Expanding Travel Options: Faster, Smarter and More Affordable A 2019- 2023 Strategic Plan (pg. 3)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Conduct an employee survey regarding commute behaviors; include questions about interest and existing barriers for participating in different trip reduction programs and public transit.	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022 (pg. 15)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Encourage staff to reduce trips (both commute and work-related) through encouraging telecommuting, trip reduction programs, and resources for public transit.	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022 (pg. 15)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Improve transportation-related energy efficiency	Lummi Nation	Climate Change Mitigation and Adaptation Plan: 2016-2026 (pg. 3)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Promote transportation demand management strategies such as: (1) Walk, bike, or carpool to your destination; (2) Provide and promote utilization of public transportation; (3) Invest in pedestrian-friendly infrastructure; (4) Drive an electric, hybrid, or high fuel economy vehicle; (5) Use fuel efficient driving habits	Lummi Nation	Climate Change Mitigation and Adaptation Plan: 2016-2026 (pg. 80-81)
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Considering climate change in constructing or updating transportation infrastructure will ensure that transportation systems can withstand future impacts	Puyallup Tribe of Indians	Climate Change Impact Assessment and Adaptation Options 2016 (pg. 30)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Transportation Choices – invest in a sustainable, multimodal transportation system, including significant expansion of high-capacity transit (light rail, bus rapid transit, passenger only ferry), bicycle and pedestrian network connections, HOV lanes and operational and efficiency improvements.	Puget Sound Regional Council	Regional Transportation Plan, adopted May 2022
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Fund, complete, and operate the highly efficient, multimodal system in the Regional Transportation Plan to support the Regional Growth Strategy. Coordinate WSDOT, regional, and local transportation agencies, in collaboration with the state legislature, to build the multimodal system.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Strategically expand capacity and increase efficiency of the transportation system to move goods, services, and people consistent with the Regional Growth Strategy. Focus on investments that produce the greatest net benefits to people and minimize the environmental impacts of transportation.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Improve local street patterns – including their design and how they are used – for walking, bicycling, and transit use to enhance communities, connectivity, and physical activity.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Design transportation programs and projects to support local and regional growth centers and high-capacity transit station areas.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Promote the preservation of existing rights-of-way for future high-capacity transit.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Efficient Systems Operations	Reduce greenhouse gases by expanding the use of conservation and alternative energy sources, electrifying the transportation system, and reducing vehicle miles traveled by increasing alternatives to driving alone.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	User Fees	Develop vehicle usage pricing strategies that are equitable, while also reducing emissions from County-owned vehicles by 45% by 2025	King County	King County Strategic Climate Action Plan (pg. 12)
Move People and Goods More Efficiently and Equitably	User Fees	Support vehicle usage pricing to reduce car trips that is equitable and socially just, such as congestion or VMT pricing that fund transit and ensure rates are reduced for people with low-incomes	King County	King County Strategic Climate Action Plan (pg. 69)
Move People and Goods More Efficiently and Equitably	User Fees	Differential sales tax based on vehicles GHG emissions	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	User Fees	Restrict sales of light-duty internal combustion engine (ICE) vehicles by a future date	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	User Fees	Further examination of PSRC's RTP for "User Fees"	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	User Fees	Create differential charges on fuels based on life-cycle carbon-intensity	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	User Fees	Impose a tax or fee on diesel to subsidize alternative fuels	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Move People and Goods More Efficiently and Equitably	User Fees	Implement a road usage charge (RUC) system by 2030 that will serve as an eventual replacement of the motor fuel tax	Puget Sound Regional Council	Regional 2030 Climate Analysis – Background Documentation and Analysis Results Review Draft
Move People and Goods More Efficiently and Equitably	User Fees	Manage traffic flow using toll lanes	WSDOT	Sustainable Transportation Website
Move People and Goods More Efficiently and Equitably	User Fees	Pricing – transition from the gas tax to a user pricing system, such as implementation of a variable time of day road usage charge (10 cents/mile peak, 5 cents/mile off peak); revenues generated should be available for multimodal improvements.	Puget Sound Regional Council	Regional Transportation Plan, adopted May 2022
Move People and Goods More Efficiently and Equitably	User Fees	Pursue alternative transportation financing methods, such as user fees, tolls, and other pricing mechanisms to manage and fund the maintenance, improvement, preservation, and operation of the transportation system.	Puget Sound Regional Council	Vision 2050
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Deploy EV charging stations within the City	City of Bellevue	Comprehensive Plan (pg. 248)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Utilize electric vehicles and alternative fuels for the City fleet	City of Seattle	Seattle Climate Action (pg. 9)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Increase funding for fleet capital budget to accelerate replacement with low emission vehicles	City of Tacoma	Climate Action Plan (pg. 187)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Transition transit fixed route fleet vehicles to zero-emission battery buses	King County	Implementation Plan for a Carbon Neutral King County Government (pg. 24)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Transition fleet and transit (non-fixed route) vehicles to electric vehicles (EVs) and other alternative fuels and improving fuel efficiency. Fleet include ACCESS vehicles, rideshare vehicles, Transit NRV, and EV Fleet	King County	Implementation Plan for a Carbon Neutral King County Government (pg. 28)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Increase the efficiency of County vehicle fleets and minimize their GHG emissions by establishing targets and supporting actions - such as transitioning to electric vehicles - to reduce fleet GHG emissions by 45% by 2050 and 70% by 2030	King County	King County Strategic Climate Action Plan (pg. 39)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Reduce fleet GHG emissions by 45 percent by 2025 and 70 percent by 2030	King County	King County Strategic Climate Action Plan (pg. 61)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Electrify the fleet and build out electric vehicle charging infrastructure	King County	King County Strategic Climate Action Plan (pg. 61)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Pursue fleet and workforce efficiencies such as right-sizing vehicles, pooling equipment, and expanding employee remote work options	King County	King County Strategic Climate Action Plan (pg. 61)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Complete a Zero-Emission Fleet Transition Plan	Okanogan County Transit Authority	Transit Development Plan 2022-2027 (pg. 10)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Offer grants to transit authorities for projects that reduce the carbon intensity of the Washington transportation system, including fleet electrification, modification or replacement of facilities to facilitate fleet electrification and hydrogen fueling, upgrades to electrical transmission and distribution systems, and constructing of charging and fueling infrastructure	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Transition fleet vehicles to battery-electric options	Washington State Department of Commerce	Fleet Electrification
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Pursue accelerative policies, including financial incentives, loan programs, fleet targets and outreach campaigns for public and private fleets	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 65)
Move People and Goods More Efficiently and Equitably	Fleet Operations Management	Prioritize investments to reduce GHG emissions and VMT from facilities, assets and fleet operations	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Protect federal vehicle efficiency standards	King County	King County Strategic Climate Action Plan (pg. 81)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Limit fossil fuel consumption from idling ships by (1) enabling ships to connect to expended electricity systems serving the Marine Terminal and (2) deploying a mobile bulk ship loader	Port of Anacortes	Marine Modernization Plan (pg. 13)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Reduce emissions for maritime vehicles at shore by offering shore power	Port of Bellingham	2013 Sustainability Report (pg. 21)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Operate all vehicles and equipment in a manner that reduces emissions to the extent possible	Port of Edmonds	Environmental Policy (pg. 1)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Provide direct shore power connections to support net zero emissions when vessels are working alongside Port docks	Port of Port Angeles Washington	Strategic Plan 2009-2013 (pg. 7)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Install shore power at all major cruise berths by 2030	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 69)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Support continual advancements in equipment efficiency and emission reduction from ocean-going vessels	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 70)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Install and require shore power usage at international container terminals	Port of Tacoma	Environmental Action Plan: Tacoma Harbor (pg. 10)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Promote Lower Carbon Marine Operations	Port of Vancouver	Climate Action Plan (pg. 21)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Install drayage truck traffic monitoring systems to reduce idling	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Provide shore power at the TOTE Terminal and for tugboats	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Equip switching locomotives with idle reduction equipment	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Provide shore power at Terminal 91 cruise terminal for cruise and commercial fishing fleet	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Install drayage truck traffic monitoring systems to reduce idling	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Equip switching locomotives with idle reduction equipment	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Use CMAQ grant funding to provide electrical shore power infrastructure for vessels	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 9)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Repower existing ferries with newer engines	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 9)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Connect to shore power during tie-up at night	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 9)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Limit train speeds and shut down idle locomotives to save fuel	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 9)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Install idle reduction equipment on existing locomotives	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 9)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Replace older locomotives with new fuel-efficient locomotives and implement rail lubrication to increase fuel efficiency	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 9)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Pursue opportunities for reduction in GHG emissions through improvements in traffic operations and roadway design that reduce vehicle delay, idling, and starting and stopping at intersections	Skagit Council of Governments	Skagit 2045 Regional Transportation Plan (pg. 92)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Fund programs and projects to increase transportation efficiency, reduce delay, and reduce emissions such as signalization coordination improvements along with application of speed harmonization techniques (ex. reevaluate speed limits, roundabouts vs signalized intersection, street connectivity	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 84)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Assess how to effectively mitigate freight VMT and greenhouse gas emissions	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 60)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Ports and railroads can invest in improvements that make operations more efficient	WSDOT	2020 Washington State Rail Plan (pg. 86)
Move People and Goods More Efficiently and Equitably	Vehicle Efficiency	Identify additional opportunities for ferry vessel operational efficiencies, such as adjusting vessel trim and reducing engine use	WSDOT	2020 WSDOT Greenhouse Gas Emissions Fact Sheet
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require electric vehicle charging stations with new developments, including multi-family housing and some commercial buildings	City of Olympia	Transportation Master Plan (pg. 16-17)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Ensure visible and ready access to charging infrastructure to support expanded vehicle electrification	City of Seattle	Seattle Climate Action (pg. 8)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Implement a pilot program to understand how EV charging will impact the electric grid	City of Seattle	Seattle Climate Action (pg. 9)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Amend the electrical code to ensure new parking is built to facilitate future electric vehicle charging infrastructure	City of Seattle	Seattle Climate Action (pg. 9)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Expand EV charging infrastructure at all City prioritized fleet sites using results from the EV Siting Study	City of Tacoma	Climate Action Plan (pg. 187)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Improve access to electric vehicles and charging through incentives, shared-use opportunities, and outreach	King County	King County Strategic Climate Action Plan (pg. 69)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Evaluate opportunities to expand publicly accessible EV charging infrastructure at King County facilities that prioritize equitable access to shared mobility	King County	King County Strategic Climate Action Plan (pg. 81)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Develop code revisions for unincorporated King County that require or incentive(s) EV readiness in new development	King County	King County Strategic Climate Action Plan (pg. 82)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Electrify King County's vehicle fleet and build out charging infrastructure.	King County	King County Strategic Climate Action Plan (pg. 84)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy EV charging across Port waterfront properties	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 44)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide infrastructure to enable adoption of zero-emission harbor vessels by 2030	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 71)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide infrastructure to enable adoption of zero-emission supply trucks and buses by 2030, support adoption of zero-emission supply truck and bus equipment by 2050, and	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 78)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
		support continual advancements in vehicle efficiency and emission reduction from trucks and buses		
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide infrastructure to enable adoption of zero-emission on-terminal rail by 2030, support adoption of zero-emission rail by 2050, and support continual advancements in equipment efficiency and emission reductions from rail	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 79)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	By 2030, sufficient infrastructure is in place to enable the transition to zero-emission trucks	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 26)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	By 2030, sufficient infrastructure is in place to enable adoption of zero-emissions harbor vessels	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 28)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	By 2030, sufficient infrastructure is in place to enable adoption of zero-emissions on-terminal rail	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 30)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Install infrastructure needed to support adoption of zero- emission technologies	Port of Tacoma	Environmental Action Plan: Tacoma Harbor (pg. 10)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Place GHG requirements on operation of heavy-duty on- road trucks	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Install electric vehicle charging station	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Advance electric ground support equipment (eGSE) charging for Concourses A and B and South Satellite at SEA	SeaTac (airport)	SEA Steps on the (Renewable) Gas to Halve Carbon Emissions
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Developing a complete electrical vehicle charging network in strategic locations	Northeast Washington Regional Transportation	Northeast Washington Regional Transportation Plan 2042 (pg.25)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
			Planning Organization	
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Develop a robust EV charging network along the region's scenic byways, highways, and other strategic locations	Okanogan Council of Governments	2040 Regional Transportation Plan for the Okanogan Region (pg. 30)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Participate in Avista's electric vehicle supply equipment (EVSE) charging station installation program	Palouse Regional Transportation Planning Organization	Palouse 2040 Regional Transportation Plan (pg. 56)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide infrastructure sufficient to support widespread electrification of the transportation system	Puget Sound Regional Council	Vision 2050 (pg. 106)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Build EV charging infrastructure	Southwest Washington Regional Transportation Planning Organization	Coordinated Public Transit – Human Services Transportation Plan (Chapter 8-4)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require large commercial and residential buildings to dedicate a percentage of parking spots for electric vehicle charging	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 85)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Allow free parking for all electric vehicles at local government buildings and in city centers to encourage the adoption of all electric vehicles	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 85)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require all new residential construction be built EV ready	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 85)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Reevaluate regulations and make necessary changes to ensure charging stations are able to be permitted in locations where they are needed	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 85)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Partner with environmental and other agencies to increase consumer awareness about EV options and incentives for use and purchase	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 85)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Create a group purchase program for residents to get deep discounts on EVs, other fuel efficient and alternative fuel vehicles	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 86)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Partner with car sale and lease dealerships to provide incentives for purchase of electric vehicles by Thurston County residents	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 86)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Evaluate and apply data and standardized methods for optimizing locations of public charging infrastructure, public-private partnerships, and cost-sharing	Whatcom Council of Governments	Way to Go, Whatcom (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Submit an EV Infrastructure Deployment Plan annually and deploy EV infrastructure accordingly	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Fund the deployment of Level 2 and direct current fast charging (DCFC) electric vehicle (EV) chargers and hydrogen fueling infrastructure along highway corridors in Washington	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require that any regional transportation planning organization containing a county with a population greater than one million must collaborate with state and local governments to promote EV use, invest in EV charging infrastructure, and seek federal or private funding for these efforts	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	install electrical outlets suitable for charging EVs in each of the state's fleet parking and maintenance facilities as well as every state-operated highway rest stop	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require that jurisdictions develop regulations to allow the use of EV infrastructure and battery charging stations in all areas except critical areas or areas zoned for residential or resource use	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Install co-located DCFC and hydrogen fueling stations in the Wenatchee or East Wenatchee area near a state route or publicly owned facility	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Implement ZEVIP—Zero Emission Vehicle (ZEV) Infrastructure Partnership Grant Prgm. 10.M	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Implement NEVI—National EV Infrastructure Grant Program. 9.8M (Fed)	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Invest with EV Infrastructure Grants (local/tribal govt., utilities) \$69M in 2021-2023; \$138M for 2023-25	Office of Program Research Washington State	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
			House of Representatives	
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Install Direct Current (DC) fast and Level 2 "medium speed" charging equipment along Interstate 5, eastward along Interstate 90, and US Highway 2	Washington State Department of Commerce	Clean Transportation (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Direct and fund a comprehensive Battery Electric Vehicle (BEV) charging and FCV fueling infrastructure needs assessment	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 60)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Establish a permanent BEV charging and FCV fueling infrastructure planning and development entity responsible for setting near- and long-term priorities, coordinating among different stakeholders and jurisdictions, and helping to secure funding	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 64)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Establish — and promote enforcement of — building codes that require installation of conduit, wiring and panel capacity needed to support EVSE in new and retrofitted buildings, including commercial buildings, office buildings and multifamily dwelling units	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 64)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Identify major BEV charging and FCV fueling infrastructure projects with significant public benefit and provide these with direct public investment	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 64)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide resources for robust, comprehensive and accessible EV outreach and education	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 65)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide guidance to cities, counties, and transit agencies on various business models and funding mechanisms that can enable them to plan for and stimulate an expansion of electric vehicle charging stations across Washington	Washington State Transportation Commission	Washington Transportation Plan: 2040 and Beyond (pg. 61)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Determine future needs and opportunities for electric truck charging facilities in the state.; Look for opportunities to increase [truck] parking availability when building out charging infrastructure	WSDOT	2021 Washington State Truck Parking Workshop (pg. 7)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Promote and invest in the conversion to zero emission infrastructure and fuels by developing plans for statewide zero emissions fueling infrastructure	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Conduct public education and outreach to increase consumer awareness and demand	WSDOT	Washington State Electric Vehicle Action Plan (pg. 26)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide more EV charging signage to increase public awareness of availability	WSDOT	Washington State Electric Vehicle Action Plan (pg. 27)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Explore providing other incentives to increase use of electric vehicles	WSDOT	Washington State Electric Vehicle Action Plan (pg. 28)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Complete the build-out of Washington's fast charging network along highways	WSDOT	Washington State Electric Vehicle Action Plan (pg. 29)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Explore funding mechanisms and business models to bolster installation of EVSE	WSDOT	Washington State Electric Vehicle Action Plan (pg. 30)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support workplace charging	WSDOT	Washington State Electric Vehicle Action Plan (pg. 31)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Address building codes, policy, and zoning barriers to EV infrastructure	WSDOT	Washington State Electric Vehicle Action Plan (pg. 32)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Engage utilities on EV issues	WSDOT	Washington State Electric Vehicle Action Plan (pg. 33-34)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require future state-supported DC fast charging stations to serve more vehicles	WSDOT	Washington State Electric Vehicle Action Plan (pg. 34)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support and participate in regional partnerships to advance EVs	WSDOT	Washington State Electric Vehicle Action Plan (pg. 35-36)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Identify investments in fast charging along the state's existing Alternative Fuel Corridors (AFCs), beginning with interstates	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Fill gaps in the EV infrastructure network such that the frequency of stations [is] no less than 50 miles along the selected corridor and stations are within one travel mile from the corridor	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 15)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Conduct gap analysis to identify remaining [EV charging] network discontinuities	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 2)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Place fast chargers at or near ferry terminals	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 20)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy a grant program for the development of EV charging infrastructure in rural areas, office buildings, multifamily housing, ports, schools and school districts, and state and local government offices	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 26)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Build a mapping and forecasting tool that provides locations and information on charging and refueling infrastructure	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 26)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Use grant funding to support the City of Mount Vernon for the Mount Vernon Library Commons project to install 75 electric vehicle charging stations	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 27)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Use grant funding to support the Lewis Public Transportation Benefit Area to construct a hydrogen fueling station near Chehalis	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 27)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Use grant funding to support the city of Lacey to install 12 electric vehicle charging stations in parks and other public spaces	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 27)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Use grant funding to support the town of Steilacoom to install electric vehicle charging stations at the town's public works facility	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 27)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy EVSE infrastructure at state-owned facilities to accommodate charging station installations	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 28)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Prepare a ZEV implementation strategy state fleet passenger vehicle fleet; identify barriers to EV replacement strategies; identify optimal hub locations; estimate fiscal impacts	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 28)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy a co-located DC fast charging and hydrogen fueling station near the Wenatchee or East Wenatchee area to serve passenger, light-duty, and heavy-duty vehicles	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 29)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Design an electric charging mega-site project at Mount Vernon library commons	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 29)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Conduct assessment of options for a publicly available mapping and forecasting tool that provides locations and essential information of charging and fueling infrastructure	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 29)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Identify all electric vehicle infrastructure grants related including state, federal, and other funds	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 3)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Conduct public engagement to better understand EV charging needs to inform project prioritization	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 4)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Plan for and expand EV charging station availability for Tribal Facilities	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022 (pg. 14)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support EV/hydrogen purchases through public outreach	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022 (pg. 15)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Promote the use of alternative fuels such as electricity and compressed natural gas and evaluate the use of such fuels for the city's vehicles	City of Bellevue	Comprehensive Plan (pg. 263)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide support to Pierce Transit to develop a zero-emission transit plan and help Pierce Transit compete effectively for state and federal funding opportunities.	City of Tacoma	Climate Action Plan (pg. 49)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support zero emission technology innovation in the marine, trucking and rail sector	City of Tacoma	Climate Action Plan (pg. 51)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Engage in regional coordination efforts with King County Climate and Equity Community Taskforce and existing forums, including the Regional Transportation Electrification Workgroup, to accelerate equitable distribution of benefits of EVs, so communities that have experiences disproportionate burden from air pollution see reductions first and promoting equitable access to mobility that prioritizes mobility solutions	King County	King County Strategic Climate Action Plan (pg. 81)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support engagement and partnership with utilizes and organizations to develop regional pilots to incent the transition to EV ownership	King County	King County Strategic Climate Action Plan (pg. 81)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Evaluate and consider adoption of incentives or requirements for Transportation Network Companies licensing that phases in EV adoption	King County	King County Strategic Climate Action Plan (pg. 82)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Replace older vehicles with more fuel efficient or electric- powered vehicles	Port of Olympia	2017 GHG Emissions Inventory Report (pg. 5-1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support accelerated turnover of harbor vessels to zero- emission models by 2050	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 71)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	By 2050, zero-emissions trucks are adopted	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 27)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	By 2050, zero-emissions harbor vessels are adopted	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver	Northwest Ports Clean Air Strategy (pg. 29)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
			Fraser Port Authority	
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	By 2050, zero-emissions on-terminal rail is adopted	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 32)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	By 2050, port authorities have adopted zero-emissions vehicles, equipment, and vessel fleets	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 32)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Transition Port fleet to zero-emission vehicles by 2050	Port of Tacoma	Environmental Action Plan: Tacoma Harbor (pg. 10)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Transition to zero-emission drayage trucks (independent trucks/companies)	Port of Tacoma	Environmental Action Plan: Tacoma Harbor (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support deployment of a hybrid or zero emission tug	Port of Tacoma	Environmental Action Plan: Tacoma Harbor (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Promote the Upgrade of Fossil-fueled Tenant Vehicles and Equipment	Port of Vancouver	Climate Action Plan (pg. 20-21)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Reduce Emissions from Rail Operation	Port of Vancouver	Climate Action Plan (pg. 21)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Accelerate zero-emission vehicle (ZEV) adoption in the Puget Sound region	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Adopt a ZEV mandate similar to California	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Offer ZEV infrastructure incentive programs	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Expand zero-emission bus services in rural areas, along with the related and necessary charging and storage facilities in rural communities, park-and-rides and the Link	Chelan-Douglas Transportation Council	Coordinated Mobility Plan (pg. 21)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
		Transit operations base to accommodate additional electric transit vehicles		
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Shift to zero-emission vehicles	Puget Sound Regional Council	2030 GHG Analysis and Climate Implementation Strategy (pg. 21)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Invest in new, greener vessels through electrification	Puget Sound Regional Council	Regional Transportation Plan (pg. 136)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Work with partner agencies on regional collaboration to support electric vehicles and associated infrastructure issues	Puget Sound Regional Council	Vision 2050 (pg. 107)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Electrify the transportation system	Puget Sound Regional Council	Vision 2050 (pg. 60)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	"STA has invested in more than ten battery electric buses in 2020 and 2021. There are ongoing efforts to plan and fund bus charging at various transit stops throughout the region."	Spokane Regional Transportation Council	Horizon 2045 Spokane Metropolitan Transportation Plan (pg.98)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	"SRTC was awarded a grant of \$2.5 million for electric vehicle supply equipment (EVSE) from the Washington State Dept. of Commerce through the US Dept of Energy's Clean Energy Fund III. Matching funds were provided by Avista and STA."	Spokane Regional Transportation Council	Horizon 2045 Spokane Metropolitan Transportation Plan (pg.98)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Investigate options then set appropriate timetables and policies for municipal and other governmental entities to replace public fleets with cleaner, energy-efficient vehicles to reduce long term fuel costs, improve air quality, and reduce greenhouse gas emissions	Thurston Regional Planning Council	Thurston Climate Mitigation Plan (pg. 85)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Conduct planning and programming activities in alignment with the compatible elements of federal, state, and member jurisdiction's electric vehicle infrastructure plans and initiatives	Whatcom Council of Governments	Way to Go, Whatcom (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Coordinate with WTA, neighboring county transit agencies, and WSDOT to support transit's needs to transition vehicles to zero-emission, including funding opportunities	Whatcom Council of Governments	Way to Go, Whatcom (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	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	Whatcom Council of Governments	Way to Go, Whatcom (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Finalize a Zero Emission Vehicle mandate ("ZEV mandate") reflecting California's ZEV policy, which requires 100 percent of new passenger vehicles and light-duty trucks sold in the state to be zero-emissions vehicles (ZEVs) by 2035.	Department of Ecology, State of Washington	Clean Fuel Standard Cost Benefit Analysis Report (pg. 15)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Adopt California's Advanced Clean Trucks standard for new medium and heavy duty-vehicle sales starting with model year 2025	Department of Ecology, State of Washington	Clean Fuel Standard Cost Benefit Analysis Report (pg. 16)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Exempt public lands used for installing, maintaining, and operating EV charges from leadhold excise taxes.	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Exempt EV and FCEV batteries and fuel cells, along with the following, from state sales and use taxes: labor and services for installing, repairing, altering, or improving EV and FCEV batteries fuel cells, or EV and FCEV infrastructure; the sale of property used for EV and hydrogen fueling infrastructure; and the sale of zero emission buses	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Offer grants to nonprofit organizations and local governments to design and create a ZEV carshare program in underserved and low-to moderate-income communities	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Have utilities submit transportation electrification plans that deploy electric vehicle (EV) charging stations or programs and incentives that support transportation electrification	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Exempt the sale or lease of new or used passenger vehicles, light-duty trucks, and medium-duty passenger AFVsfrom the state retail sales and use tax	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Offer rebates through utilities for purchasing or charging EVs	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	State executive and small-cabinet agency fleets must procure EVs to replace light-, medium-, and heavy- duty internal combustion engine (ICE) vehicles once they reach the end of their useful life	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Exempt entities that offer electric vehicle supply equipment to the public for hire from having their rates, services, facilities or practices regulated by the Washington Utilities and Transportation Commission (Commission)	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Work with the Office of the Governor and state agencies to select projects and distribute funding to leverage 15% of Washington's portion of the VW Environmental Mitigation Trust for the acquisition, installation, operation, and maintenance of light-duty zero-emission vehicle charging infrastructure	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require, for all new buildings, that at least one parking space, or 10% of parking spaces rounded to the next whole number, must be made-ready for Level 2 EV charging stations	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Require that all light-duty vehicles sold, purchased, or registered in Washington state must be EVs by model year 2030	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Establish and coordinate a zero-emission truck stakeholder group to lead the development and implementation of at least one zero-emission drayage truck demonstration project and develop a roadmap to transition the NWSA cargo gateway fleet to zero-emission trucks, by 2050	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Establish an interagency EV coordinating council (Council) to advance transportation electrification	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Exempt EV Batteries, Fuel Cells, Infrastructure, and Zero Emission Bus from Retail Sales and Use Taxes	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Invest in Hybrid-Electric Ferries	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Invest in Ferry Electrification (for vessel conversions and terminals)	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Invest in Ferry Electrification Project (Guemes Ferry Boat Replacement)	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide Electric Vessel, Marine Battery, and Infrastructure Tax Exemptions	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy State and Local Decarbonization Grants \$392M planned in future funding over next 15 years	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy Carbon Emission Reduction Grants \$125M planned in future funding over next 15 years	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy Volks Wagon Settlement Grants (to reduce toxic diesel and GHG emissions; 15% for ZEV infrastructure)	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Fund Electrification of Transportation Systems Program (includes grants for grid modernization to fund new approaches to electrification)	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Fund an incentive program and technical assistance and support for conversion of heavy and medium duty vehicles from gas to zero emission in overburdened communities [including tribes]	State Environmental Justice Council	Environmental Justice Council Meeting Materials November 18, 2022, Special Meeting (pg. 4)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Fund an incentive program and technical assistance and support for conversion to zero emissions vehicles for those who are using a primary vehicle for small business write-offs.	State Environmental Justice Council	Environmental Justice Council Meeting Materials November 18, 2022, Special Meeting (pg. 4)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Register 50,000 plug-in electric vehicles by 2020	Washington State Department of Commerce	Clean Transportation (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Provide grants to Washington local governments and Tribal Governments for electric vehicle charging infrastructure	Washington State Department of Commerce	Clean Transportation (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Transportation Electrification Strategy (TES)	Washington State Department of Commerce	Transportation Electrification Strategy (TES)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Set targets for Electric Vehicles (EV) and Fuel Cell Vehicle (FCV) adoption, differentiated by vehicle class	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 60)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Continue to publicly track annual metrics on BEV and FCV adoption	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 60)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Continue efforts to convert state-owned vehicle fleets to EVs and expand the current goal beyond 50% of new state passenger vehicle purchases	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 65)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Enhance existing and restore expired electric vehicle and low carbon fuel incentive and reduce disincentives	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 65)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Incentivize the use of clean technology and energy efficiency in the freight sector	Washington State Transportation Commission	Washington Transportation Plan: 2040 and Beyond (pg. 62)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Complete System Electrification Plan to outline efforts to electrify the vessel fleet	WSDOT	2020 WSDOT Greenhouse Gas Emissions Fact Sheet
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Promote and invest in the conversion to zero emission infrastructure and fuels by implementing grant programs	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Promote and invest in the conversion to zero emission infrastructure and fuels by advocating for sustainable fuels and seeking funding	WSDOT	Draft WSDOT Transportation Sector GHG Actions (Resilience Goal P2 tab of spreadsheet)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Purchase plug-in hybrid work trucks	WSDOT	Sustainable Transportation Website
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy new locomotives to the Amtrak Cascades fleet	WSDOT	Sustainable Transportation Website
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Replace 25% of WSDOT gasoline use with electricity by 2040; 50% by 2050	WSDOT	Washington State Department of Transportation Greenhouse Gas Reduction Plan (pg. 13)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Relace 25% of WSDOT diesel use with electricity by 2050	WSDOT	Washington State Department of Transportation Greenhouse Gas Reduction Plan (pg. 13)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Replace 25% of WSDOT natural gas use with electricity by 2040; 75% by 2050	WSDOT	Washington State Department of Transportation Greenhouse Gas Reduction Plan (pg. 13)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Track and participate in national EV efforts	WSDOT	Washington State Electric Vehicle Action Plan (pg. 36)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Convert Washington State Ferries to a hybrid-electric propulsion fleet, which includes delivering 16 new vessels as well as six diesel conversions	WSDOT	Washington State Ferries System Electrification Plan
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Conduct 17 terminal electrification projects to electrify Washington State Ferries	WSDOT	Washington State Ferries System Electrification Plan
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Develop training plan focused on hybrid-electric technologies to support ferry electrification	WSDOT	Washington State Ferries System Electrification Plan
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Promote EV adoption through the EV charging network	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 15)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Transition King County Metro fleet to 100 percent zero emissions powered by renewable energy by 2035	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 20)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Support the Spokane Transit Authority City Line project with a zero emission battery-electric bus	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 20)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Deploy a grant program that demonstrates innovative approaches to electrification of transportation services	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 27)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Conduct a study to assess opportunities to encourage high- consumption fuel users, including users of diesel fuel and gasoline, as well as in consideration to fleet usage, to switch to zero emission vehicles	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 28)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Exempt hydrogen fuel cell electric vehicles from sales and use taxes	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 28)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Develop a pilot program to provide clean alternative fuel vehicle use opportunities to underserved communities and low to moderate income members of the workforce not readily served by transit or located in transportation corridors that exceed emission standards	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 29)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Study maximizing walk on ferry ridership, including EV rentals at ferry terminals	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 29)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Develop a statewide transportation electrification strategy to meet the Clean Cars 2030 target	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 3)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Ensure that 100 percent of all new truck and bus sales are zero emission vehicles (ZEVs) by 2050, with an interim target of at least 30 percent by 2030.	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 30)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Mandate that at least one parking space, or 10% of parking spaces, must be made ready for Level 2 EV Charging at all new buildings	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 30)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Transition fleet vehicles to all electric	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022 (pg. 14)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Explore electric marine fleet options	Jamestown S'Klallam Tribe	Carbon Neutral Plan 2022 (pg. 15)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles	Technology / Decarbonization – transition the region's vehicle fleets to zero emission vehicles, with at least 90% of passenger vehicles and 50% of trucks zero emission by 2050.	Puget Sound Regional Council	Regional Transportation Plan, adopted May 2022
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Efficient Systems Operations	Transition to Electric vehicles and right-size vehicles and fleet by replacing older vehicles with newer, more fuel-efficient models, eliminating under-utilized vehicles from the fleet, and by pooling vehicles to maximize use per asset	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 45)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	By 2030, port authority passenger fleets are zero emissions vehicles or use renewable fuels	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 32)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Upgrade or Replace Fossil-Fueled Vehicles and Equipment	Port of Vancouver	Climate Action Plan (pg. 14)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Support the transition to a cleaner transportation system through investments in zero emission vehicles, low carbon fuels and other clean energy options	Puget Sound Regional Council	Vision 2050 (pg. 106)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Promote exploration of low emission fuels such as compressed natural gas (CNG), liquified natural gas (LNG), and renewable natural gas (RNG) to use in transit fleets	Southwest Washington Regional Transportation Planning Organization	Coordinated Public Transit – Human Services Transportation Plan (Chapter 8-4)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Require that all state agencies and local government agencies use, to the extent practicable, 100% biofuels or electricity to operate all publicly owned vehicles	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Require that state agencies consider purchasing low carbon fuel vehicles or converting conventional vehicles to use low carbon fuels when financially comparable over the vehicle's useful life	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Reduce diesel emissions in rail systems	WSDOT	2020 Washington State Rail Plan (pg. 78)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Convert ferries to hybrids (M/V Wenatchee, M/V Tacoma, M/V Puyallup Hybrid Electric Conversions)	WSDOT	Draft WSDOT Transportation Sector GHG Actions (FY 2023 tab of spreadsheet)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Transform public and private fleets	WSDOT	Washington State Electric Vehicle Action Plan (pg. 26)
Reduce Carbon Intensity of Transportation Fuels	Electric Vehicles/Green Hydrogen and Low- carbon Fuels	Implement programs and incentives that promote the purchase or conversion to alternative fuel vehicles	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 26)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Promote the use of alternative fuels such as electricity and compressed natural gas and evaluate the use of such fuels for the city's vehicles	City of Bellevue	Comprehensive Plan (pg. 263)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Develop and incorporate contractor fuel emissions reduction standards into bids and contracts to ensure construction contractors doing work on the City's behalf are using fuel efficient and low polluting vehicles and equipment when feasible and practicable	City of Tacoma	Climate Action Plan (pg. 190)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Adopt a clean fuels standard to reduce transportation-fuel GHG emissions intensities by at least 20% by 2030, compared to 2017 levels	King County	King County Strategic Climate Action Plan (pg. 61)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Expand the use of biofuels and renewable diesel	King County	King County Strategic Climate Action Plan (pg. 69)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Support the adoption of a statewide or regional low carbon fuel standard that gradually lowers pollution from transportation fuels. Additionally, support funding and policies that advance other clean fuel and zero emission vehicle strategies.	King County	King County Strategic Climate Action Plan (pg. 81)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Expand the use of alternative fuels when EVs are not feasible.	King County	King County Strategic Climate Action Plan (pg. 85)
Reduce Carbon Intensity of Transportation Fuels	Green hydrogen and low-carbon fuels	Replace organization carpool vehicles with hybrid vehicles	Port of Bellingham	2013 Sustainability Report (pg. 21)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Consider ways to reduce pollutants from transportation activities, including fleet vehicles, vehicle policies, maintenance practices, and cleaner fuels	Port of Coupeville	Port of Coupeville Resolution No. 286 (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Continue to explore cost-effective alternatives to fossil fuels in Port vehicles and equipment and implement changes as they become cost-feasible	Port of Edmonds	Environmental Policy (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Strive to acquire appropriate vehicle technology with the lowest GHG emissions as financially feasible	Port of Everett	Climate Change Strategy (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Invest in clean energy vehicles and equipment	Port of Everett	Environmental Stewardship & Sustainability Report 2020 (pg. 13)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Use drop-in renewable fuels for the port fleet (non- petroleum-based fuels like renewable diesel and renewable gasoline, made from sources like waste cooking oil, grease, tallow, or other renewable feedstocks	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 43)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Support continual advancements in vessel efficiency and emission reduction from harbor vessels	Port of Seattle	Charting the Course to Zero Port of Seattle's Maritime Climate and Air Action Plan (pg. 72)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Replace fossil natural gas with renewable natural gas in the Port bus fleet.	Port of Seattle	Measuring Greenhouse Gas Emissions at Port of Seattle (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Use renewable diesel in the Port fleet	Port of Seattle	Measuring Greenhouse Gas Emissions at Port of Seattle (pg. 1)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Continually increase vessel efficiency and decrease emissions from existing vessels	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 22)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Support international efforts toward phasing out emissions from vessels	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 23)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Continually increase vehicle efficiency and decrease emissions from existing trucks	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 26)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Continually increase vessel efficiency and decrease emissions from existing vessels	Port of Seattle, Port of Tacoma, Northwest Seaport Alliance, and Vancouver Fraser Port Authority	Northwest Ports Clean Air Strategy (pg. 28)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Adopt improved local government alternative fuel rule	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Institute life-cycle carbon-intensity requirements	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Regulate methane emissions or flaring to stimulate RNG production	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Incentivize production and use of renewable diesel (RD) and renewable natural gas (RNG)	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 11)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Incentivize the use of aviation biofuels	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Implement a biofuel mandate for every gallon sold, starting at B20 and ramping up with renewable diesel (local production and feedstocks, considering carbon intensity)	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Require that local government fleets have RFP or bid for fuel purchase with required GHG reductions	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Back or secure loans for [Renewable diesel (RD)] plants assuming funds are available	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Back or secure loans for [Renewable natural gas (RNG)] digesters or capture and processing for municipal, agriculture, and smaller facilities assuming funds are available	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Provide subsidy to vendors or fleets in our region for biofuel assuming funds are available	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Offered financial incentives for ships to burn cleaner fuel at berth	Puget Sound Maritime Air Forum	2016 Puget Sound Maritime Emissions Inventory - Revised 2018 (pg. 10)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Utilize renewable natural gas for bus fleet	SeaTac (airport)	"HOW SEATTLE-TACOMA INTERNATIONAL AIRPORT LEVERAGED RNG FOR THERMAL USE" (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Promote use of alternative fuels and technologies that reduce pollution and greenhouse gas emissions and other environmental impacts from motorized vehicles	Peninsula Regional Transportation Planning Organization	Regional Transportation Plan 2040 (pg. 11)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Adopt a Clean Fuel Standard that requires a 20% gradual reduction from 2017 levels in the carbon intensity of transportation fuels between 2023-2038	Department of Ecology, State of Washington	Clean Fuel Standard Cost Benefit Analysis Report (pg. 10)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Continue to set annual biofuel blending requirements for the Federal Renewable Fuel Standard Policy (RFS)	Department of Ecology, State of Washington	Clean Fuel Standard Cost Benefit Analysis Report (pg. 16)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Require suppliers to gradually reduce the carbon intensity of transportation fuels to 20% below 2017 levels by 2034, per the Clean Fuel Standard law	Department of Ecology, State of Washington	Clean Fuel Standards
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Provide tax credits to businesses for purchasing new or used medium- and heavy-duty AFVs and medium- and heavy-duty vehicles converted to alternative fuels, and installing alternative fueling infrastructure	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Establish a Clean Fuels Program (Program) that reduces the overall carbon intensity of transportation fuels used in the state by 20% below 2017 levels by 2035	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Require that at least 2% of all diesel fuel sold in Washington must be biodiesel or renewable diesel	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Require that at least 20% of all diesel fuel used to fuel state agency vehicles, vessels, and construction equipment must be biodiesel.	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Establish the Office of Renewable Energy (Office) to leverage, support, and collaborate with other state agencies to: *Accelerate market development by providing assistance along the entire life cycle of renewable fuel projects; *Support research on the development and deployment of renewable fuel and use of renewable and green electrolytic hydrogen; *Drive job creation, improve economic vitality, and support the transition to clean energy; *Enhance resiliency by using renewable fuels and green electrolytic hydrogen to support climate change mitigation and adaptations; and, *Partner with underserved communities to ensure communities equitably benefit from clean fuel efforts.	Department of Energy, State of Washington	Alternative Fuels Data Center - Washington Laws and Incentives (pg. 1)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Provide Alternative Fuel Business & Occupation (B&O) and Public Utility Tax (PUT) Commercial Vehicle Tax Credit	Office of Program Research Washington State House of Representatives	Carbon Reduction Stakeholder Meetings— December 2022 Alternative Fuels and Transportation Overview of Programs, Incentives, and Projects
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Make 35% of WSDOT vehicle fleet's diesel use renewable or a blend of biodiesel and renewable by 2040; 90% by 2050	WSDOT	Washington State Department of Transportation Greenhouse Gas Reduction Plan (pg. 13)

Level 1 Category	Level 2 Category	Strategic Action	Agency	Document Title
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Make 35% of WSDOT ferry vessel diesel use renewable or a blend of biodiesel and renewable by 2040; 90% by 2050	WSDOT	Washington State Department of Transportation Greenhouse Gas Reduction Plan (pg. 13)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Use lower carbon energy fuels for WSDOT operations	WSDOT	Washington State Department of Transportation Greenhouse Gas Reduction Plan (pg. 8)
Reduce Carbon Intensity of Transportation Fuels	Green Hydrogen and Low-carbon Fuels	Convert bus fleet to compressed natural gas	WSDOT	Washington State Plan for Electric Vehicle Infrastructure Deployment (pg. 20)
Other ⁶²	Other	Put overall GHG limits on major activity centers through the adoption of an Indirect Source Rule (ISR)	Puget Sound Clean Air Agency	Candidate Actions to Reduce Transportation Greenhouse Gas Emissions: Evaluation Report (pg. 12)
Other	Other	Implement California's "advanced clean car" emissions standards and follow through with implementation of measures needed to match California's ZEV sales targets for medium- and heavy-duty trucks.	Washington State Department of Commerce	Washington 2021 State Energy Strategy (pg. 60)

⁶² These entries are of a higher level than the other strategies identified in this Appendix and do not fit neatly into the previous Level 1 or 2 categories. We show them separately here for completeness.

Washington State Transportation Carbon Reduction Strategy

Appendix B: Partner Outreach Summary



Appendix B. Partner Outreach Summary

This Partner Outreach Summary documents the 2023 Transportation Carbon Reduction Strategy outreach process, thematic findings, and how the findings were used for informing the statewide strategy. Additional outreach and partner feedback will be included following the public comment period on the draft TCRS.

B.1. Early partner engagement and outreach

WSDOT recognizes that industry partners, metropolitan planning organizations (MPOs), regional transportation planning organizations (RTPOs), state departments and agencies, tribes, and community-based organizations throughout the state are developing individual carbon reduction strategies in multiple sectors. To inform the Washington State Transportation Carbon Reduction Strategy (TCRS), WSDOT sought to engage representatives around the state to learn about existing programs, current priorities, and plans for implementing local and regional carbon emissions reductions.

In March 2023, WSDOT developed an engagement plan to serve as a guide for public engagement activities. This plan was designed to provide flexibility over time to ensure that partners and the public were engaged and that the project team received the data and feedback needed to develop the TCRS. The engagement plan supported the policies and guidelines outlined in WSDOT's 2016 Community Engagement Plan and the 2022 Community Engagement Plan Update Draft. Engagement activities complied with community engagement principles consistent with WSDOT's strategic plan, federal requirements for a public involvement plan, and new state-level requirements under the Healthy Environment for All (HEAL) act.

The project team reached out to several hundred partner organizations with the following engagement plan goals:

- Advance equitable community participation as outlined in the HEAL Act.
- Maintain regular contact with partners to inform them of the TCRS development process and findings.
- Provide opportunities for partners to participate in the planning process by sharing data, information, insights, and perspectives.
- Build support for strategy findings and raise awareness of the state's role in reducing carbon emissions.

This outreach summary is organized by audience category and includes outreach strategies with key findings for each audience. Audience categories include:

- 1. State partners, and agencies, transportation planning organizations
- 2. State and federally recognized tribes in Washington State
- 3. Freight, aviation, port, transit, and transportation partners
- 4. Community-based organizations

State partners, agencies and transportation planning organizations

This category includes government partners, state and local agencies, metropolitan planning organizations (MPOs), and regional transportation planning organizations (RTPOs).

This audience was engaged to solicit data and perspectives on strategies that are highest priority, to learn what will work in their regional/local context, and to identify transportation carbon reduction strategies already in place. As the source of local information, this audience was asked to advise on which strategies to incorporate into the statewide TCRS and to provide local context. Coordination began early in the process to ensure involvement throughout the TCRS development. Outreach included:

- An online survey on issues, trends, and needs related to existing or upcoming local and statewide transportation carbon reduction strategy and efforts.
- Presentations to partner representatives and special interest committees.

Outreach was designed to meet three main goals:

- 1. Identify strategies being implemented to reduce transportation carbon emissions across the state.
- 2. Understand priorities and concerns relevant to developing the TCRS.
- 3. Improve relationships and knowledge sharing between WSDOT and local organizations.

Survey

WSDOT developed a survey asking MPOs and RTPOs about their past, existing, and current efforts – both formal and informal – to reduce carbon emissions. The survey asked for input on past challenges and secondary benefits. The survey was sent to all Washington State MPOs and RTPOs. Forty-three individuals representing 34 organizations completed the survey.

Respondents were asked if their comprehensive plans or strategy documents explicitly address transportation sector carbon emissions reduction strategies and to provide direct links and/or upload the documents for WSDOT reference.

Respondents were asked to elaborate on transportation carbon emissions reduction strategies that have been particularly successful, including if they would share their examples as a case study to WSDOT. Key highlights include:

- Working from home/telework policies have been powerful in reducing emissions.
- Trip reduction programs have reduced single-occupancy vehicle trips. Providing outreach services and information to employers contributes to that success.
- Transitioning to cleaner fuel products when/where electric vehicles are not yet available has been effective in reducing emissions.
- Denser land use policies and encouraging biking/walking/shorter vehicle trip lengths may be reducing overall emissions.
- An increase in e-commerce and more efficient delivery truck routes may be reducing overall emissions.

- Integrating several tactics land use policies, formal transportation demand management (TDM) programs, facility/fare tolling, and overall system decarbonization – produces the greatest reductions.
- Tracking and attributing success to specific tactics is difficult because implementation is done at many levels and there is no single agency or tool dedicated to tracking.

WSDOT asked respondents if there are other ways their organizations implicitly address transportation carbon emissions reduction strategies that were not already identified in the strategy elements or other documents provided. Key highlights include:

- Incorporating transportation strategies with land use policy development.
- Proactively developing and maintaining congestion/TDM programs, ensuring access to transit, and supporting active transportation programs.
- Regional organizations supporting local jurisdictions via Congestion Mitigation and Air Quality Improvement (CMAQ) funds administration and helping to oversee local modeling efforts to ensure coordination.
- Transit agencies are working to ensure efficient systems, for example consolidating and/or aligning services to avoid route duplication and/or unnecessary trips.

WSDOT asked respondents what type of challenges their organizations have encountered implementing carbon reduction strategies. Key highlights include:

- Overall lack of project funding and/or competition for limited funds.
 - Limited capacity (staffing/resources) and competing priorities to get projects to "shovel-ready" and ready for funds.
 - Federal infrastructure funds favor large, vehicle-centric projects and not transformative, smaller multi-modal transportation projects.
- No clear agreement or state/federal guidance on how to prioritize carbon reduction strategies.
 - Project prioritization mindsets and processes still focus on "level of service" and less on carbon reduction impact.
 - No global tool to measure emission reductions.
- Overall cost of electric vehicle charging stations and electric vehicles.
- Lack of flexibility for smaller communities to apply effective strategies to make small steps in the right direction e.g., statewide mandates can't/don't always work in more rural settings.
- Communities that developed around cars require major transportation system redesign, investment, and a shift in thinking.
 - o Reluctance to take "voluntary" actions that have big price tags.
- Lack of urgency and/or recognition, as well as pushback, from jurisdictional leadership and/or communities to develop or implement carbon reduction strategies.
- Funding strategies, organizational, and societal norms are designed to prioritize vehicle travel and level of service. Partners have to fight against the push for road capacity expansion projects as the default rather than multimodal and other carbon reduction strategies. Need to redesign transportation systems to support alternative transportation modes.

WSDOT asked respondents to describe any next steps and/or carbon reduction strategies their organization anticipates pursuing in the next five years. Key highlights include:

- Implementing current plans and strategies and measuring change.
- Continuing to include carbon reduction as a legislative priority and push for as a key element
 in the federal funding process. Supporting vehicle electrification opportunities both for internal
 facilities and fleets, external communities, and for low-income residents and those living in
 multi-family housing.
- Continuing to invest in pedestrian and bike infrastructure, integrated transportation, reducing urban corridor parking requirements, and micro mobility planning.
- Supporting broadband network development to reduce single occupant trips.
- Continuing to define and review greenhouse gas (GHG) inventories and incorporate and update strategies that make the most impact.
- Focusing on transportation system operations for energy reduction and increasing efficiencies in existing facilities.

Focused meetings

The project team held focused meetings with state agencies to gather detailed input on existing and planned carbon or VMT reduction strategies or other related topics. Meetings were held with organizations representing multiple sectors including MPOs/RTPOs, planning and transportation organizations, and state agencies.

Figure B.1: State partners meetings/presentations

- Clark County
- MPO/RTPO/WSDOT Coordinating Committee
- Puget Sound Regional Council
- Spokane Regional Transportation Council
- Thurston Regional Planning Council
- Washington State Department of Commerce and RMI (consultant working on electrification strategy)
- Washington State Department of Ecology
- Washington State Department of Labor
- Washington State University Green Transportation Alternative Fuels Program

Key findings

During the partners meetings, the project team learned about transportation carbon reduction programs, travel programs, and other related initiatives throughout the state. Key topics of discussion included:

- Responding to and generating actions from the Vehicle Miles of Travel Reduction Proviso.⁶³
- Developing local- and industry-specific carbon reduction strategies and opportunities for coordinating and working together. For example, workforce initiatives, the Green Electrolytic Hydrogen study, and Washington State University (WSU) Energy Program's Green Transportation Alternative Fuels program.
- Ecology's GHG baseline, statewide inventory and related statewide emission reduction programs.

Washington tribes

WSDOT initiated consultation with tribes in April 2023 via letters and email distributed to all state and federally recognized tribes in Washington State. As part of that correspondence, WSDOT invited tribes to participate in a survey on issues, trends, and needs related to carbon emission reduction efforts. In addition to the survey, the project team held a virtual tribal briefing meeting and offered individual tribal meetings. Goals were to:

- Better understand tribes' plans and priorities that may be relevant to developing the statewide TCRS.
 - Collect input on the tribes' carbon reduction concerns and constraints in developing carbon emission reduction strategies.
 - Learn about and address carbon emissions impacts on the environment, overburdened communities, and overall quality of life for tribes' people and businesses.
 - Improve relationships and opportunity for knowledge sharing between WSDOT and tribes.

Survey

Following multiple requests for survey input, WSDOT collected two responses from individual tribes. These responses provided tribal location-specific feedback to the project team.

Figure B.2: Survey responses from Washington State tribes

- Quinault Indian Nation
- Stillaguamish Tribe

The survey asked questions related to existing planning or strategy documents the tribes have developed to address transportation carbon emissions reduction strategies, non-formalized strategies, and other actions with secondary benefits including transportation carbon emissions reduction.

Key messages from the tribes' survey responses include:

• The tribes who responded indicated that they have not developed any planning or strategy documents that explicitly address transportation carbon emissions reduction strategies.

⁶³ 2021-23 Transportation Budget SSB 5165, Section 218 (3)

- As it relates to other, non-formalized transportation carbon emissions reduction strategies, one tribe responded that they have been working on climate change impact studies and mitigation strategies that include carbon reduction strategies. Additional efforts with secondary benefits include funding for electric vehicle (EV) charging stations, adding solar energy, and new construction designed to meet LEED standards.
- A past example of transportation carbon emissions reduction efforts included a carpool program that has since been eliminated.
- Challenges encountered in the implementation of carbon reduction strategies include a lack
 of funding and staffing to seek funding and run projects, a lack of expertise in electrical
 systems, and other priorities ahead of climate change initiatives.
- Electric vehicle charging stations and green energy production were cited as the carbon reduction strategies anticipated to be pursued in the next five years.
- Overall feedback included a comment that mitigating climate change and the impacts of carbon emissions are important to the sovereignty of the tribe. In addition, a comment was received that few tribal staff are tracking climate change issues.

Tribal briefing and focused meetings

The project team hosted a tribal briefing on May 2, 2023, via Zoom webinar. The briefing was promoted to 29 tribes via the WSDOT Tribal Liaison's office and attended by representatives from the Puyallup, Quinault, Squaxin, and Stillaguamish tribes. The briefing included a presentation outlining the CRP and the overall approach for the TCRS. Following a brief presentation from WSDOT and consultant project managers, the project team asked for input on tribes' current initiatives and priorities.

In addition to the tribal briefing, representatives from the Jamestown S'Klallam and Stillaguamish tribes, and the Yakama Nation attended the April 26th community partners meeting. Other tribal briefings included a presentation to the Tribal Transportation Planning Organization and a one-to-one discussion with the Cowlitz Tribe.

Figure B.3: Tribal partners meetings/presentations

- Cowlitz Tribe
- Tribal briefing webinar
- Tribal Transportation Planning Organization

Key messages from tribes included:

- Tribes may have individual strategies for carbon reduction.
- The tribes we spoke with are encouraging people to prioritize public transit and to reduce personal vehicle use.
- Tribes who participated in the listening session expressed concern about funding opportunities to implement carbon reduction projects.
- Tribes struggle keeping up with the number of funding opportunities available and the different grant and plan requirements needed for each. They don't have the resources to apply for all the programs and funding from which they could benefit.
- Tribes would like to see opportunities streamlined to make it easier for them (and other entities) to access available programs.

- Tribes find it challenging to thoroughly complete work on the tight schedules required by funding entities.
- Individual expenses toward electrification/clean power are their biggest hurdle. Need to look at how to lessen the burden of decarbonization on people with less economic means.
- Tribal transit agencies are concerned that there is no way to charge electric vehicles in rural areas and large transit vehicles often don't have a large enough range.

WSDOT will seek additional tribal input when the draft document is available for public review and invite tribes to the final public webinar and one-to-one meetings.

Freight, aviation, port, transit, and transportation partners

This category includes freight and aviation partners, ports, transit, and transportation partners as well as organizations such as mobility services, transportation-focused schools, and associations representing professional services such as pilots, operating engineers, delivery services, and trucking.

Survey

WSDOT developed a partner survey that asked about past, existing, and current efforts – both formal and informal – to reduce carbon emissions. The survey also asked about past challenges and secondary benefits of carbon reduction efforts.

WSDOT sent the partner survey to 304 contacts representing freight and aviation partners, ports, schools, transit agencies, mobility services, and bicycle and active transportation organizations across the state. Fifty-eight individuals responded to the survey request and 46 individuals provided substantive responses to the survey.

Figure B.4: Partner survey responses

- 18 individuals representing transportation/transit organizations
- 16 individuals representing port districts/associations
- 5 individuals representing state, regional, or local government agencies
- 4 individuals representing private freight, aviation and transportation industry/business partners
- 2 individuals representing community-based organizations
- 1 individual representing airports

Key survey findings

Over one-third of respondents stated that their organization has developed or is currently working on a planning/strategy document specific to carbon emissions reduction. In addition to, or in absence of, a formal carbon reduction strategy, many organizations are looking to transition their vehicle fleets to electric, hybrid, propane, or biodiesel when practical. Other key takeaways include:

Many organizations, government agencies, transportation agencies, and port properties
mentioned they are looking to retrofit older technologies, equipment, and buildings, to include
solar, electrification, and other forms of alternative energy.

- Private industries are focused on transitioning to electric vehicles and zero emission machines within their business operations.
- Ports are implementing programs to convert to zero emissions technologies, including ship to shore power, cargo handling, and drayage trucks, as well as proactive programs to create green cruise corridors.
- Government and transportation agencies are coordinating with other regional authorities'
 active transportation and multimodal teams to enhance multimodal investments within their
 services areas with a focus on underserved and overburdened communities.

WSDOT asked respondents to elaborate on any carbon emissions reduction strategies that have proven effective in the past. Key highlights include:

- Government and transportation agencies are transitioning fleet vehicles to electric, hybrid, and alternative fuels.
- Many public agencies (ports, government, and transportation) reported implementing trip
 reduction strategies (such as telework/remote work policies, shared EVs, and offering bikes to
 staff for short trips).
- Transit agencies using routing software to optimize demand responsive routes to increase fuel efficiency.
- Ports reported pilot programs using zero emissions technologies

 such as the deployment of
 battery electric port terminal tractors and electric shore power plug-ins for vessels to shut off
 their engines.
- Ports reported increased coordination and collaboration between similar agencies (for example, Ports collaborating to develop a green cruise corridor as the Northwest Clean Ports Strategy, initiated by the Port of Seattle and Port of Tacoma).
- The Port of Seattle mentioned focusing on selecting investments based on lifecycle costs instead of upfront costs to effectively decarbonize elements of a capital program.
- An airport established "no-idling" policies, and minimum "miles per gallon" standards at airport and port facilities for taxis and transportation network companies (TNC) vehicles (such as Uber and Lyft).
- Ports reported purchasing green power, though at a premium, to reduce emissions from electricity use.

WSDOT asked respondents what other actions their organizations are taking where the secondary benefits include the reduction of carbon emissions from transportation. Comments included:

- Washington Public Ports Association reported that modernization projects have resulted in more efficient processes overall and modernized equipment is more efficient. These both reduce GHG emissions reductions.
- Organizations are sharing lessons learned by offering trainings and classes, as well as developing de-carbonization guidebooks and other materials to share with the general public.
- The Northwest Seaport Alliance reported that by leveraging federal funding, several
 organizations are building on their successes and creating larger, multi-party collaborative
 programs to develop larger, regional roadmaps to zero emissions technologies within freight
 and cargo systems and corridors.

 Several organizations stated that requests to pilot sustainability and zero emission programs and projects, are due to strong relationships with local, state, regional and national sustainable focused industry and authorities. Infrastructure improvements associated with improved pedestrian safety and connectivity efforts have provided secondary benefits toward reducing carbon emissions due to mode shift.

WSDOT asked respondents what type of challenges their organizations have encountered related to implementation of carbon reduction strategies.

- Most respondents mentioned the cost, lack of funds, and revenue restrictions as a challenge
 for some organizations. Smaller organizations struggle to have significant resources to devote
 to carbon emissions reduction strategies and/or don't know where or how to start. Smaller
 public agencies mentioned needing clarity on grant funding eligibility and support for grant
 applications.
- The Port of Seattle and Whatcom County mentioned the need for local utilities to support the build-out of charging or hydrogen fuel networks, increase grid reliability, and decrease charging costs.
- Many port and transportation agencies mentioned the lack of inventory and recent substantial increase in costs of electric, hybrid and other alternative vehicles, both for organization's fleet transitions plans and for the general population.
- Some mentioned a lack of vehicles with the charge capacity for the mileage that freight/transit organizations require.
- Many public agencies reported it is hard to get projects moving when federal funding is involved and the "Buy America" requirement (lack of vendors with the zero emissions technologies).
- Transit agencies reported that it is sometimes hard to get support from more rural, politically conservative communities as they are often wary of "green" initiatives.
- The Northwest Seaport Alliance mentioned ensuring organizations move forward with carbon reduction strategies in an equitable way to meet the needs of underserved and overburdened communities.
- Several transportation agencies mentioned they are still supporting COVID-19 recovery efforts and dealing with lingering supply chain issues.

WSDOT asked respondents to describe any next steps and/or carbon reduction strategies their organization anticipates pursuing in the next five years.

- Public agencies noted they will have access to updated GHG inventories to inform updates of local climate action plans, decarbonization plans and/or other similar planning documents governing transportation/shipping.
- Most public agencies reported pursuing electric vehicle charging and alternative fueling grants from the federal government.
- Agencies noted completing feasibility studies to determine next steps on major programs –
 like the Northwest Seaport Alliance working on establishing a green corridor for shipping from
 Washington to South Korea.
- Several public agencies reported establishing regional TDM programs and continuing to advocate for multimodal options and incentives to use active and high-occupancy vehicle transportation.
- Most respondents said they would continue to improve operational efficiencies, and work with utilities to get electric infrastructure in place.

 Several public agencies mentioned monitoring feasibility and cost reasonableness of specific technologies.

WSDOT asked respondents if there were additional questions or other information that they wanted to share related to the development of a statewide transportation carbon reduction strategy. Key highlights include:

- Several smaller transportation agencies and an airport asked that WSDOT consider rural
 communities' ability to comply with decisions made at a statewide level and consider making
 funds more available to support compliance and efforts, as well as flexibility for different
 approaches.
- A community-based organization noted that non-profits do not have tax-based revenue to support some of the transition requirements and many support transportation in more rural areas, requiring longer distance trips than city/suburb transit.
- Many smaller, regional public agencies also requested support with grant applications, funding requests, and/or sponsor matches.
- A private industry group mentioned the importance of developing strategies and tools that can be implemented by a range of organizations.
- Ports reiterated that it is costly to decarbonize port equipment and systems, but they
 appreciate the effort to discuss their experiences and the attention provided to them.

Focused meetings

The project team hosted a discussion on February 13, 2023 as part of a WSDOT freight, VMT, and TCRS workshop. Twenty participants from port, aviation, and freight industries attended the workshop. The presentation outlined the Carbon Reduction Program (CRP) and the overall approach for a TCRS. Following the presentation, the project team asked for input on current initiatives and priorities.

Key meeting findings

Participants described short-term strategies to reduce carbon including modal shifts from truck to rail and creating zero emission programs. Some participants are working on incentive programs such as old truck scrap/replace programs and the Environmental Protection Agency's clean cargo handling equipment (CHE) incentive program. There is also a trend to create efficiencies in coordination such as package delivery consolidation and trip reductions, employee scheduling, and maximizing on- and near-dock rail when possible or using heavy haul networks between rail/warehouses and container terminals.

There was discussion on renewable aviation fuels and improved asset management of dieselpowered equipment, new clean truck programs, and seeking approval for allowing triple trailers.

Many participants reported electrification as a key strategy including not only electric vehicles but also space and infrastructure planning. This includes electrification at piers, in airport parking lots, electrifying heavy-duty equipment and support equipment such as forklifts.

Long term strategies included overall fleet management and other electrification programs such as harbor craft, modal shift from ship to barge in the over water shipping industry, and electric aviation and renewable aviation fuels in the air cargo industry. Transportation related land use and zoning are priorities along with careful consideration of embodied carbon

reductions in infrastructure. Heavier trucks may impact roadways more, leading to larger maintenance costs and additional materials, thus resulting in greater construction, operations, and maintenance emissions (i.e., embodied carbon emissions).

Community organizations

WSDOT initiated outreach to community organizations, including equity-based community organizations, throughout Washington State via email correspondence in April 2023. The project team hosted a community partner webinar on April 26, 2023, inviting 230 community-based organizations, environmental justice and community advocacy groups, unions, chambers of commerce, and economic development organizations. The briefing was attended by representatives from 23 organizations and tribes as listed in the chart below. Additionally, two community organizations participated in the freight, aviation, port, transit, and transportation partner survey detailed in the section above.

Outreach to this group was designed to meet three main goals:

- Better understand priorities and concerns that may be relevant to developing the TCRS.
- Learn about carbon emissions impacts on the environment, overburdened communities, and overall quality of life for state residents and business.
- Improve relationships and opportunities for knowledge sharing between WSDOT and local organizations.

During the webinar a presentation was made that outlined the CRP and the overall approach for a TCRS. Following a brief presentation from WSDOT and consultant project managers, the project team asked for input on current initiatives and priorities. Key messages included:

- Partners strongly support transit-centered development and increasing access to transit and other active modes of travel.
- Partners want regular updates through email and newsletters with opportunities to provide input on draft elements of the TCRS.
- Partners want to contribute to the TCRS and requested that WSDOT transparently engage, sharing information about important topics, what they plan to do with that information, and how they do or do not incorporate input in the TCRS document.
- Attendees expressed interest in building rail infrastructure in Washington State, for both passenger and freight.
- Participants expressed a sense of urgency in responding to climate change especially in communities that may not be typically engaged in planning.

Figure B.5: Community organizations attending the April 26, 2023 webinar

- 4 Clean Air
- Associated General Contractors of Washington
- Association of Washington Business
- Blue Green Alliance
- Climate Alliance
- Climate Solutions
- Community Leaders of Washington
- Downtown on the Go
- Granite Construction
- Jamestown S'Klallam Tribe
- Latino Chamber of Commerce
- Seattle Latino Chamber of Commerce
- Solutionary Rail
- Stillaguamish Tribe
- VTD Rail Consulting
- Washington Association of Wheat Growers
- Washington Conservation Action
- Washington Ports
- Washington State Fruit Tree Association
- Yakama Nation

Overall themes

The following summarizes common themes WSDOT heard throughout partner outreach efforts.

- 1. There is a lack of coordination and direction between federal and state agencies, resulting in transportation partners, tribes, and other organizations each taking individual action to reduce transportation related carbon emissions. Comprehensive strategies vary but generally include a combination of tactics and incorporate multiple approaches such as land use planning, transportation planning, and inter-agency coordination. In some cases, entities are forming partnerships with others to leverage funding and build multi-party, collaborative programs and launching pilot initiatives.
- 2. Overall, there is both a sense of urgency to address climate change and a sense of unknown as funding is slow, confusing, and difficult to access. Participants want specific direction on creating new plans and more guidance on accessing funding. There is a disconnect between funding opportunities for large initiatives and what is achievable from small entities and local/rural communities. Therefore, most participants who gave input are focused on modernization of existing systems, increasing use of EVs, additional rail infrastructure, reducing VMT, and implementing alternative fuel programs. Some participants are in the early stages of strategizing, working on feasibility studies, and exploring transit-oriented development.

- 3. Secondary benefits include workforce development and economic growth in industries specific to EVs, alternative fuels, and infrastructure retrofits. Some participants are seeking to partner with other sectors such as land use and transportation agencies working together to create multi-modal or trip-reduction strategies that may result in reduced VMT. From each of the engagement audience categories, participants mentioned the importance of shared information, access to funding opportunities, and creating programs that compliment and coordinate with others.
- 4. Equity is an issue, specifically access to funding and the availability of people to implement initiatives if funding is obtained. This is especially concerning for tribes and areas of the state that have a large population of people with less economic means, often resulting in the areas of greatest climate change impact.

Including partner and public input in the TCRS

Outreach efforts were designed to be informational and provide partners the opportunity to provide perspectives related to transportation carbon emissions reduction efforts. Input received will be considered and incorporated into the TCRS.

Assessments of priorities and existing local carbon reduction strategies in the TCRS reflect initiatives identified through outreach efforts. The TCRS responds to these needs and issues and reflects solutions that partners raised as being important or relevant.

The final TCRS will reflect and address comments received on the draft TCRS during the public review period. The public review period on the draft TCRS will include a webinar with an invitation to tribes, partners, and the public to attend. Feedback received during the public comment period will be incorporated into the final TCRS.

Lessons learned

The TCRS, which will be updated every four years, is an opportunity to strengthen existing relationships, build new partnerships, and encourage wholistic thinking throughout the state of Washington. The project team heard and responded to partner, tribe, and community-based organization input throughout the development of the plan. As the project team worked with partners, the following lessons were learned and are suggested for consideration during engagement planning for the next TCRS update.

- 1. Feedback fatigue, especially among equity-based groups. Partner feedback and input sought from equity-based groups, while in the spirit of the HEAL Act, may be placing undue time burdens on groups with limited staff and resources to respond to all the requests. Public agencies should consider coordinating on similar topics and focusing on participating in existing meetings and events to share information and seek feedback rather than request separate interviews or meetings.
- Demonstrate that input is being used. All partners need to see how their input was
 incorporated via a feedback loop. If they do not see how their feedback was evaluated, and/or
 influenced work, plans or policy, they will become discouraged from participating in the
 planning process.
- Outreach to tribes on a coordinated, government-to government, level is important for building new and strengthening existing relationships. It is important to pay attention to proper protocol at all outreach levels and provide options for engaging that are most appropriate for individual tribes.

- 4. Engagement of industry partners such as representatives from freight and aviation organizations is essential for informing the TCRS. These partners are developing their own carbon reduction strategies that not only inform WSDOT plans but can also present opportunities to leverage funding and/or implementation to achieve coordinated efforts that may result in efficiencies and increased carbon reduction.
- 5. Continued and frequent engagement with equity-based community organizations, especially when input is requested, is encouraged for overall support of a state-wide TCRS. An outreach plan that includes active and meaningful participation of equity-based groups will be important to keeping organizations interested and actively engaged. Consider a compensation model to increase participation.

B.2. Public comment period

A 30-day public comment period was held from July 17, 2023, through August 16, 2023, to seek input from partners and the community at large.

A draft version of the strategy was posted on WSDOT's website's online open houses section. An online survey was used to collect comments.

An informational webinar was held on July 25, 2023, at 6:30 pm. Twenty-one attendees participated in the webinar, including representatives of local government, aviation and freight partners, transit agencies, and community organizations. WSDOT provided an overview presentation followed by a question and answer session. Overall, attendees were interested in learning more about the report, specifically regarding emissions thresholds, population allocation funding, and WSDOTs strategy for reducing the number of capacity-building roadway construction projects.

Figure B.6: Participants in the July 25, 2023 webinar

- Asian Pacific Islander Coalition of Yakima
- Beacon Hill Council
- City of Tumwater
- City of Woodland
- Community Transit
- Concerned citizens/individuals
- King County
- King County Metro
- Paine Field Snohomish County
- Seattle Latino Metropolitan Chamber of Commerce
- Snohomish County
- Valley Transit
- Washington Environmental Justice Council
- Washington State Tree Fruit Association
- Washington State University Energy Program
- Washington Trucking Associations
- Yakima Valley Conference of Governments

Tribes were invited to participate in the July 25, 2023 webinar or to request an individual meeting with WSDOT. A meeting with the Jamestown S'Klallam Tribe was requested and held on August 10, 2023.

Multiple emails announcing the webinar and public comment period were distributed to about 785 recipients (including representatives of the organizations listed in Attachment 1 below):

- July 5 pre-registration for webinar
- July 17 public comment period open
- July 20 webinar reminder
- July 25 webinar reminder
- August 14 comment period reminder

Commenters

Forty-four people provided their name or email address in the survey. One person responded anonymously. Respondents represented a variety of organizations:

- Community group 16
- Local government 11
- MPO/RTPOs 3
- State agency 1
- Trade group 1
- Individuals 13

Of the 45 who responded, 25 provided comments; some provided comments on multiple topics.

Comments received

Commenters provided a range of feedback. Where relevant, WSDOT incorporated this feedback into the document. Modifications made are noted in conjunction with the comments.

Some comments noted missing information. Additional information on each of these topics was added to the document:

- The role of utilities in implementing electrification programs
- Significant state tax incentives that support vehicle electrification
- Amtrak Cascades service
- The importance of focusing growth in compact communities and a fundamental shift in land use planning need
- Truck parking as an important issue
- Park and ride as a support for transit
- No health or medical organizations were partners

Several comments addressed how information was characterized. Information was added to incorporate and correct information.

- The importance of clearly showing the emissions profile for transportation sources, the urgent need for reductions, and potential level of impact of different types of strategies, particularly user fees.
- Corrections on PSRC's user fee analysis and the importance of the Transportation Commission's work on a road use charge.

Comments were received supporting rail.

- Amtrak Cascades service was noted as missing from the plan information on Amtrack Cascades was added to the document.
- Rail is more efficient than road transport and intercity freight and passenger travel should shift to rail.
- Commenters preferred increasing Amtrack Cascades service over ultra-high-speed ground transport (UHSGT).
- Some noted that UHSGT will not be developed in time to help the state meet emission limits.

Some commenters recommended new program opportunities. This information was forwarded to the relevant divisions within WSDOT to be considered for future programs:

- Expanding vanpools with electric vans
- Car sharing for housing complexes, including electric car sharing
- A zero-emissions incentive program to facilitate the acquisition of 300 commercial vehicles

Additional examples were provided. Three of the four examples were added to Chapter 3.

- BFCOG's Safe Routes to Schools planning
- South Whidbey School District's EPA grant for an electric school bus and charging station
- Vancouver Area Smart Trek program
- City of Seattle port drayage electrification pilot this example was similar to others in the relevant section, so was not added.

One commenter requested that the plan be made more relatable to a statewide audience. WSDOT has worked to include information and examples from across the state. The document represents information found during research and provided by partners through engagement.

Another noted that free transit fares lead to lost data about boardings. This effect was passed along to the WSDOT Public Transportation Division for further consideration.

In addition, 10 respondents provided general comments, mostly supportive, some emphasizing the need for immediate action or wanting more ambitious action.

Respondents also provided their opinions on a variety of the topics. Generally, these views called for more actions, often in specific areas. Given the nature of this document – documenting current state and local policies, strategies, and projects – opinions were not incorporated.

Overall, information from comments was incorporated into the document to the extent possible. Information that was identified as missing was added. Where examples broadened the type or location of projects being implemented, they were added. As relevant, information on some topics was provided to other division within WSDOT.

Individual comments and responses can be viewed in the comment response document.

Attachment B.1: List of Partner Organizations Contacted by Audience Category

Organization	Audience Category
160 Driving Academy	Freight, Aviation, Port, and Transportation Partners
American Automobile Association (AAA) Washington	Community Organizations
Adams County	State Partners, Agencies, and Transportation Planning Orgs
African Chamber of Commerce of the Pacific Northwest	Community Organizations
African-American, Hispanic, Asian and Native Americans Business Association (AHANA)	Community Organizations
Aircraft Owners and Pilots Association	Freight, Aviation, Port, and Transportation Partners
Alaska Airlines	Freight, Aviation, Port, and Transportation Partners
Alliance for Equal Justice	Community Organizations
American Airlines	Freight, Aviation, Port, and Transportation Partners
Apex Trucking LLC	Freight, Aviation, Port, and Transportation Partners
Arab Alliance Chamber of Commerce of Washington State	Community Organizations
Arab America	Community Organizations
Arab Center of Washington	Community Organizations
Asia Pacific Cultural Center - Lakewood	Community Organizations
Asian Pacific Directors Coalition	Community Organizations
Asian Pacific Islander Coalition - Chaya	Community Organizations
Asian Pacific Islander Coalition - South Puget Sound	Community Organizations
Asian Pacific Islander Coalition - Yakima	Community Organizations
Asian Pacific Islander Coalition of Washington	Community Organizations
Asian Pacific Islander Coalition South Puget Sound Chapter	Community Organizations
Asotin County Transit (Public Transportation Benefit Area)	Freight, Aviation, Port, and Transportation Partners
Association of Washington Businesses	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Association of Washington Cities	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Around the Sound Transportation	Freight, Aviation, Port, and Transportation Partners
Audubon Washington	Community Organizations
Aviation and Aerospace Advisory Committee	Freight, Aviation, Port, and Transportation Partners
Avista	Community Organizations
Balboa/South Indian Trail	Community Organizations

Organization	Audience Category
BC Trucking Association	Freight, Aviation, Port, and Transportation Partners
Beacon Hill Council	Community Organizations
Ben Franklin Transit	Freight, Aviation, Port, and Transportation Partners
Benton County Board of Commissioner	Community Organizations / State Partners, Agencies, and Transportation Planning Orgs
Benton-Franklin Community Action Committee	Community Organizations
Benton-Franklin Council of Governments	State Partners, Agencies, and Transportation Planning Orgs
Better Health Together	Community Organizations
Big Bend Community College	Freight, Aviation, Port, and Transportation Partners
Black Lives Matter Alliance	Community Organizations
Blacks in Government Region X	Community Organizations
Blue Mountain Land Trust	Community Organizations
BlueGreen Alliance	Community Organizations
BNSF Railway Company	Freight, Aviation, Port, and Transportation Partners
Boeing	Freight, Aviation, Port, and Transportation Partners
BP	Freight, Aviation, Port, and Transportation Partners
Building Trade Council	Community Organizations
Cascade Bicycle Club	Freight, Aviation, Port, and Transportation Partners
Cascade Loop Scenic Highway	Freight, Aviation, Port, and Transportation Partners
Cascade Pacific Action Alliance	Community Organizations
Central States Safety & Driver Training, LLC	Freight, Aviation, Port, and Transportation Partners
Central Transit - City of Ellensburg	Freight, Aviation, Port, and Transportation Partners
Central Washington Hispanic Chamber of Commerce	Community Organizations
Certified Electrical Workers of WA	Community Organizations
Check Ride Driver Training	Freight, Aviation, Port, and Transportation Partners
Chehalis Confederated Tribes	Tribes
Chehalis River Basin Land Trust	Community Organizations
Chelan County	State Partners, Agencies, and Transportation Planning Orgs
Chelan-Douglas County Community Action Council	Community Organizations
Chelan-Douglas Transportation Council	Freight, Aviation, Port, and Transportation Partners / State Partners, Agencies, and Transportation Planning Orgs
Chewelah Municipal Airport	Freight, Aviation, Port, and Transportation Partners

Organization	Audience Category
Chinese American Citizens Alliance Seattle Chapter	Community Organizations
Choose Your Way Bellevue	Community Organizations
City of Aberdeen	State Partners, Agencies, and Transportation Planning Orgs
City of Anacortes	State Partners, Agencies, and Transportation Planning Orgs
City of Battle Ground	Community Organizations / State Partners, Agencies, and Transportation Planning Orgs
City of Bellevue	State Partners, Agencies, and Transportation Planning Orgs
City of Blaine	State Partners, Agencies, and Transportation Planning Orgs
City of Brewster	State Partners, Agencies, and Transportation Planning Orgs
City of Bridgeport	State Partners, Agencies, and Transportation Planning Orgs
City of Camas	State Partners, Agencies, and Transportation Planning Orgs
City of Cashmere	State Partners, Agencies, and Transportation Planning Orgs
City of Chelan	State Partners, Agencies, and Transportation Planning Orgs
City of College Place	State Partners, Agencies, and Transportation Planning Orgs
City of Conconully	State Partners, Agencies, and Transportation Planning Orgs
City of Covington	State Partners, Agencies, and Transportation Planning Orgs
City of East Wenatchee	State Partners, Agencies, and Transportation Planning Orgs
City of Electric City	State Partners, Agencies, and Transportation Planning Orgs
City of Entiat	State Partners, Agencies, and Transportation Planning Orgs
City of Ephrata	State Partners, Agencies, and Transportation Planning Orgs
City of George	State Partners, Agencies, and Transportation Planning Orgs
City of Hoquiam	State Partners, Agencies, and Transportation Planning Orgs
City of Leavenworth	State Partners, Agencies, and Transportation Planning Orgs
City of Liberty Lake	State Partners, Agencies, and Transportation Planning Orgs
City of Longview	State Partners, Agencies, and Transportation Planning Orgs
City of Mansfield	State Partners, Agencies, and Transportation Planning Orgs
City of Mattawa	State Partners, Agencies, and Transportation Planning Orgs
City of Moses Lake	State Partners, Agencies, and Transportation Planning Orgs
City of Nespelem	State Partners, Agencies, and Transportation

Organization	Audience Category
	Planning Orgs
City of Ocean Shores	State Partners, Agencies, and Transportation Planning Orgs
City of Okanogan	State Partners, Agencies, and Transportation Planning Orgs
City of Olympia	State Partners, Agencies, and Transportation Planning Orgs
City of Omak	State Partners, Agencies, and Transportation Planning Orgs
City of Oroville	State Partners, Agencies, and Transportation Planning Orgs
City of Othello	State Partners, Agencies, and Transportation Planning Orgs
City of Pasco	State Partners, Agencies, and Transportation Planning Orgs
City of Pateros	State Partners, Agencies, and Transportation Planning Orgs
City of Poulsbo	State Partners, Agencies, and Transportation Planning Orgs
City of Quincy	State Partners, Agencies, and Transportation Planning Orgs
City of Raymond	State Partners, Agencies, and Transportation Planning Orgs
City of Redmond	State Partners, Agencies, and Transportation Planning Orgs
City of Richland	State Partners, Agencies, and Transportation Planning Orgs
City of Ridgefield	State Partners, Agencies, and Transportation Planning Orgs
City of Ritzville	State Partners, Agencies, and Transportation Planning Orgs
City of Rock Island	State Partners, Agencies, and Transportation Planning Orgs
City of Royal City	State Partners, Agencies, and Transportation Planning Orgs
City of Seattle	State Partners, Agencies, and Transportation Planning Orgs
City of Selah Transportation Service	Freight, Aviation, Port, and Transportation Partners
City of Sequim	State Partners, Agencies, and Transportation Planning Orgs
City of Soap Lake	State Partners, Agencies, and Transportation Planning Orgs
City of Spokane Valley	State Partners, Agencies, and Transportation Planning Orgs
City of Tacoma	State Partners, Agencies, and Transportation Planning Orgs
City of Tonasket	State Partners, Agencies, and Transportation Planning Orgs
City of Town of Coulee Dam	State Partners, Agencies, and Transportation Planning Orgs
City of Tumwater	State Partners, Agencies, and Transportation Planning Orgs
City of Twisp	State Partners, Agencies, and Transportation Planning Orgs

Organization	Audience Category
City of Vancouver	State Partners, Agencies, and Transportation
Oity of varicouver	Planning Orgs
City of Warden	State Partners, Agencies, and Transportation
	Planning Orgs State Partners, Agencies, and Transportation
City of Washougal	Planning Orgs
City of Motor illo	State Partners, Agencies, and Transportation
City of Waterville	Planning Orgs
City of Wenatchee	State Partners, Agencies, and Transportation
,	Planning Orgs
City of Westport	State Partners, Agencies, and Transportation Planning Orgs
	State Partners, Agencies, and Transportation
City of Wilson Creek	Planning Orgs
City of Winthrop	State Partners, Agencies, and Transportation
	Planning Orgs
Civics Consulting LLC	Community Organizations
	State Partners, Agencies, and Transportation
Clallam Transit	Planning Orgs / Freight, Aviation, Port, and Transportation
	Partners
Clark County	State Partners, Agencies, and Transportation
Clark County	Planning Orgs
Clark County Public Transit Benefit Area	Community Organizations
Authority (C-Tran)	/ Freight, Aviation, Port, and Transportation Partners
	State Partners, Agencies, and Transportation
Clark County Public Works	Planning Orgs
Clark Public Utilities	State Partners, Agencies, and Transportation
Clark Fublic Otilities	Planning Orgs
Clark Regional Wastewater District	State Partners, Agencies, and Transportation
Climate Solutions	Planning Orgs
Climate Solutions	Community Organizations State Partners, Agencies, and Transportation
Clinton Community Council	Planning Orgs
	Community Organizations
Coastal Community Action Program	/ Freight, Aviation, Port, and Transportation
	Partners
Columbia Basin Railroad	Freight, Aviation, Port, and Transportation
	Partners Freight, Aviation, Port, and Transportation
Columbia County Transit	Partners
Columbia Land Trust	Community Organizations
	Freight, Aviation, Port, and Transportation
Columbia River High/Wide/Heavy Corridor	Partners
Colville Business Council	Community Organizations
Colville Confederated Tribes	Tribes
Commercial Aviation Coordinating Committee	Freight, Aviation, Port, and Transportation
Commercial Aviation Coordinating Committee	Partners
Commercial Driver School	Freight, Aviation, Port, and Transportation
Commercial Driver School	Partners
Commercial Vehicle Training Center	Freight, Aviation, Port, and Transportation
Commercial verticio Training Center	Partners

Organization	Audience Category
Commission on African American Affairs	State Partners, Agencies, and Transportation
Commission on Asian Pacific American Affairs	Planning Orgs State Partners, Agencies, and Transportation Planning Orgs
Commission on Hispanic Affairs	State Partners, Agencies, and Transportation Planning Orgs
Communities for a Healthy Bay	Community Organizations
Communities of Color Coalition	Community Organizations
Community Coalition for Environmental Justice/Got Green Seattle	Community Organizations
Community Health of Central Washington	Community Organizations
Community Health Worker Coalition for Migrants and Refugees	Community Organizations
Community in Motion	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Community to Community Development	Community Organizations
Community Transit	Freight, Aviation, Port, and Transportation Partners
Community Transportation Association of the Northwest	Community Organizations
Commute Smart NW (Spokane County)	Community Organizations
Costco	Freight, Aviation, Port, and Transportation Partners
Cowiche Canyon Conservancy	Community Organizations
Cowlitz County Public Works	State Partners, Agencies, and Transportation Planning Orgs
Cowlitz Indian Tribe	Tribes
Cowlitz-Wahkiakum Council of Governments	State Partners, Agencies, and Transportation Planning Orgs
Crowley	Freight, Aviation, Port, and Transportation Partners
Darigold	Freight, Aviation, Port, and Transportation Partners
Delta Airlines	Freight, Aviation, Port, and Transportation Partners
Disability Rights Washington	Community Organizations
Douglas County	State Partners, Agencies, and Transportation Planning Orgs
Downtown On the Go	Community Organizations
Downtown Seattle Association	Community Organizations
Drive Forward (Rideshare)	Freight, Aviation, Port, and Transportation Partners
Drive509	Freight, Aviation, Port, and Transportation Partners
Duwamish River Community Coalition	Community Organizations
Earth Ministry	Community Organizations
Earthjustice	Community Organizations
Ecolane	Freight, Aviation, Port, and Transportation Partners
Economic Alliance of Snohomish County	Community Organizations

Organization	Audience Category
Economic Development Alliance of Skagit County Latino Leadership Initiative & Social Justice & Equity Task Force	Community Organizations
El Centro De La Raza	Community Organizations
Elite Truck School Inc.	Freight, Aviation, Port, and Transportation Partners
Environmental Priorities Coalition	Community Organizations
Ethnic Chamber of Commerce Coalition	Community Organizations
Everett Transit	Freight, Aviation, Port, and Transportation Partners
Eviation	Freight, Aviation, Port, and Transportation Partners
Federal Highways Administration	State Partners, Agencies, and Transportation Planning Orgs
FedEx	Freight, Aviation, Port, and Transportation Partners
Feet First	Community Organizations
Ferry County Public Works	State Partners, Agencies, and Transportation Planning Orgs
Filipino American Association Kitsap County	Community Organizations
Filipino American Association of North Puget Sound	Community Organizations
Floathaven Seaplane Base 0W7	Freight, Aviation, Port, and Transportation Partners
Freight Mobility Strategic Investment Board	Freight, Aviation, Port, and Transportation Partners
Friends of the Columbia Gorge	Community Organizations
Front and Centered	Community Organizations
Futurewise	Community Organizations
Garfield County Transportation Authority	Freight, Aviation, Port, and Transportation Partners
General Contractors Association of America - Washington Chapter	Community Organizations
GMC Training Institute	Freight, Aviation, Port, and Transportation Partners
Go Redmond	Community Organizations
Goin	Freight, Aviation, Port, and Transportation Partners
Gordan Thomas Honeywell - Government Affairs	Community Organizations
Got Green	Community Organizations
Grant County	State Partners, Agencies, and Transportation Planning Orgs
Grant County Economic Development	Community Organizations
Grant County International Airport - Port of Moses Lake	Freight, Aviation, Port, and Transportation Partners
Grant Transit Authority	Freight, Aviation, Port, and Transportation Partners
Grays Harbor College	Freight, Aviation, Port, and Transportation Partners
Grays Harbor Transportation Authority	Freight, Aviation, Port, and Transportation

Organization	Audience Category
	Partners
Greater Columbia Accountable Community of Health	Community Organizations
Greater Peninsula Conservancy	Community Organizations
Greater Seattle Business Association	Community Organizations
Greater Seattle Chinese Chamber of Commerce	Community Organizations
Greater Spokane Progress	Community Organizations
Greater Tacoma Community Foundation	Community Organizations
Heavy Haul	Freight, Aviation, Port, and Transportation Partners
Hispanic Business Professionals Association	Community Organizations
Hoh Indian Tribe	Tribes
Homage Senior Services	Freight, Aviation, Port, and Transportation Partners
Hopelink	Community Organizations / Freight, Aviation, Port, and Transportation Partners
HopeSource Transportation	Freight, Aviation, Port, and Transportation Partners
Idaho Transportation Department	State Partners, Agencies, and Transportation Planning Orgs
India Association of Western Washington	Community Organizations
Initiative for Rural Innovation and Stewardship	Community Organizations
Intercity Transit	Freight, Aviation, Port, and Transportation Partners
International Longshore & Warehouse District Council	Freight, Aviation, Port, and Transportation Partners
International Mobility & Trade Corridor Program	Freight, Aviation, Port, and Transportation Partners
Island County Public Works	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Island Regional Transportation Planning Organization	State Partners, Agencies, and Transportation Planning Orgs
Island Transit	Freight, Aviation, Port, and Transportation Partners
Jamestown S'Klallam Tribe	Tribes
Japanese American Citizens League	Community Organizations
Jefferson County	State Partners, Agencies, and Transportation Planning Orgs
Jefferson Transit	Freight, Aviation, Port, and Transportation Partners
Joby Aviation	Freight, Aviation, Port, and Transportation Partners
Kalispel Tribe	Tribes
Kenmore Air	Freight, Aviation, Port, and Transportation Partners
Kent Black Action Commission	Community Organizations
King County - Boeing Field Airport	Freight, Aviation, Port, and Transportation

Organization	Audience Category
	Partners
King County Equity Now	Community Organizations
King County International Airport Community Coalition	Community Organizations
King County Metro	Freight, Aviation, Port, and Transportation Partners
King County Water Taxi	Freight, Aviation, Port, and Transportation Partners
Kitsap County Public Works	Freight, Aviation, Port, and Transportation Partners
Kitsap Transit	Freight, Aviation, Port, and Transportation Partners
Kittitas Audubon Society	Community Organizations
Kittitas Conservation Trust	Community Organizations
Kittitas County	State Partners, Agencies, and Transportation Planning Orgs
Klickitat County Board of Commissioners	State Partners, Agencies, and Transportation Planning Orgs
Klickitat County Senior Services/Mt. Adams Transportation Service	Freight, Aviation, Port, and Transportation Partners
Lake Forest Park Citizens Commission	State Partners, Agencies, and Transportation Planning Orgs
Latino Community Fund of Washington	Community Organizations
League of Women Voters of Yakima County	Community Organizations
League of United Latin American Citizens	Community Organizations
Leavenworth Chamber of Commerce	Community Organizations
Lewis & Clark Valley Metropolitan Planning Organization	State Partners, Agencies, and Transportation Planning Orgs
Lewis County Board of County Commissioners	State Partners, Agencies, and Transportation Planning Orgs
Lewis County Economic Development Commission	Freight, Aviation, Port, and Transportation Partners
Lewis Mountain Highway Transit	Freight, Aviation, Port, and Transportation Partners
Lime Micromobility	Freight, Aviation, Port, and Transportation Partners
Link Transit	Freight, Aviation, Port, and Transportation Partners
Lopez Community Land Trust	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Lower Columbia College	Freight, Aviation, Port, and Transportation Partners
Lower Columbia Community Action Council	Freight, Aviation, Port, and Transportation Partners
Lower Elwha Klallam	Tribes
Lummi Island Ferry	Freight, Aviation, Port, and Transportation Partners
Lummi Nation	Tribes
Lutheran Community Services Northwest -	Community Organizations

Organization	Audience Category
Lyft	Freight, Aviation, Port, and Transportation Partners
Makah Tribe	Tribes
Maritime Blue	Freight, Aviation, Port, and Transportation Partners
Marshallese Community Advisory Board	Community Organizations
Mason County Transportation Authority	Freight, Aviation, Port, and Transportation Partners
Maxum Petroleum	Freight, Aviation, Port, and Transportation Partners
MedStar Transportation	Freight, Aviation, Port, and Transportation Partners
Metro Matters	Community Organizations
Mobility for All	Freight, Aviation, Port, and Transportation Partners
Mount Si Senior Center (Snoqualmie Valley Transportation)	Freight, Aviation, Port, and Transportation Partners
Moving Forward Network	Community Organizations
MTZ Academy, LLC	Freight, Aviation, Port, and Transportation Partners
Muckleshoot Tribe	Tribes
Muslims Community Action and Support	Community Organizations
Na'ah Illahee Fund	Community Organizations
National Asian Pacific American Women's Forum	Community Organizations
National Association for the Advancement of Colored People	Community Organizations
National Association for the Advancement of Colored People (Seattle)	Community Organizations
National Association for the Advancement of Colored People (Snohomish)	Community Organizations
National Association for the Advancement of Colored People (Spokane)	Community Organizations
National Association for the Advancement of Colored People (Vancouver)	Community Organizations
National Association for the Advancement of Colored People 253 (Tacoma)	Community Organizations
National Association for the Advancement of Colored People (Bremerton)	Community Organizations
National Association for the Advancement of Colored People (Yakima County)	Community Organizations
National Association of Minority Contractors	Community Organizations
National Business Aviation Association	Freight, Aviation, Port, and Transportation Partners
National Renewable Energy Laboratory	State Partners, Agencies, and Transportation Planning Orgs
Native Organizers Alliance	Community Organizations
Nature Conservancy – Washington Chapter	Community Organizations
Naval Air Station Whidbey Island	State Partners, Agencies, and Transportation Planning Orgs
New Sound Trucking School	Freight, Aviation, Port, and Transportation Partners

Organization	Audience Category
Nimiipuu Protecting the Environment	Community Organizations
Nisqually Tribe	Tribes
Nooksack Tribe	Tribes
North Central Accountable Community of Health	Community Organizations
North Cross Commercial Driving School, LLC	Freight, Aviation, Port, and Transportation Partners
North Idaho College	Freight, Aviation, Port, and Transportation Partners
Northeast Washington Regional Transportation Planning Organization	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Northwest Energy Coalition	Community Organizations
Northwest Immigrant Rights Project	Community Organizations
Northwest Regional Council	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Northwest Seaport Alliance	Freight, Aviation, Port, and Transportation Partners
Oak Harbor Chamber of Commerce	Community Organizations
OK Commercial Drivers License Training, LLC	Freight, Aviation, Port, and Transportation Partners
Okanogan Council of Governments	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Okanogan County	State Partners, Agencies, and Transportation Planning Orgs
Okanogan County Community Action Council	Community Organizations
Okanogan County Transit Authority (TranGo)	Freight, Aviation, Port, and Transportation Partners
Okanogan County Transportation and Nutrition	Freight, Aviation, Port, and Transportation Partners
Okanogan Land Trust	Community Organizations
Olympia Regional Airport - Port of Olympia	Freight, Aviation, Port, and Transportation Partners
One America	Community Organizations
Operating Engineers Local 302/612	Freight, Aviation, Port, and Transportation Partners
Oregon Department of Transportation	Freight, Aviation, Port, and Transportation Partners
Organization of Chinese Americans – Greater Seattle Chapter	Community Organizations
Oroville Chamber of Commerce	State Partners, Agencies, and Transportation Planning Orgs
Our Place Nuestra Casa Multicultural Center	Community Organizations
Our Valley Our Future/Nuestro Valle Nuestro Futuro	Community Organizations
PACCAR (Kenworth/Peterbilt)	Freight, Aviation, Port, and Transportation Partners
Pacific Coast Congress of Harbormasters and	Freight, Aviation, Port, and Transportation

Organization	Audience Category
Port Managers	Partners
Pacific County	State Partners, Agencies, and Transportation Planning Orgs
Pacific Islander Coalition of Washington	Community Organizations
Pacific Mobility Group	Freight, Aviation, Port, and Transportation Partners
Pacific Northwest Aerospace Alliance	Freight, Aviation, Port, and Transportation Partners
Pacific Northwest Agriculture and Health Center	Community Organizations
Pacific Northwest University of Health Sciences	Freight, Aviation, Port, and Transportation Partners
Pacific Northwest Waterways Association	Freight, Aviation, Port, and Transportation Partners
Pacific NW Professional Driving School	Freight, Aviation, Port, and Transportation Partners
Pacific Transit System	Freight, Aviation, Port, and Transportation Partners
Paine Field Airport - Snohomish County Airport Commission	Freight, Aviation, Port, and Transportation Partners
Palouse Regional Transportation Planning Organization	Freight, Aviation, Port, and Transportation Partners
Palouse Regional Transportation Planning Organization	State Partners, Agencies, and Transportation Planning Orgs
Paratransit Services	Freight, Aviation, Port, and Transportation Partners
Patagonia	Freight, Aviation, Port, and Transportation Partners
Peninsula Regional Transportation Planning Organization	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Peninsula Truck Lines	Freight, Aviation, Port, and Transportation Partners
People for People	Freight, Aviation, Port, and Transportation Partners
Pierce County	State Partners, Agencies, and Transportation Planning Orgs
Pierce County Airport and Ferry Division	Freight, Aviation, Port, and Transportation Partners
Pierce County Coordinated Transportation	State Partners, Agencies, and Transportation Planning Orgs
Pierce Transit	Freight, Aviation, Port, and Transportation Partners
Port Gamble S'Klallam Tribe	Tribes
Port of Anacortes	Freight, Aviation, Port, and Transportation Partners
Port of Bellingham	Freight, Aviation, Port, and Transportation Partners
Port of Camas/Washougal	Freight, Aviation, Port, and Transportation Partners
Port of Chelan County	Freight, Aviation, Port, and Transportation Partners
Port of Coulee City	Freight, Aviation, Port, and Transportation Partners

Organization	Audience Category
Port of Coupeville	Freight, Aviation, Port, and Transportation Partners
Port of Douglas County	Freight, Aviation, Port, and Transportation Partners
Port of Edmonds	Freight, Aviation, Port, and Transportation Partners
Port of Ephrata	Freight, Aviation, Port, and Transportation Partners
Port of Everett	Freight, Aviation, Port, and Transportation Partners
Port of Grand Coulee	Freight, Aviation, Port, and Transportation Partners
Port of Longview	Freight, Aviation, Port, and Transportation Partners
Port of Mattawa	Freight, Aviation, Port, and Transportation Partners
Port of Moses Lake	Freight, Aviation, Port, and Transportation Partners
Port of Olympia	Freight, Aviation, Port, and Transportation Partners
Port of Othello	Freight, Aviation, Port, and Transportation Partners
Port of Pasco, Kennewick	Freight, Aviation, Port, and Transportation Partners
Port of Port Angeles	Freight, Aviation, Port, and Transportation Partners
Port of Quincy	Freight, Aviation, Port, and Transportation Partners
Port of Royal Slope	Freight, Aviation, Port, and Transportation Partners
Port of Seattle	Freight, Aviation, Port, and Transportation Partners
Port of Tacoma	Freight, Aviation, Port, and Transportation Partners
Port of Vancouver	Freight, Aviation, Port, and Transportation Partners
Port of Warden	Freight, Aviation, Port, and Transportation Partners
Port of Woodland	State Partners, Agencies, and Transportation Planning Orgs
Poverty Action Network	Community Organizations
Provide a Ride	Freight, Aviation, Port, and Transportation Partners
Puget Sound Clean Air Agency	State Partners, Agencies, and Transportation Planning Orgs
Puget Sound Latino Chamber of Commerce	Community Organizations
Puget Sound Maritime Air Forum	Freight, Aviation, Port, and Transportation Partners
Puget Sound Partnership	State Partners, Agencies, and Transportation Planning Orgs
Puget Sound Regional Council	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Puget Sound Sage	Community Organizations
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Organization	Audience Category
Puget Soundkeeper Alliance	Community Organizations
Pullman Transit	Freight, Aviation, Port, and Transportation Partners
Purpose Driven Girl	Freight, Aviation, Port, and Transportation Partners
Puyallup Tribe	Tribes
Quad Counties Regional Transportation	State Partners, Agencies, and Transportation
Planning Organization	Planning Orgs
Quiet Skies Puget Sound	Community Organizations
Quileute Tribe	Tribes
Quinault Nation	Tribes
Rainbow Advocacy Inclusion Networking Services	Community Organizations
Rainier Beach Action Coalition	Community Organizations
Regional Fisheries Enhancement Groups	Community Organizations
Reshmi's Group	Community Organizations
RiverCities Transit	Freight, Aviation, Port, and Transportation Partners
RTDS Truck Driving School	Freight, Aviation, Port, and Transportation Partners
Rural Community Development Resources	Community Organizations
Rural Resources Community Action	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Salmon Orca Project	Community Organizations
Saltchuk	Freight, Aviation, Port, and Transportation Partners
Samish Nation	Tribes
San Juan County Economic Development Council	Freight, Aviation, Port, and Transportation Partners
Sauk-Suiattle Tribe	Tribes
Save Our Communities	Community Organizations
Schultz Aviation	Freight, Aviation, Port, and Transportation Partners
SeaTac Air Cargo	Freight, Aviation, Port, and Transportation Partners
Seattle Bike Blog	Freight, Aviation, Port, and Transportation Partners
Seattle Center Monorail	Freight, Aviation, Port, and Transportation Partners
Seattle Chinatown International District Preservation and Development Authority	Community Organizations
Seattle Department of Transportation Blog	Freight, Aviation, Port, and Transportation Partners
Seattle Latino Metropolitan Chamber of Commerce	Community Organizations
Seattle Rideshare Driver Association	Freight, Aviation, Port, and Transportation Partners
Seattle Tacoma International Airport	Freight, Aviation, Port, and Transportation Partners
Seattle Transit Blog	Freight, Aviation, Port, and Transportation

Organization	Audience Category
	Partners
Shaver Transportation	Freight, Aviation, Port, and Transportation Partners
Shoalwater Bay Tribe	Tribes
Sierra Club – Washington State Chapter	Community Organizations
Sightline Institute	Community Organizations
Skagit City Trucking School	Freight, Aviation, Port, and Transportation Partners
Skagit Council of Governments	State Partners, Agencies, and Transportation Planning Orgs
Skagit County	State Partners, Agencies, and Transportation Planning Orgs
Skagit County Guemes Island Ferry	Freight, Aviation, Port, and Transportation Partners
Skagit Transit	Freight, Aviation, Port, and Transportation Partners
Skamania County Senior Services	Freight, Aviation, Port, and Transportation Partners
Skokomish Tribe	Tribes
Snohomish County Airport	Freight, Aviation, Port, and Transportation Partners
Snohomish County Committee for Improved Transportation	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Snohomish County Latino Coalition	Community Organizations
Snohomish County Public Works	State Partners, Agencies, and Transportation Planning Orgs
Snohomish County Transportation Coalition	Freight, Aviation, Port, and Transportation Partners
Snoqualmie Indian Tribe	Tribes
Sound Transit	Freight, Aviation, Port, and Transportation Partners
Southwest Airlines	Freight, Aviation, Port, and Transportation Partners
Southwest Regional Transportation Planning Organization	Freight, Aviation, Port, and Transportation Partners
Southwest Washington Regional Airport	Freight, Aviation, Port, and Transportation Partners
Southwest Washington Regional Transportation Council	Freight, Aviation, Port, and Transportation Partners / State Partners, Agencies, and Transportation Planning Orgs
Special Mobility Services	Freight, Aviation, Port, and Transportation Partners
Specialized Carriers & Rigging Association	Freight, Aviation, Port, and Transportation Partners
Spokane Alliance	Community Organizations
Spokane Area Good Roads Association	Freight, Aviation, Port, and Transportation Partners
Spokane City Council	State Partners, Agencies, and Transportation Planning Orgs
Spokane Community College	Freight, Aviation, Port, and Transportation Partners

Organization	Audience Category
Spokane International Airport	Freight, Aviation, Port, and Transportation Partners
Spokane Regional Transportation Council	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Spokane Transit Authority	Freight, Aviation, Port, and Transportation Partners
Spokane Tribe	Tribes
Spokane Valley Economic Development	Community Organizations
Spokane Peace & Justice Action League	Community Organizations
Squaxin Island Tribe	Tribes
Starbucks	Freight, Aviation, Port, and Transportation Partners
Stillaguamish Tribe	Tribes
Supernal	Freight, Aviation, Port, and Transportation Partners
Suquamish Tribe	Tribes
Sustainable Wenatchee	Community Organizations
Swinomish Tribe	Tribes
Tabor 100	Community Organizations
Tacoma League of Young Professionals	Community Organizations
Teamsters 117	Community Organizations
Teamsters 117-Rideshare Drivers	Freight, Aviation, Port, and Transportation Partners
Teamsters 28	Community Organizations
Teamsters Local 231, Bellingham / Mt. Vernon	Freight, Aviation, Port, and Transportation Partners
The Black Collective	Community Organizations
The Municipal Research and Services Center	Community Organizations
The Noble Foundation / Our Place Nuestra Casa	Community Organizations
The Urbanist	Community Organizations
Thurston Regional Planning Council	State Partners, Agencies, and Transportation Planning Orgs
Tidewater Barge Lines	Freight, Aviation, Port, and Transportation Partners
Tilth Alliance	Community Organizations
Tonasket Chamber of Commerce	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Town of Bucoda	State Partners, Agencies, and Transportation Planning Orgs
Town of Cathlamet	State Partners, Agencies, and Transportation Planning Orgs
Town of Ione	State Partners, Agencies, and Transportation Planning Orgs
Town of Lind	State Partners, Agencies, and Transportation Planning Orgs
TranGo	Freight, Aviation, Port, and Transportation

Partners Freight, Aviation, Port, and Trans	
Freight, Aviation, Port, and Trans	
Trans 360 Inc. Partners / State Partners, Agencies, and T	
Transit Riders Union Community Organizations / Freight, Aviation, Port, and Tran Partners	nsportation
Transportation Choices Coalition Community Organizations / Freight, Aviation, Port, and Tran Partners	sportation
Transportation Improvement Board State Partners, Agencies, and Transportation Improvement Board Planning Orgs	
TransPro/Around the Sound Freight, Aviation, Port, and Trans Partners	
Travel Washington Intercity Bus Program Freight, Aviation, Port, and Trans Partners	sportation
Tri-Cities Hispanic Chamber of Commerce Community Organizations	
Tri-City Lumber Community Organizations	
Troops Into Transportation Freight, Aviation, Port, and Trans Partners	sportation
Tulalip Tribes Tribes	
Twin Transit Freight, Aviation, Port, and Trans Partners	
U.S. Oil / U.S. Energy Freight, Aviation, Port, and Trans Partners	
Uber Freight, Aviation, Port, and Trans Partners	sportation
Ukrainian Association of Washington State Community Organizations	
Union Gap Transit Freight, Aviation, Port, and Trans Partners	
United Auto Workers Local 4121 Freight, Aviation, Port, and Trans Partners	sportation
United Farm Workers Community Organizations	
United States Maritime Administration Freight, Aviation, Port, and Trans Partners	
University of Washington Freight, Aviation, Port, and Trans Partners	portation
Upper Skagit Tribes Tribes	
UPS Freight, Aviation, Port, and Trans Partners	portation
Urban League (Seattle) Community Organizations / Freight, Aviation, Port, and Tran Partners	sportation
Urban League (Tacoma) Community Organizations	
USDOT Small Business Transportation Resource Center Community Organizations	
USGS State Partners, Agencies, and Tra Planning Orgs	•
Valley Transit Freight, Aviation, Port, and Trans Partners	portation
Vancouver Audubon Society Community Organizations	

Organization	Audience Category
Vancouver Fraser Port Authority	Freight, Aviation, Port, and Transportation Partners
Vancouver Public Works	State Partners, Agencies, and Transportation Planning Orgs
Vietnamese American Community of Seattle and Sno-King Counties	Community Organizations
VIGOR	Freight, Aviation, Port, and Transportation Partners
Wahkiakum County Health and Human Services	Freight, Aviation, Port, and Transportation Partners
Walla Walla Community College	Freight, Aviation, Port, and Transportation Partners
Walla Walla Subregional Transportation Planning Organization	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Walla Walla Transit	Freight, Aviation, Port, and Transportation Partners
Walla Walla Valley Metropolitan Planning Organization and Sub-Regional Transportation Planning Organization	State Partners, Agencies, and Transportation Planning Orgs
Washington Agricultural Legal Foundation	Community Organizations
Washington Apple Commission	Community Organizations
Washington Association of Counties	State Partners, Agencies, and Transportation Planning Orgs
Washington Association of Wheat Growers	Community Organizations
Washington Bikes	Freight, Aviation, Port, and Transportation Partners
Washington Build Back Better Alliance	Community Organizations
Washington Building Trades	Community Organizations
Washington Chamber of Commerce Executives	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Washington Community Action Network	Community Organizations
Washington Conservation Voters	Community Organizations
Washington Department of Agriculture	State Partners, Agencies, and Transportation Planning Orgs
Washington Department of Commerce	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Washington Department of Ecology	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Washington Department of Energy	State Partners, Agencies, and Transportation Planning Orgs
Washington Department of Health Climate Justice Taskforce	Community Organizations
Washington Department of Labor	State Partners, Agencies, and Transportation Planning Orgs
Washington Department of Transportation	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners

Organization	Audience Category
Washington Department of Transportation - Keller Ferry	Freight, Aviation, Port, and Transportation Partners
Washington Economic Development Association	State Partners, Agencies, and Transportation Planning Orgs
Washington Forest Protection Association	Community Organizations
Washington Highway Users Federation	State Partners, Agencies, and Transportation Planning Orgs
Washington Pilots Association	Freight, Aviation, Port, and Transportation Partners
Washington Policy Center	State Partners, Agencies, and Transportation Planning Orgs
Washington Public Ports Association	Community Organizations / Freight, Aviation, Port, and Transportation Partners
Washington Retail Association	Community Organizations
Washington Roundtable	State Partners, Agencies, and Transportation Planning Orgs
Washington State Association of County Engineers	Community Organizations / State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Washington State Aviation Alliance	Freight, Aviation, Port, and Transportation Partners
Washington State Coalition of African Community Leaders	Community Organizations
Washington State Commission on Hispanic Affairs/Centro Latino Tacoma	State Partners, Agencies, and Transportation Planning Orgs
Washington State Commute Trip Reduction	State Partners, Agencies, and Transportation Planning Orgs
Washington State Cultural Commission	State Partners, Agencies, and Transportation Planning Orgs
Washington Department of Health	State Partners, Agencies, and Transportation Planning Orgs
Washington State Environmental Justice Council	Community Organizations / State Partners, Agencies, and Transportation Planning Orgs
Washington State Farm Bureau	Community Organizations
Washington State Ferries	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Washington State House of Representatives	State Partners, Agencies, and Transportation Planning Orgs
Washington State Labor Council	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners
Washington State Office of Financial Management	State Partners, Agencies, and Transportation Planning Orgs
Washington State Patrol	State Partners, Agencies, and Transportation Planning Orgs / Freight, Aviation, Port, and Transportation Partners

Organization	Audience Category
	Community Organizations
Washington State Potato Commission	/ Freight, Aviation, Port, and Transportation Partners
Washington State Senate	State Partners, Agencies, and Transportation Planning Orgs
Washington State Transit Association	Freight, Aviation, Port, and Transportation Partners
Washington State Transportation Commission	State Partners, Agencies, and Transportation Planning Orgs
Washington State Tree Fruit Association	Community Organizations
Washington State Trucking Association	Freight, Aviation, Port, and Transportation Partners
Washington State University	Community Organizations
Washington State University Freight Policy Transportation Institute	Freight, Aviation, Port, and Transportation Partners
Washington State University Transportation Research Group	Freight, Aviation, Port, and Transportation Partners
Washington Toxics Coalition	Community Organizations
Washington Traffic Safety Commission	Freight, Aviation, Port, and Transportation Partners
Washington Trucking Association	Freight, Aviation, Port, and Transportation Partners
Washington Trucking School	Freight, Aviation, Port, and Transportation Partners
Washington Utilities and Transportation Commission	Freight, Aviation, Port, and Transportation Partners
Washington Wilderness Coalition	Community Organizations
Wenatchee Valley Chamber of Commerce	State Partners, Agencies, and Transportation Planning Orgs
Western Washington Clean Cities	Community Organizations
Whatcom Council of Governments	State Partners, Agencies, and Transportation Planning Orgs
Whatcom County	State Partners, Agencies, and Transportation Planning Orgs
Whatcom Mobility	Freight, Aviation, Port, and Transportation Partners
Whatcom Transportation Authority	Freight, Aviation, Port, and Transportation Partners
Wheelchair Accessible Taxi Association of Washington	Freight, Aviation, Port, and Transportation Partners
Whidbey Camano Land Trust	Community Organizations
Willapa Hills Audubon Society	Community Organizations
Winthrop Chamber of Commerce	Community Organizations
Women of Wisdom Tri-Cities	Community Organizations
Yakama Nation	Tribes
Yakima Transit	Freight, Aviation, Port, and Transportation Partners
Yakima Valley Conference of Governments	State Partners, Agencies, and Transportation Planning Orgs
Yakima Valley Farmworkers Clinic	Community Organizations
ZEV Co-op	Freight, Aviation, Port, and Transportation Partners

Organization	Audience Category
Zipline	Freight, Aviation, Port, and Transportation
	Partners

Washington State Transportation Carbon Reduction Strategy

Appendix C: Funding Opportunities



Appendix C. Funding Opportunities

Appendix C: Funding Opportunities presents a summary of state and federal funding available through various programs to support projects consistent with Washington's climate goals.

C.1. Introduction

This appendix lists funding opportunities, primarily grants, that support transportation carbon emission reductions, across a variety of modes and project types. This list serves multiple purposes:

- Resource for organizations looking for funding support
- Demonstrating the breadth of support for emission reductions available to organizations in Washington State

The opportunities listed below are competitive programs available to multiple organizations. Formula grants that distribute funds are excluded, as are tax incentives.

Although the deadline for the current funding cycle has passed for some opportunities, funding amounts are identified to indicate general funding levels. Some programs, especially state-funded programs, begin the application process before funding levels are set in law so that organizations can receive funding early in the new biennium. Follow the links to find out more about each opportunity.

Where applicable, the agency administering each grant is noted in parenthesis at the end of the grant title. Agencies offering funding opportunities are listed with their acronyms:

- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- Washington State Department of Commerce (Commerce)
- Washington State Department of Ecology (Ecology)
- Washington State Department of Transportation (WSDOT)
- Washington State Transportation Improvement Board (TIB)
- United States Department of Transportation (USDOT)
- United States Environmental Protection Agency (EPA)

C.2. Climate Planning and Implementation

Climate Pollution Reduction Grants (EPA)

The Climate Pollution Reduction Grants program will provide grants to states, local governments, tribes, and territories to develop and implement plans for reducing greenhouse gas emissions and other harmful air pollution. Funds may be used by states, municipalities, air pollution control agencies, tribes, and groups thereof to develop and implement strong, local greenhouse gas reduction strategies. This two-phase grant program provides noncompetitive funding for planning grants and competitive funding for implementation grants.

Funding available

- Noncompetitive planning grants \$250 million
- Competitive implementation grants \$4.6 billion

htttps://www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants

C.3. Electric vehicle charging infrastructure

As more vehicles and modes are electrified, additional charging infrastructure must be installed. Grants and programs in this section provide support across the spectrum of vehicle types, except transit. Programs supporting transit electrification are included below in section C.7 Transit Programs.

In addition to programs listed below, EV expansion on the National Highway System is an eligible activity within a variety of federal funding programs. Depending on the funding source, activities may include planning, vehicle acquisition, workforce development, and charger installation for passenger vehicles, freight, and transit. FHWA's <u>DOT Funding and Financing Programs with EV Eligibilities</u>⁶⁴ document identifies which federal funding program can be used for which activities.

Zero-emission Vehicle Infrastructure Partnerships grant (WSDOT)

For the installation of new electric vehicle charging equipment and hydrogen fueling infrastructure along priority corridors in Washington. Priority corridors for EV charging infrastructure include only state routes, that is, no Interstate or U.S. routes. For EV charging, stations should be located at least every 50 miles and within one travel mile of the priority corridor. Priority corridors for hydrogen fueling infrastructure include Interstates, U.S. routes, and state routes. Hydrogen stations should be located at least every 150 miles and within five travel miles of the priority corridor.

2023-2025 biennium funds available - \$30 million

https://wsdot.wa.gov/business-wsdot/grants/zero-emission-vehicle-grants/zero-emission-vehicle-infrastructure-partnerships-grant

National EV Infrastructure Grant Program (NEVI) (WSDOT)

WSDOT will administer formula National EV Infrastructure program grants. These grants will focus on building out FHWA National Alternative Fuel Corridors (I-5, I-82, I-90, US 101, US 195, US 395). Installations must include four 150kW CCS DCFC per site and be located within one mile of highway.

Funding available – federal fiscal years 2022-2026 – \$71 million

WA State Plan for EV Infrastructure Deployment⁶⁵

Community Charging (Commerce)

Projects that receive funding under this section must be implemented by, or include partners

⁶⁴ https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/resources/ev_funding_report_2022.pdf

⁶⁵ https://wsdot.wa.gov/construction-planning/statewide-plans/washington-state-plan-electric-vehicle-infrastructure-deployment#:~:text=The%20%245%20billion%20NEVI%20Formula%20Program%20will%20provide,years%2C%20including%20%24 10.5%20million%20for%20the%20first%20year

from, one or more of the following: local governments, federally recognized tribal governments, or public and private electrical utilities that serve retail customers in the state.

Funding may be used for level 2 or higher charging infrastructure and related costs including but not limited to construction and site improvements - prioritizing charging at multifamily housing first, followed by publicly available charging, then schools, state and local government, and all others.

2023-2025 biennium funds available - \$138 million

https://waevcharging.org/

Vehicle Incentives (Commerce)

Vehicle incentives programs will be funded for:

- Individuals living in an overburdened community.
- Individuals in greatest need of this assistance in order to reduce the carbon emissions and other environmental impacts of their current mode of transportation in the overburdened community in which they live.
- Communities with the greatest health disparities, and communities of color that are most likely to receive the greatest health benefits.

2023-2025 biennium funds available - \$50 million

Website coming in early 2024.

Electrification of Transportation Systems (Commerce)

This program supports the continued transformation of the electric transportation market in Washington State with grants for local governments, tribal governments, and retail electric utilities for electric vehicle charging infrastructure.

2023-2025 biennium funds available – \$5.5 million

https://www.commerce.wa.gov/growing-the-economy/energy/clean-energy-fund/electrification-of-transportation/

Charge where you are: Level 2 EV Charging (Ecology)

Public organizations, tribal governments, businesses, and non-profit 501(c)(3) organizations may use funds to install 4-10 Level 2 charger plugs for publicly available charging, fleet and workplace charging, and charging at multi-unit residential buildings.

Round 1 application period September 26 to November 16, 2023.

2023-2025 biennium funds available – VW funds, amount to be announced

https://ecology.wa.gov/about-us/payments-contracts-grants/grants-loans/find-a-grant-or-loan/volkswagen-enforcement-action-grants

Charging and Fueling Infrastructure Discretionary Grant Program (US DOT)

This new competitive grant program provides funds to strategically deploy electric vehicle (EV) charging infrastructure and other alternative fueling infrastructure projects in urban and rural communities in publicly accessible locations, including downtown areas and local neighborhoods, particularly in underserved and disadvantaged communities, as well as along alternative fuel corridors.

Funding available – federal fiscal years 2022-2026 – \$2.5 billion

https://www.transportation.gov/rural/grant-toolkit/charging-and-fueling-infrastructure-grant-program

C.4. Utility-provided electric vehicle incentives

The Department of Energy provides information on <u>utility incentives in Washington State</u>.⁶⁶ Be sure to confirm information with individual utilities. Incentives available at the time this document was prepared are listed below.

Plug in America has a <u>tool to find EV incentives by zip code</u>,⁶⁷ including federal, state, and utility tax credits, rebates, and discounts.

Pacific Power – Time of Use Rate

Offers residential and commercial customers a time-of-use rate.

https://www.pacificpower.net/savings-energy-choices/time-of-use.html

Tacoma Public Utility - Residential EV Charging Rebate

Tacoma Public Utility offers residential customers a \$400 rebate, in form of bill credit, for installation of a Level 2 EV charging station, a smart splitter, or a 240-volt outlet.

https://www.mytpu.org/ways-to-save/residential-incentives/ev-charging/

Tacoma Public Utility – Multifamily and Businesses EV Charging Rebate

Tacoma Public Utility offers rebates on the firs two Level 2 EV Charging stations at multifamily dwellings and business in Tacoma. Rebates for the first two EV charging station ports:

Applicant Type	Standard Rebate Amount	Rebate for Historically Underinvested Communities
Business	60% of project costs, up to \$12,000	80% of project costs, up to \$16,000
Multifamily Dwelling	80% of project costs, up to \$16,000	100% of project costs, up to \$20,000

⁶⁶

https://afdc.energy.gov/fuels/laws/ELEC?state=WA#:~:text=Electric%20Vehicle%20(EV)%20Charging%20Station%20Rebates,%E2%80%93%20Tacoma%20Public%20Utility%20(TPU)&text=A%20rebate%20of%20up%20to,%2425%2C000%2C%20to%20increase%20grid%20reliability

⁶⁷ https://plugstar.com/tools/incentives

A rebate of up to \$2,000 is available for every additional EV charging station port installed. Applicants may also receive a rebate for 100% of utility infrastructure upgrade costs, up to \$25,000, to increase grid reliability.

Business charging: https://www.mytpu.org/community-environment/clean-renewable-energy/electric-vehicles/public-electric-vehicle-charging/

Multifamily charging: https://www.mytpu.org/community-environment/clean-renewable-energy/electric-vehicles/multifamily-dwelling-ev-charging/

Clark Public Utilities (CPU) – Residential Level 2 Charger Rebate

Offers customers rebates for purchase and installation of Level 2 EV charging stations:

- Energy star and internet connected chargers \$400
- Other chargers \$100

https://www.clarkpublicutilities.com/residential-customers/reduce-energy-waste-and-lower-your-bill/all-rebates-incentives-and-low-interest-loans/electric-vehicle-program/

Clark Public Utilities (CPU) - Income-qualified EV Rebate

Income-qualified customers may receive a 10% rebate on the purchase of an EV, up to \$2000. Residency and registration requirements apply. Funding is on a first-come first-serve basis.

https://www.clarkpublicutilities.com/residential-customers/reduce-energy-waste-and-lower-your-bill/all-rebates-incentives-and-low-interest-loans/electric-vehicle-program/

Snohomish Public Utility District - Residential EV Charging Station Rebate

Offers residential customers a \$350 rebate for the purchase and installation of a qualified Level 2 EV charging station.

Offers a \$200 account credit towards the charging of a new or leased EV.

https://www.snopud.com/save-energy/electric-vehicles/residential/tax-credits-rebates/

Seattle City Light – Fleet Electrification Program

Seattle City Light offers assessment assistance and recommendations to convert vehicle fleets to electric vehicles, as well as rebates for both on-road and off-road vehicle charging. Fleets located in environmental justice communities may be eligible for "make-ready infrastructure incentives."

https://www.seattle.gov/city-light/business-solutions/renewable-energy-services/fleet-electrification-program

Seattle City Light - Multifamily EV Charging Program

Seattle City Light offers assessment assistance and recommendations for multifamily properties. EV charger rebates depend on property type.

- Multifamily housing 100 percent of costs for Level 1 and Level 2 charging installations, up to \$15,000.
- Shared parking at affordable housing 100% of the cost of installing at least 2 Level 2 chargers for shared parking spaces, up to \$50,000.
- Shared parking market rate condominiums 50% of the cost of installing at least 2 Level 2 chargers for shared parking spaces, up to \$25,000.

https://www.seattle.gov/city-light/energy/electrification/transportation-electrification/multifamily-ev-charging

C.5. Zero emission commercial vehicles & infrastructure

In addition to programs listed below, a variety of federal funds may be used for vehicle electrification efforts, including planning, vehicle acquisition, workforce development, and charger installation for passenger vehicles, freight, and transit. <u>More information</u>⁶⁸ is available from FHWA.

ZEV Commercial vehicle infrastructure and incentive programs (WSDOT)

These funds will support the implementation of zero-emission commercial vehicle infrastructure and incentive programs and the replacement of school buses powered by fossil fuels with zero emission school buses, including the purchase and installation of zero-emission school bus refueling infrastructure.

An early action grant program will provide \$20 million in expedited funding to zero-emission commercial vehicle infrastructure demonstration projects. The remaining \$100 million will be held until the joint transportation committee completes the medium- and heavy-duty vehicle infrastructure and incentive strategy (due January 2024).

2023-2025 biennium funds available – \$120 million

Clean off-road equipment incentives (WSDOT)

This program will provide incentives for clean off-road technologies. Funds will be held until the joint transportation committee completes the medium- and heavy-duty vehicle infrastructure and incentive strategy (due January 2024).

2023-2025 biennium funds available – \$5 million

Cargo handling equipment incentives (WSDOT)

This program will provide incentives for the adoption of zero emission cargo handling equipment. Funds will be held until the joint transportation committee completes the medium- and heavy-duty vehicle infrastructure and incentive strategy (due January 2024).

2023-2025 biennium funds available – \$2.5 million

⁶⁸ https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/resources/ev_funding_report_2022.pdf

Air Quality Clean Diesel Grant Program (Ecology) – yard trucks and fuel cell transit buses

Cities, counties, public utility districts/co-ops, ports, transit authorities, school districts, state government, tribes, nonprofit organizations, tribes, and local clean air agencies are eligible for the following activities:

- Scrap and replace diesel yard trucks with zero emission yard trucks.
- Scrap and replace diesel transit buses with zero emission transit buses.

Application period opens early December 2023.

2023-2025 biennium funds available – \$2.2 million

https://ecology.wa.gov/About-us/Payments-contracts-grants/Grants-loans/Find-a-grant-or-loan/Clean-diesel-grants

Air Quality Clean Diesel Grant Program (Ecology) – marine engines and vocational training

Cities, counties, public utility districts/co-ops, ports, transit authorities, school districts, state government, tribes, nonprofit organizations, tribes, and local clean air agencies are eligible for the following activities:

- Replace the oldest diesel marine engines with all-electric or hybrid electric system.
- Vocational training pilot programs to prepare students for jobs created by transforming diesel fleets to zero emission fleets.

Application period opens first or second quarter 2024.

2023-2025 biennium funds available – to be determined

https://ecology.wa.gov/About-us/Payments-contracts-grants/Grants-loans/Find-a-grant-orloan/Clean-diesel-grants

Diesel to zero-emission refuse vehicle, street sweeper, freight switcher, port cargo handling equipment, and forklifts (Ecology)

Provides funding to cities, counties, state government, tribes, public utility districts/co-ops, public ports and public port authorities, school districts, and public colleges and universities to repower or replace the following diesel equipment types with zero emission equipment. Funds available shown in parentheses.

- Refuse vehicles and street sweepers (\$9.68 million)
- Freight switchers locomotives (\$3.52 million)
- Port cargo handling equipment (\$3.08 million)

https://ecology.wa.gov/about-us/payments-contracts-grants/grants-loans/find-a-grant-or-loan/volkswagen-enforcement-action-grants

Clean Heavy-Duty Vehicle Program (EPA)

EPA will offer grants and rebates to replace class 6 or class 7 heavy-duty vehicles with zero emission vehicles. Funding can support infrastructure, workforce development, training and planning, and maintenance and charging.

Eligible recipients are states, municipalities, Indian tribes, and non-profit school transportation associations.

Funding available - \$1 billion to be available through federal fiscal year 2031.

EPA Clean Heavy-Duty Vehicle Program⁶⁹

Diesel Emissions Reduction Act (DERA) Program (EPA)

DERA offers funding assistance to accelerate the upgrade, retrofit, and turnover of the legacy diesel fleet. Funds may be used for buses, class 5 to 8 heavy-duty highway vehicles, marine engines, locomotive engines, and non-road engines, equipment or vehicles used in construction, cargo handling, agriculture, mining, or energy production.

Funding available – \$100 million per federal fiscal year through 2024

https://www.epa.gov/dera/national

C.6. Zero emission school buses

Air Quality Clean School Bus Grant Program (Ecology)

Provides funding to bus owners that transport students to Central and Eastern Washington K-12 schools overseen by the <u>Washington Office of Superintendent of Public Instruction</u> (OSPI) for the 2023 — 2024 school year to scrap and replace diesel uses with zero emission school buses.

Application opens November 2023

Funding available – \$14 million

https://ecology.wa.gov/About-us/Payments-contracts-grants/Grants-loans/Find-a-grant-or-loan/Clean-diesel-grants

Clean School Bus Program (EPA)

This program funds the purchase of replacement buses for 2010 and older diesel-powered school buses that will be scrapped if selected for funding. Replacement buses must EPA or CARB-certified 2021 model year or newer battery electric, compressed natural gas, or propane. Electric bus purchases may also be eligible to receive funding for charging infrastructure equipment and installations. Half of the funding is available to zero emission buses and equipment and half is dedicated to clean school buses.

Funding available – federal fiscal years 2022-2026 - \$5 billion

In federal fiscal year (FFY), EPA awarded \$1 billion in rebates. In FFY 2023, EPA is running a grant program and anticipates awarding \$400 million.

⁶⁹ https://www.epa.gov/inflation-reduction-act/clean-heavy-duty-vehicle-program#:~:text=The%20Inflation%20Reduction%20Act%20invests,to%20train%20and%20develop%20workers

https://www.epa.gov/cleanschoolbus

C.7. Active transportation

E-bike lending library and rebate programs

WSDOT is to create an e-bike lending library program to start in state fiscal year 2025. The agency is also establishing an e-bike rebate program.

Prior to that, funding is directed to the University of Washington to develop a policy brief with recommendations on establishing the e-bike lending library and grant programs.

2023-2025 biennium funds available – \$7 million (about \$5 million for rebates and \$2 million for the lending library, includes funding for UW study)

A website has not yet been established.

Safe Routes to Schools Grant Program (WSDOT)

2023-2025 biennium funds available - \$34.9 million

 $\underline{https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/safe-routes-school-program}$

Pedestrian and Bicyclist Safety Grant Program (WSDOT)

2023-2025 biennium funds available - \$33.5 million

Move Ahead Tier Bicycle and Pedestrian Projects (WSDOT)

2023-2025 biennium funds available - \$41.2 million

School-Based Bicycle Education Program

2023-2025 biennium funds available - \$16.8 million

Complete Streets (TIB)

The Washington State Transportation Improvement Board offers Complete Streets award. Awards are funding opportunities for local governments that have adopted a Complete Streets ordinance. Board approved nominators may nominate an agency for showing practice of planning and building streets to accommodate all users, including pedestrians, access to transit, cyclists, and motorists of all ages and abilities.

About \$15 million was awarded in 2022. The next award cycle is anticipated for 2023 or 2024

http://www.tib.wa.gov/grants/grants.cfm

Small City Active Transportation Program (TIB)

The Active Transportation Program provides funding to improve pedestrian and cyclist safety, enhanced pedestrian and cyclist mobility and connectivity, or improve the condition of existing

facilities.

Funding applications are available during each year's call for projects (from June to August).

http://www.tib.wa.gov/grants/grants.cfm

Urban Active Transportation Program (TIB)

The Active Transportation Program provides funding to improve pedestrian and cyclist safety, enhanced pedestrian and cyclist mobility and connectivity, or improve the condition of existing facilities. All projects must be transportation related on a federally classified route (principal, minor, collector).

Funding applications are available during each year's call for projects (from June to August).

http://www.tib.wa.gov/grants/grants.cfm

Connecting Community Grants (WSDOT)

The Sandy Williams Connecting Communities Program (SWCCP) was established to improve active transportation connectivity for people walking, biking, and rolling along and across current and former state highways. The program focuses on high equity needs communities, which are those most affected by environmental health disparities and barriers to opportunities.

Funding – \$50 million over five years

https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/sandy-williams-connecting-communities-program

C.8. Transit and Shared Mobility

The programs listed below are competitive grants for transit capital, planning, mobility management, and operating expenses.

Many transit grant programs solicit and review applications prior to the biennium. See individual grant websites to determine application timelines and processes. Amounts available for the 2023-2025 biennium are shown even for grants that have already selected projects to indicate the overall level of funding the program has historically allocated.

Green Transportation Capital Grant Program (WSDOT)

Green Transportation Capital grants provide funding to transit agencies for cost-effective capital projects that reduce the carbon intensity of the Washington transportation system.

- Electrification of vehicle fleets, including battery and fuel cell operated electric vehicles.
- Updating or modifying facilities for fleet electrification and/or hydrogen refueling infrastructure.
 New facilities that directly and primarily support fleet electrification.
- Construction of electric charging and fueling stations.
- Necessary upgrades to electrical transmission and distribution systems.

- In-house staff directly managing a capital construction or equipment/vehicle procurement project.
- Acquisition of property rights for capital projects.
- Planning activities (contingent upon legislative appropriation of funding). Planning may include, but is not limited to, zero emission fleet transition planning, alternatives analyses, major investment studies, preliminary design/engineering, project-level environmental assessment and documentation, and final design.

2023-2025 biennium funds available - \$55 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/green-transportation-capital

Low or No Emission Vehicle Grant Program (FTA)

The Low or No Emission competitive program provides funding to state and local governmental authorities for the purchase or lease of zero emission and low emission transit buses as well as acquisition, construction, and leasing of required supporting facilities.

- Purchasing or leasing low or no emission buses.
- Acquiring low or no emission buses with a leased power source.
- Constructing or leasing facilities and related equipment (including intelligent technology and software) for low- or no-emission buses.
- Constructing new public transportation facilities to accommodate low or no emission buses.
- Rehabilitating or improving existing public transportation facilities to accommodate low or no emission buses.
- Workforce development training.

Federal fiscal year 2022-2026 competitive funding – \$5.6 billion (about \$1.1 billion per fiscal year)

https://www.transit.dot.gov/lowno

Bus and Bus Facilities Grants Program (FTA)

This competitive federal grant may be used for capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities.

\$5.1B nationally in funding for FY 2022 to FY 2026—FTA administers program

Federal fiscal year 2022-2026 - \$1.9 billion

Federal fiscal years 2024, 2025, 2026 – about \$400 million each year

https://www.transit.dot.gov/bus-program

Zero-emissions Access Program grant (WSDOT)

The Zero-emissions Access Program (ZAP) provides funding for zero emission carshare pilot programs. ZAP grants fund carshare pilot programs in underserved and low- to moderate-income communities that have limited access to public transportation or are in areas where emissions exceed state or federal standards.

The ZAP grant's goal is to expand access to clean-fuel transportation options and provide opportunities for zero-emission carshare programs in underserved communities where access to public transportation is less available (RCW 47.04.355).

2023-2025 biennium funds available – \$1.1 million

https://wsdot.wa.gov/business-wsdot/grants/zero-emission-vehicle-grants/zero-emissions-access-program-grant

Commute Trip Reduction (WSDOT)

Funding is available for Commute Trip Reduction (CTR) grants and activities to reduce emissions and congestion.

2023-2025 biennium funds available – \$7.2 million

https://wsdot.wa.gov/business-wsdot/commute-trip-reduction-program

Special Needs & Rural Mobility Grant Program – Non-Profit Providers (WSDOT)

Paratransit/Special Needs grants sustain and expand services to people with disabilities. Rural Mobility grants support public transportation in rural and small urban areas. These competitive grants cannot be applied for independently. WSDOT awards these grants as part of the Consolidated Grant program.

2023-2025 biennium funds available – \$48.7 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/paratransit-special-needs-and-rural-mobility-competitive

Public Transit Rideshare Grant Program (WSDOT)

Transit agencies use these grant funds to expand rideshare fleets, replace aging rideshare vehicles, and provide incentives to employers to increase ridership. The funding allows transit agencies to purchase rideshare vehicles with alternative fuel types and associated charging stations, including low-emission plug-in hybrids and zero-emission all-electric vehicles.

2023-2025 biennium funds available – \$10 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/public-transit-rideshare

Consolidated Grant Program (WSDOT)

Consolidated grants provide funds for public transportation improvements within and between

rural communities; transportation services between cities; purchases of new buses and equipment; and public transportation services to seniors and people with disabilities. Funds may support planning, operations, mobility management, and capital projects.

2023-2025 biennium funds available – \$110 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/consolidated

Tribal Transit Mobility Grant Program (WSDOT)

Tribal Transit Mobility Grants are part of the Consolidated Grant Program.

Federally recognized tribes may apply. Project types include capital, planning, operations and maintenance, and mobility management. Match requirements depend on project type.

2023-2025 biennium funds available – up to \$10 million per biennium. WSDOT anticipates \$4.6 million will be available in the current funding cycle; recommended projects will be submitted to the legislature on September 1, 2023.

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/tribal-transit-mobility

Regional Mobility Grants Program (WSDOT)

This grant supports local efforts to improve connectivity between counties and regional population centers as well as to reduce transportation delays. This program includes four eligible project types: vehicle and equipment purchases, capital construction, operations, and transportation demand management.

2023-2025 biennium funds available - \$115 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/regional-mobility

Transit Coordination Grants Program (WSDOT)

This grant supports projects that increase transit ridership and improve transit riders' travel experience through collaboration among agencies in the central Puget Sound region. The program encourages joint planning and coordination by central Puget Sound transit systems to improve user experience and increase ridership while making the most effective use of tax dollars.

Transit agencies located in a county or counties with a population of 700,000 or more that border Puget Sound (i.e., King County Metro, Everett Transit, Sound Transit, Community Transit, Pierce Transit). At least two eligible transit agencies must jointly propose an application.

Eligible projects include, but are not limited to:

- Integrating marketing efforts
- Aligning fare structures

- Integrating service planning
- Coordinating long-range planning, including capital projects planning and implementation
- Integrating other administrative functions and internal business processes, as appropriate
- Integrating certain customer-focused tools and initiatives

2023-2025 biennium funds available - \$2 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/transit-coordination

Transit Support Grants (WSDOT)

These grants provide funding to support operating and capital expenses of transit agencies in Washington state. To be eligible for transit support funds, transit agencies must:

- Adopt and implement a zero-fare policy for all modes provided by the agency, including paratransit, for people 18 by October 1, 2022. Agencies that adopt and implemented a zerofare policy after October 1, 2022, will not receive 2023-2025 funds and will be eligible for funds beginning in the 2025-2027 biennium.
- Maintain or increase their local sales tax authority on or after January 1, 2022, and may not delay or suspend the collection of voter-approved sales taxes approved on or before January 1, 2022.
- Certify annually that the agency has maintained its local sales tax authority for transit at or above January 1, 2022 levels.
- To the extent practicable, align implementation of youth zero-fare policies with equity and environmental justice principles consistent with recommendations from the environmental justice council, and ensure low-barrier accessibility of the program to all youth.

2023-2025 biennium funds available - \$188.9 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/transit-support-grant

State Bus and Bus Facilities Grant Program (WSDOT)

State Buses and Bus Facilities grants provide funding to transit agencies for the replacement, expansion, rehabilitation, and purchase of transit rolling stock; construction, modification, or rehabilitation of transit facilities; and funding to adapt to technological change or innovation through the retrofitting of transit rolling stock and facilities.

2023-2025 biennium funds available – \$37.5 million

https://wsdot.wa.gov/business-wsdot/grants/public-transportation-grants/grant-programs-and-awards/state-buses-and-bus-facilities

C.9. Ferries

Passenger Ferry Grant Program (FHWA)

The Passenger Ferry Program provides funding to improve the condition and quality of existing passenger ferry services, support the establishment of new passenger ferry services, and repair and modernize ferry boats, terminals, and related facilities and equipment.

Of the 2023 funds, \$5 million is exclusively for low or zero-emission ferries or ferries using battery or fuel cell components and associated infrastructure.

Funding available – Federal fiscal year 2023 – \$50.1 million

https://www.transportation.gov/rural/grant-toolkit/passenger-ferry-grant-program

Electric or Low-Emitting Ferry Pilot Program (FHWA)

This program provides competitive funding for projects that support the purchase or electrification of ferries and other efforts to reduce emissions from ferries. Low-emitting ferries must use alternative fuels, such as electricity, hydrogen, biofuel.

Funding available – federal fiscal years 2022-2026–\$250 million (\$50 million per fiscal year)

https://www.transit.dot.gov/funding/grants/grant-programs/electric-or-low-emitting-ferry-pilot-program-iija-ss-71102

C.10. Aviation

Sustainable Aviation Grants (WSDOT)

This grant program supports the adoption of energy efficient and clean energy airport infrastructure to reduce harmful aviation-related emissions, and transition airports to more environmentally sustainable operations. The department considers projects that advance the state of sustainable aviation technology and lead to future innovation. Projects may include, but are not limited to, pilot projects demonstrating the use of

- Mobile battery charging technology
- Hydrogen electrolysers and storage
- Electric ground equipment
- Hanger charging technology

2023-2025 biennium funds available - \$1.48 million

https://wsdot.wa.gov/travel/aviation/aviation-grants

C.11. Ports

Port Electrification Competitive Grants (WSDOT)

This program will provide grants for port electrification. Recipients must require that vessels docked at the port use shore power if the vessel is capable and power is available.

2023-2025 biennium funds available – \$26.5 million

Reduction of Truck Emissions at Port Facilities Program (FHWA)

The Reduction of Truck Emissions at Port Facilities program studies and provides grants to reduce idling at port facilities, including through the electrification of port operations.

Available funding federal fiscal years 2022-2026 - \$400 million

https://ops.fhwa.dot.gov/bipartisan-infrastructure-law/index.htm

Clean Ports Program (EPA)

This new funding program will build on EPA's Ports Initiative to help address public health and environmental impacts on surrounding communities. Funds may be used for zero-emission port equipment and technology and developing port climate plans.

Available funding - \$3 billion, available until the end of federal fiscal year 2027.

https://www.epa.gov/inflation-reduction-act/clean-ports-program

Washington State Transportation Carbon Reduction Strategy

Appendix D: 2023-2026 STIP Emission Reduction Investments



Appendix D. 2023-2026 STIP Emission Reduction Investments

The State Transportation Improvement Program (STIP)⁷⁰ is a four-year prioritized multimodal transportation program of state, local, tribal, and public transportation projects that include highways, streets, roads, rail, transit hubs, park & rides, bridges, sidewalks, bike lanes, trails, and safety. WSDOT compiles the STIP in accordance with Federal Transportation Act requirements.

Projects programmed in the STIP are the highest priority for the available funding, to preserve and improve the state's transportation network and to achieve the national goals established in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and continued through the recently enacted Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law (IIJA/BIL) for federal fiscal years 2022-2026.

Projects programmed in the STIP can be authorized by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to use federal funds. Once projects are approved in the STIP, agencies may request federal fund authorization of the project. Regionally significant projects without federal funding are also included in the STIP.

Thus, while extensive, the STIP is not all inclusive of transportation investments. In fact, some key emission reduction efforts are not in the STIP as they use state or local funds and are not regionally significant. For example, a variety of grant programs are not included in the STIP, in particular, charging and refueling infrastructure investments.

D.1. Current STIP investments to reduce emissions

The subsequent tables identify numerous projects in the current STIP that advance Washington's efforts to reduce transportation carbon emissions.

The current STIP was reviewed for programmed projects that support reducing transportation emissions. Search terms relevant to emission reduction project types identified projects in the August 2023 STIP database: active, bicycle, bike, bus, charge, electric, multiuse, path, trail, transit, and trolley.

The list demonstrates that many projects have an active transportation element, from repairing a sidewalk as part of a much larger effort to adding a new multi-use trail as the entire project.

Table D.1.	WA STI	P invo	etmonte	in ami	ssion	reduction
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Investment Type	Federal (million)	State (million)	Local (million)	Total (million)
Active Transportation	1,017	944	654	2,616
Electrification (vehicle and ferry vessels)	161	135	496	793
Transportation Demand Management (TDM)	13		3.5	16
Transit (Capital and Operating)	1,914	37	3,189	5,141
Total	3,105	1,116	4,344	8,567

⁷⁰ https://wsdot.wa.gov/business-wsdot/support-local-programs/delivering-your-project/statewide-transportation-improvement-program-stip

Table D.2. WA STIP transportation electrification projects

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Battery Electric Buses & Infrastructure	3,870,800		967,700	4,838,500
Bus Replacement	6,665,985		2,156,247	8,822,232
Bus Replacements 2021-2022	15,505,786		18,255,340	33,761,126
Electric Buses	10,400,000		2,600,000	13,000,000
Electric Vehicles & Charging Infrastructure II	4,600,000		1,190,082	5,790,082
Fixed Route Bus Purchase	2,876,707		23,436,628	26,313,335
Guemes Island Electric Ferry, Shore-Side Facilities, And Terminal Modifications	2,500,000	23,297,591	1,353,609	27,151,200
Interim Base Battery Electric Bus Charging Depot	7,950,000	12,000,000	74,742,209	94,692,209
KCM Service Expansion Battery Electric Bus Service	5,840,000		648,889	6,488,889
Local Electric Passenger Only Ferry	7,700,000		2,680,000	10,380,000
Lummi Island Ferry System Modernization & Preservation		3,987,600		3,987,600
On Track for the Future: Tacoma Rail Battery- Electric Switcher Locomotive Replacement	3,645,000		5,000,000	8,645,000
Purchase replacement electric vehicles (heavy & medium buses)	1,036,903		663,097	1,700,000
Replace Fixed Route Buses	8,862,951		1,564,053	10,427,004
Replace One (1) Small Heavy-Duty Transit Bus	814,745		203,687	1,018,432
Replace Three (3) Cutaway Buses	265,102		60,995	326,097
South Annex Base Expansion and Electrification	8,225,000		348,914,931	357,139,931
Spanaway Transit Center Phase II	3,271,477		817,869	4,089,346
Terminal Electrification - Mukilteo - Clinton Route	4,900,000	21,000,000		25,900,000
Terminal Electrification - Seattle and Bainbridge Island Terminals	9,000,000	26,690,000		35,690,000
Vehicle, Equipment and Facilities Maintenance for Electric Trolley Fleet 2021- 2022	10,000,000		2,500,000	12,500,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Vehicle, Equipment and Facilities Maintenance for Electric Trolley Fleet 2023- 2024	35,215,127		8,803,782	44,018,909
Zero-Emission Drayage Demonstration Program	2,800,000		434,700	3,234,700
Total	161,180,583	135,048,647	496,993,818	793,223,048

Table D.3. WA STIP Transportation Demand Management (TDM) investments

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Commute Trip Reduction 2024-2026	991,924		304,708	1,296,632
Improving Access to Regional Centers through Transportation Demand Management	4,100,000		639,884	4,739,884
Increasing Student and Family Access to Regional Travel Options through TDM	1,500,000		234,104	1,734,104
King County Post Pandemic TDM	2,000,000		312,139	2,312,139
TDM Support for Communities, Businesses, and Commuters	900,000		300,000	1,200,000
Transportation Demand Management and Wayfinding Expansion	3,610,000		1,795,814	5,405,814
Total	161,180,583	135,048,647	496,993,818	793,223,048

Table D.4. WA STIP transit projects

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
2021-22 Bus and OTR Coach Purchase	3,633,113		5,079,964	8,713,077
I90/Valley HPT Line Park & Ride Construction	1,200,000	2,880,000	1,321,000	5,401,000
15th Ave W/NW and Ballard Bridge	6,500,000		6,699,597	13,199,597
2021-2022 Everett Station Preventive Maintenance and Rehabilitation	60,407		19,442	79,849
2021-2022 Preventive Maintenance Vehicle Fleet	1,278,034		331,344	1,609,378
2021-22 Passenger Only Ferry System Preventive Maintenance	470,904		0	470,904
2022-2023 EVST Electronic Signage (Passenger Amenities)	100,447		29,681	130,128
2023 - 2026 Equipment: Communication, security, data collection, passenger	528,000		5,053,886	5,581,886

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
amenities, maintenance equipment, integrated technology projects				
2023 - 2026 Facilities	6,064,000		16,614,900	22,678,900
2023 - 2026 Transit Vehicle Replacements	15,171,238	2,000,000	5,653,595	22,824,833
2023- 2026 Operating, Preventative Maintenance	20,697,683		20,697,683	41,395,366
2023 Everett Station HVAC Replacement	1,275,009		318,753	1,593,762
2023 Everett Station Preventive Maintenance	57,323		22,667	79,990
2023-26 Operating Assistance	17,476,512		17,476,512	34,953,024
2024 Electronic Signage (Passenger Amenities)	104,102		26,026	130,128
2024 Everett Station Preventive Maintenance	63,992		15,998	79,990
2024 Preventive Maintenance for the Vehicle Fleet	1,270,898		317,725	1,588,623
4th Plain Bus Rapid Transit Extension			42,000,000	42,000,000
500K Substation Breaker Replacement	7,120,000		1,280,000	8,400,000
ADA Expansion	2,745,101		686,276	3,431,377
ADA Service 2021-2022	1,076,272		320,833	1,397,105
ADA Service 2023-24	1,396,596		349,150	1,745,746
Annual Federal Fiscal Year FTA Operating Assistance 5307 - Fixed Route Service	10,137,852		10,137,852	20,275,704
Annual FTA 5339 Assistance - Bus and Bus Facilities Equip	950,000		950,000	1,900,000
At-Grade Safety Enhancements			3,628,000	3,628,000
Atlantic Base Maintenance Building HVAC Replacement	1,000,000		250,000	1,250,000
Atlantic Base Pavement Replacement	24,100,001		22,593,402	46,693,403
Atlantic Base Trolley Infrastructure Replacement	2,000,000		500,000	2,500,000
Atlantic Base Trolley Power System Replacement	1,864,761		466,190	2,330,951
Atlantic Base Vehicle Maintenance Bus Lifts	13,574,199		4,520,170	18,094,369

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Atlantic Base Wash Systems Vacuum Replacement	2,424,880		622,424	3,047,304
Auburn Station Improvements			111,747,148	111,747,148
Boeing Access Rd Infill Station	8,230,000		18,545,000	26,775,000
Broad Street Substation Transformer Replacement	5,388,000		1,501,943	6,889,943
Bus and Bus Facilities	160,000		40,000	200,000
Bus and OTR Coach Purchase (23-24)	8,297,062		2,088,822	10,385,884
Clean Fuels Bus Replacement Expansion 2023-24	14,125,827		3,531,457	17,657,284
Clean Fuels Bus Replacement/Expansion 2021-2022	14,333,300		3,161,795	17,495,095
COACH MIDLIFE OVERHAULS CTA 20-4	259,000		65,000	324,000
COACH MIDLIFE OVERHAULS CTA 21-3	259,000		65,000	324,000
Commute Trip Reduction - Spokane County 2023	294,000	91,968		385,968
Commuter Rail Project: Seattle to Lakewood	10,000,000		27,651,000	37,651,000
Cowlitz Indian Tribe Transit Facility Roof Replacement	185,368		46,343	231,711
Division St BRT Project Development	1,000,000		11,000,000	12,000,000
DOWNTOWN RECTANGULAR RAPID FLASHING BEACONS	1,046,200			1,046,200
Downtown Redmond Link Extension	44,595,168		320,740,792	365,335,960
Downtown Seattle Transit Tunnel (2023-2026)	3,000,000		23,480,924	26,480,924
Everett Link Extension			93,317,000	93,317,000
Facilities Rehabilitation, Renovation and Maintenance	7,329,164		34,611,207	41,940,371
Federal Way Link Extension	379,451,000		678,351,000	#########
FFY 2020 5339(b) Bus and Bus Facilities Discretionary Award - Pacific Transit	250,003		62,500	312,503
FFY 2022 5339 Statewide Bus & Bus Facilities Formula Program Bucket	4,000,000		1,000,000	5,000,000
FFY 2022 5339(b) Bus and Bus Facilities Discretionary Award	5,422,168		1,355,542	6,777,710

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
FFY 2023 5339 Statewide Bus & Bus Facilities Formula Program	4,000,000		1,000,000	5,000,000
FFY 2023 5339(b) Bus & Bus Facilities Discretionary Competitive Grant	10,830,000		9,060,000	19,890,000
FOUR LOW-FLOOR BIODIESEL REPLACMENT BUSES 21-4	1,560,000		1,288,000	2,848,000
FY 2024 Replacement Fixed Route Coaches	804,985		201,246	1,006,231
FY 2024 Vanpool Vans	900,000		225,000	1,125,000
FY 24 Capital Preventive Maintenance	320,000		80,000	400,000
General Labor Operating FFY 2026	800,000		800,000	1,600,000
Highway 99 Bus Rapid Transit	5,000,000		40,000,000	45,000,000
Hilltop Tacoma Extension			1,261,000	1,261,000
I-405 Bus Rapid Transit	26,319,336		2,343,995	28,663,331
I-405/NE 85th St Interchange - Toll Infrastructure			7,484,497	7,484,497
Johnson Road Park & Ride	1,390,000		4,485,000	5,875,000
KCM Sound Transit Link Passenger Improvements	14,140,751		3,683,559	17,824,310
King County Metro Bus Acquisition 2023- 2024	116,047,124		50,642,285	166,689,409
Lynnwood Link Extension	404,099,000		255,408,000	659,507,000
M/V Solano Maintenance	1,961,862		1,700,000	3,661,862
Marysville UZA Transit Operations	945,839		2,245,839	3,191,678
Marysville UZA Transit Operations 2021- 2022	2,139,600		2,139,600	4,279,200
Marysville UZA Transit Operations 2023- 2024	4,074,156		4,074,156	8,148,312
Metro Base Facilities HVAC Replacements	17,040,000		22,691,570	39,731,570
Monorail System Maintenance 2021-2022	1,986,881		496,721	2,483,602
Monorail System Maintenance 2023-2024	2,046,360		511,590	2,557,950
NE 130th Street Infill Station	7,300,000		3,168,000	10,468,000
North Kitsap Base	436,984		10,443	447,427

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Northgate to Downtown Transit Improvements	3,000,000	6,434,000	0	9,434,000
On-Demand Feeder-to-Fixed Route Connections to Transit Program	2,500,000		725,000	3,225,000
ONE TRANSIT COACH CTA 20-3	416,000		296,000	712,000
ONE TRANSIT COACH CTA 21-2	416,000		296,000	712,000
ONE TRANSIT COACH CTA 22-2	480,000		232,000	712,000
Operating Funds	15,993,963		15,993,963	31,987,926
Pacific Avenue/SR 7 BRT Buses	2,000,000		500,000	2,500,000
Pacific Avenue/SR 7 BRT Stations	9,917,875		0	9,917,875
Pacific Avenue/SR 7 Bus Rapid Transit 112th Street S to 99th Street S	13,740,000		1,200,000	14,940,000
Passenger Only Ferry System Preservation	400,679		0	400,679
Passenger Only Ferry Terminal Improvements (23-24)	770,327		0	770,327
Pattison MOA Base Rehabilitation and Expansion	2,740,164		1,352,826	4,092,990
POF Terminal Docking Facility on the Seattle Waterfront	2,500,000		1,075,000	3,575,000
Preventative Maintenance	28,820,000		7,205,000	36,025,000
Preventive Maintenance	32,682,987		8,170,746	40,853,733
Preventive Maintenance	1,200,000		300,000	1,500,000
Preventive Maintenance 2023-2024	788,767		197,192	985,959
Purchase of Equipment to Support Transit Operations	103,679		25,920	129,599
Purchase of Replacement Vanpool Vehicles	8,891		2,223	11,114
Rainier Rapid Ride Corridor	1,819,350		8,900,000	10,719,350
RapidRide I Line: Speed and Reliability Improvements	6,000,000		10,548,213	16,548,213
RapidRide J Line	60,128,514	6,000,000	48,794,086	114,922,600
Rapidride Roosevelt (J-Line), Eastlake Segment	4,000,000		750,000	4,750,000
Regional Express Bus Program (2023-2024)	26,334,139		248,761,861	275,096,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Replace Fixed Route Buses	5,640,000		1,410,000	7,050,000
Replace Paratransit Mini Buses	3,012,400		531,600	3,544,000
Replace up to Four (4) Heavy Duty Transit Bus	3,356,752		839,188	4,195,940
Replacement of Overhead Trolley Infrastructure 2021-2022	4,619,616		1,154,904	5,774,520
RideStore Rehab at Lynnwood Transit Center			4,813,821	4,813,821
Route 48 South Electrification	4,400,000		1,100,000	5,500,000
Seattle Center Monorail Station Reconfiguration	18,051,546	5,000,000	0	23,051,546
Seattle Streetcar Maintenance 2021-2022	426,110		100,142	526,252
Seattle Streetcar System Maintenance 2023-2024	821,164		175,910	997,074
Section 5310 Funding for Seniors and People with Disabilities	2,611,313		527,950	3,139,263
Series 3 Light Rail Vehicles			13,011,000	13,011,000
Shuttle Revenue Vehicles	1,762,927		440,732	2,203,659
Shuttle Revenue Vehicles 23 24	2,491,510		622,878	3,114,388
Skagit Transit Maintenance Operations and Administration Facility	1,061,416		21,547	1,082,963
Skagit Transit's Maintenance Operations and Administration Facility Project Phase II			10,000,000	10,000,000
Sounder and Link State of Good Repair (2021-2022)			3,318,544	3,318,544
Sounder and Link State of Good Repair (2023-2024)	52,692,797		195,317,203	248,010,000
South King County Corridor Speed and Reliability Improvements	3,650,000		1,217,000	4,867,000
South King County TDM	450,000	60,750	15,000	525,750
SR 18/Eastbound Auburn - Black Diamond Road - Bridge Approaches	823,200	16,800		840,000
SR 522/NE 145th St BRT	16,264,000		155,300,000	171,564,000
SR-520 Eastside Transit and HOV - Design Build	23,716,323		0	23,716,323
Swift BRT Gold Line	19,615,796	10,000,000	38,684,204	68,300,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Swift BRT Orange Line	37,150,000	5,000,000	3,835,394	45,985,394
Swift BRT TDM Expansion	1,000,000		500,000	1,500,000
Tacoma Dome Link Extension	20,134,154		343,858,000	363,992,154
TRANSIT OPERATING ASSISTANCE CTA 18-2	1,162,000		1,162,000	2,324,000
TRANSIT OPERATING ASSISTANCE CTA 19-3	1,231,000		1,231,000	2,462,000
TRANSIT OPERATING ASSISTANCE CTA 20-5	593,000		593,000	1,186,000
TRANSIT OPERATING ASSISTANCE CTA 21-1	1,657,000		597,000	2,254,000
TRANSIT OPERATING ASSISTANCE CTA 22-1	1,895,000		825,000	2,720,000
Transit Revenue Vehicles 2021-2022	13,418,082		3,643,123	17,061,205
Transit Revenue Vehicles 2023-2024	14,443,801		3,978,950	18,422,751
Trolley Energy Storage System Replacement	24,685,000		1,665,152	26,350,152
Trolley Pole Replacement 2021-2022	1,600,000		400,000	2,000,000
Trolley Pole Replacement 2023-2024	3,359,000		839,750	4,198,750
Trolley System Infrastructure SGR Master Drawings	1,948,352		487,088	2,435,440
Trolley System Transit Asset Management 2021-2022	7,402,812		2,911,385	10,314,197
Trolley System Transit Asset Management 2023-2024	7,104,552		1,776,138	8,880,690
Valley Transit Main Facility Security Fence and Accessibility Upgrades	84,000		21,000	105,000
Vehicle, Equipment and Facilities Maintenance 2021-2024	110,763,395		28,046,257	138,809,652
Walnut Street Overlay	344,356	53,744		398,100
West Bremerton Hydrogen Fueling/ Transit Center Park & Ride	4,137,531		1,584,383	5,721,914
West Seattle and Ballard Link Extensions			91,820,000	91,820,000
Zero Fare Bus Stop Access Improvements	1,825,950		456,487	2,282,437
Total	1,914,276,652	37,537,262	3,189,504,804	5,141,318,718

Table D.5. WA STIP projects with an active transportation elements

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Division/Broadway Pavement Restoration Project	327,273		250,000	577,273
Mountains to Sound Greenway Trail (C): 132nd Avenue SE to 150th Avenue SE	2,370,000	6,900,000	3,061,000	12,331,000
100th Street SW	900,000		300,000	1,200,000
100th Street SW-Lakeview Ave SW to S Tacoma Way	671,000		160,000	831,000
108th Ave SE & SE 264th St - Compact Roundabout	1,657,059		5,000	1,662,059
108th Avenue NE Transit Queue Jumps - Phases 1 & 2	1,500,000		2,000,000	3,500,000
10TH AVENUE SOUTH #475 BRIDGE REPLACEMENT	1,110,100		183,000	1,293,100
112th St SW - Clover Park High School Sidewalk		566,870	86,700	653,570
112th Street E	2,500,000		1,893,000	4,393,000
112th Street S, C Street S to A Street S	1,560,000		2,113,000	3,673,000
116th St Pavement Preservation NHS	1,581,400		0	1,581,400
120th Avenue NE (Stage 4) - NE 16th Street to Northup Way Multimodal Corridor Completion	3,820,000		15,393,500	19,213,500
124th Avenue NE Improvement Project	50,930,925	5,000,000	6,973,882	62,904,807
124th Avenue NE Roadway Improvements & NE 124th Street/124th Avenue NE/Totem Lake	3,892,500		8,342,706	12,235,206
12th and Jackson Transit Hub	2,000,000		1,524,326	3,524,326
130th Avenue NE	21,691,810		265,015	21,956,825
130th Link Station Transit & Multimodal Access - East Corridor	5,480,000		11,520,000	17,000,000
132nd/134th/Cathcart Way Overlay	4,528,000		0	4,528,000
13th Street Intersection Improvements	750,000		117,052	867,052
140 St NW/NE Overlay	840,000	727,000	1,510,900	3,077,900
147th Signal	665,000		103,786	768,786
148th Street Non-Motorized Bridge (Phase 2)	7,940,000	7,000,000	11,360,000	26,300,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
156th Avenue Shared Use Path	700,000		191,000	891,000
156th ST NE Corridor Improvements	1,003,412		156,602	1,160,014
159 ST E	2,577,790		2,300,189	4,877,979
160th St. E. (66th Ave. E. to 81st Ave. E.)	1,665,000		185,000	1,850,000
164th St. SW Overlay	3,932,800		0	3,932,800
166th St Widening and Intersection Improvements		500,000		500,000
168th Street E	420,000		145,000	565,000
169th St Connecting Segment	3,654,893		913,000	4,567,893
16th Ave SW Pedestrian Improvements	1,413,260			1,413,260
179th Ave Sidewalk - 154th St to 157th PI	561,450		87,650	649,100
180th St Connector	482,678		120,669	603,347
180th Street Roundabout	2,200,000		1,375,000	3,575,000
192nd Avenue Corridor Improvements - NE 18th Street to SE 1st Street	750,000		1,500,000	2,250,000
1st Street NE/NW and N Division Street Pedestrian Improvements	500,000		125,000	625,000
1st Street Pedestrian Amenities & Overlook	663,000		221,186	884,186
2015 Citywide Safety Improvements	427,449		4,803	432,252
2020 City Safety RRFBs	13,000		0	13,000
2022 Rectangular Rapid Flashing Beacon Crosswalks	917,050		0	917,050
2023 Arterial Asphalt and Concrete 11th/12th Ave NE	4,430,000		1,905,760	6,335,760
2023 City Safety - Systemic Pedestrian and Bicycle Data Collection	260,000			260,000
2023 City Safety - Systemic Pedestrian Safety Improvements, Signal Upgrades; Curb Extensions at 5th Ave. and 'D' St. I/S	317,000			317,000
2024 County Road Safety	2,313,000		257,000	2,570,000
2024 Newcastle Pavement Overlay Program	600,000		725,000	1,325,000
2026 Pavement Management Program	900,000		1,099,990	1,999,990

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
228th ST SE Overlay	750,000		932,000	1,682,000
228th Street SE from 35th Ave SE to 39th Ave SE Widening Project	1,000,000		409,000	1,409,000
23rd Ave Bus Rapid Transit	1,153,000		180,000	1,333,000
240th St SE Overlay (Meridian Ave S to Bothell-Everett Highway)	700,000		1,111,262	1,811,262
27th Ave SW at SW 344th St Compact Roundabout	727,500		0	727,500
29th / Washington / Monroe	4,549,000		1,137,000	5,686,000
30th Street Improvements - 1			30,000	30,000
332nd Ave SE Corridor Traffic Safety Study	324,375		50,625	375,000
34th Ave S Phase 2			201,000	201,000
34th Street Deck Repair & Seismic Retrofit	7,220,000		1,000,000	8,220,000
35th Street Phase 1	1,955,000		345,000	2,300,000
35th Street Phase 2	2,125,000		375,000	2,500,000
36th/35th Ave W Phase 1: 164th St SW to 156th St SW	2,580,000		1,157,500	3,737,500
3rd Avenue NE Reconstruction			874,748	874,748
40th Street	707,665		152,335	860,000
42nd Ave S Bridge Replacement	12,000,000	17,000,000	0	29,000,000
42nd Avenue W Improvements Segment 1	8,000,000		12,000,000	20,000,000
44th Ave W I-5 Underpass	1,370,000		2,060,000	3,430,000
47th Place West Pavement Preservation	750,000		1,020,000	1,770,000
4th Ave Protected Bike Lane	1,900,000		1,600,000	3,500,000
4th Ave SW Multimodal Improvements Project	2,370,000		669,885	3,039,885
4th Street Widening between Cedar Avenue and Highland Avenue	2,000,000		9,942,501	11,942,501
53rd and 61st Intersection and Shared-Use Path Improvements	655,419		280,894	936,313
58th Avenue E and Valley Avenue E Roundabout	692,500		257,500	950,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
67th Ave NE & 52nd St NE Intersection Improvements	240,000		60,000	300,000
67th Ave NE (Grove St to 88th St NE)	550,000		466,991	1,016,991
67th Avenue Improvements Phase 1	2,875,400		507,360	3,382,760
67th Avenue Phase 2	2,350,000		650,000	3,000,000
67th Phase 3	297,500		52,500	350,000
6th Avenue Pedestrian Crossing Safety Improvements	2,234,400		359,400	2,593,800
6th Street Preservation Phase 3, Naval Ave to Warren Ave	1,572,838		312,978	1,885,816
70th Ave Improvements Ph 2	773,500		136,500	910,000
70th Street Extension	2,700,000		963,000	3,663,000
74th Ave Trail	525,000		133,605	658,605
76th Ave. W @ 220th St. SW Intersection Improvements	244,000		809,000	1,053,000
78th Street/Lakeshore Avenue Intersection Improvements			300,000	300,000
80th St and 85th St ITS Corridors	845,000		132,000	977,000
88th St NE Phase 1 (State Ave to 55th Ave NE)	2,597,500		9,402,500	12,000,000
88th St NE Phase 2 (55th Ave NE to 67th Ave NE)	466,000		1,331,095	1,797,095
9th Street Crossing	1,242,651		149,664	1,392,315
A Street and 6th Avenue Pedestrian Crossing Improvements	552,000			552,000
A Street Loop	1,125,000		340,000	1,465,000
A Street SE Preservation (37th Street SE to Lakeland Hills Way)	905,000		1,129,000	2,034,000
ADA Ramp/ Sidewalk upgrades Phase 1			150,000	150,000
Adaptive Signals (Downtown Vicinity)	865,000		135,000	1,000,000
Airport Road Multimodal and Regional Access Improvements	1,050,000			1,050,000
Airport Station Pedestrian Improvements	5,945,000		16,359,943	22,304,943
Alaskan Way Protected Bike Lane	2,000,000		1,597,550	3,597,550

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Alderwood Mall Parkway - 168th St SW to SR 525	2,580,000		5,373,400	7,953,400
Alderwood Mall Parkway Pavement Preservation	750,000		1,450,000	2,200,000
Alexander Court Improvements - Phase 1	211,341		89,259	300,600
Apple Capital Loop (Segments 1b, 2a, and 2c)	92,412,004		15,549,854	107,961,858
Argent Road Widening, Phase 3	3,242,541		757,459	4,000,000
Argonne I-90 Bridge (PE Only)	1,297,500		202,500	1,500,000
Argonne Road, Empire to Liberty Congestion Relief	2,283,688		505,358	2,789,046
Arterial Pedestrian Hybrid Beacons	1,929,000			1,929,000
Arterial Streets Resurfacing 2023	1,604,575		250,425	1,855,000
Ash Way/Gibson Rd Phase 2: Admiralty Way to 134 St SW	2,597,500		15,785,500	18,383,000
Auburn Way S (SR 164) - Southside Sidewalk Improvements		615,000	135,000	750,000
Auburn Way S (SR-164) - Hemlock to Poplar	3,605,087		3,394,913	7,000,000
Barker @ UPRR Crossing	888,543	516,775	1,484,682	2,890,000
Basin City Alternative Transportation Route Improvements II	271,771		42,416	314,187
Bay Street Pedestrian Pathway		2,900,000	0	2,900,000
Beacon Ave S and 15th Ave S Safety	1,090,000		11,690,745	12,780,745
BEECH ST. & 30TH AVE. BUFFERED BIKE LANES	224,035		34,965	259,000
Bellevue College Multimodal Connection	2,125,000		465,000	2,590,000
Bellevue Way and NE 4th Street	4,314,700		446,700	4,761,400
Bendigo Blvd, NW 8th St, North Bend Way Crossing Improvements	2,753,000		0	2,753,000
Benson Rd Improvements, Sunrise Dr to Badger Rd	1,866,207		2,857,150	4,723,357
Bethel and Lincoln Intersection - Single Lane Roundabout	1,500,000		0	1,500,000
Bickford & Weaver Intersection Improvements	394,480		517,520	912,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Bigelow Gulch Project 2	6,174,920	2,520,000	1,604,250	10,299,170
Black Diamond Road Safety Project	250,000		540,000	790,000
Blair Drive Improvements	1,470,181		376,591	1,846,772
Bluff Connector Trail	85,745		1,000	86,745
Boblett St Traffic Channelization and Corridor Improvements	2,495,518		469,153	2,964,671
Bothell Everett Hwy Overlay	3,000,000		34,800	3,034,800
Bothell Way NE Multimodal Improvements	37,587,500	7,000,000	12,207,500	56,795,000
Bradley Road Safe Routes Pedestrian Improvements		3,000,000		3,000,000
Brick Rd Improvements	1,164,000		321,000	1,485,000
C Street SW Preservation	1,118,272		1,143,272	2,261,544
C Street SW Preservation (GSA Signal to Ellingson Rd)	865,000		1,091,000	1,956,000
California Street Ped/Bike Corridor Phase 2	1,130,000		8,750,000	9,880,000
Canyon Rd E - Asphalt Overlay	1,750,000		897,000	2,647,000
Canyon Road E 72nd Street E to Pioneer Way E	2,000,000		1,670,000	3,670,000
Canyon Road E Asphalt Overlay	725,363		2,802,637	3,528,000
Capitol Ave. Sidewalk Replacements			340,000	340,000
Captain Strong & Chief Umtuch School Zone Upgrades	87,300		600	87,900
Cascade Way Reconstruction-Wall to Normandie	1,123,000		151,605	1,274,605
Casino Road & 5th Avenue W Pedestrian Safety	814,900		132,000	946,900
CDTC Interurban Pathways Plan	986,100		153,900	1,140,000
Center City Connector	75,000,000		58,892,086	133,892,086
Center Drive Overlay Phase 4a	522,945		92,285	615,230
Center Drive Overlay Phase 4B	49,274		8,696	57,970
Central Way Preservation			2,025,000	2,025,000
Central Whidbey Bicycle Tour Route	18,600			18,600

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Chrisella Rd E Safety Improvements	1,989,360		0	1,989,360
Cirque Dr Overlay Project	723,363		156,637	880,000
City Center Access Project - Ph 1 (SB Ramp Modifications)		14,000,000		14,000,000
City Park Sidewalk and ADA Accessibility	100,000		17,000	117,000
City Safety Road Diets	1,099,140		0	1,099,140
Citywide Flashing Yellow Arrow Treatment	224,200		100,000	324,200
Citywide Intersection Improvement Project	1,062,000			1,062,000
Citywide Pedestrian Crossing Improvements	574,000			574,000
Citywide Pedestrian Safety	1,400,000		0	1,400,000
Citywide Pedestrian Safety Improvements	340,000		0	340,000
Citywide Pedestrians Safety Improvements	703,000		0	703,000
Citywide Safety Flashing Yellow Arrow Improvements	551,000		87,800	638,800
Coal Creek Parkway Corridor Safety Improvements	1,240,000		0	1,240,000
Coates Ave NW - Killion to Cullens RD			95,000	95,000
COCHRAN RD & OTTMAR RD	934,200		145,800	1,080,000
Columbia Center Boulevard Widening (Deschutes to Quinault)	2,655,550		414,450	3,070,000
Columbia Street Bicycle and Pedestrian Shoulder	119,110		8,590	127,700
Countywide Bicycle Connectivity Strategy	400,000			400,000
Cowiche Canyon Trail - Phase 1		2,256,041		2,256,041
Craig Road Pedestrian and Bicycle Path		950,000	240,000	1,190,000
Custer Road Safety Improvements	1,420,000		0	1,420,000
Daisy Street (SR 17) Sidewalk Improvements, Phase I	228,000		13,750	241,750
Discovery Road Bicycle and Pedestrian Safety	233,000		15,000	248,000
Discovery Road Bikeway, Roadway and Sidewalk Project		4,022,378	270,000	4,292,378
Division St. Pedestrian Hybrid Beacon	1,464,000			1,464,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Downtown Connectivity Improvements	500,000	3,500,000	12,281,600	16,281,600
DOWNTOWN TRAFFIC SIGNAL UPGRADE	676,800			676,800
Driscoll/Alberta/Cochran Sidewalk Infill and Finch Elem Walk Route	890,311	627,707	254,634	1,772,652
Dungeness National Wildlife Refuge Access Improvements (Lotzgesell, Voice of America, & Kitchen-Dick Roads)	1,562,825		243,909	1,806,734
E 155th Street Preservation, 1st Ave NE to 15th Ave NE	900,000		935,000	1,835,000
E 1st St, Front St, and Marine Dr Pedestrian Safety	1,280,000			1,280,000
E Entwistle/NE 45th Sidewalk	423,262		66,058	489,320
E Nob Hill Blvd & Fair Ave I/S Improvements	1,175,110		189,831	1,364,941
E Portland Ave (64-72) Overlay	807,642		231,884	1,039,526
Eagle Harbor Drive Safety Improvements	735,000		590,000	1,325,000
East Marginal Way Heavy Haul Corridor Improvements Central Segment			100,000	100,000
East Marginal Way Heavy Haul Corridor Improvements North Segment		4,100,000	0	4,100,000
East Valley Highway Preservation (84th Ave South from S 212th St to S 196th St)	1,400,000		1,570,000	2,970,000
East Valley Highway Widening	1,050,000		350,000	1,400,000
Eastrail to NE Spring Boulevard Trail Link	4,900,000		830,000	5,730,000
Eastrail Wilburton Trestle		9,000,000	18,499,714	27,499,714
East-West Corridor I-82 Turnbacks Limits to End of N. Keys RdPhase 2	2,500,000		5,000,000	7,500,000
East-West Corridor I-82 Turnbacks Limits to End of N. Keys RdPhase 3		59,044,000	1,000,000	60,044,000
Emerson West Sidewalk	387,753		60,517	448,270
Equity Pilot Program	6,010,000		937,976	6,947,976
Everett Citywide Innovative Safety	570,060		63,340	633,400
Everett Mall Way - 4th Ave. to East Mall Dr.	448,466		629,895	1,078,361
Evergreen Trail	500,000		1,841,500	2,341,500

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Fairgrounds Road Sidewalk Improvements	2,300,000		395,231	2,695,231
Farwest Drive Safe Routes to School	1,158,970		116,030	1,275,000
Fifth and Emerson Pedestrian Crossing	276,000			276,000
First Street Improvements Phase 3 - Downtown Revitalization	6,408,785		1,000,215	7,409,000
Fish Lake Trail Connection to Centennial Trail Phase 1	3,079,704		1,852,016	4,931,720
Fish Lake Trail Connection to Centennial Trail Phase 2	650,250		199,750	850,000
Fones Road - Transportation	2,887,768	2,000,000	6,000,000	10,887,768
Fourth Plain Blvd Road Diet - F Street to Fort Vancouver Way	715,000			715,000
Fryar Avenue Shared Use Trail	655,143		660,444	1,315,587
Fulton Street Bicycle Pedestrian Corridor	700,000		250,000	950,000
Garrison Road Sidewalk Infill	350,000		1,032,000	1,382,000
Gee Creek Trail - North Segment	1,019,785		10,000	1,029,785
George Hopper Interchange Improvements, Phase II	800,000		400,000	1,200,000
Georgetown to Downtown Safety Project	2,370,000		5,746,000	8,116,000
Georgetown to South Park Trail	1,500,000		1,500,000	3,000,000
Golden Given Rd E / 99th St E	105,000		0	105,000
Goodwin/Sunset Highway Improvement	919,834		143,558	1,063,392
Granite Falls Bridge #102 Replacement Project	22,106,000		3,833,000	25,939,000
Grant Rd and Nile Ave Intersection Improvement	1,391,000		348,000	1,739,000
Grant Road and Highline Drive Roadway Rehabilitation	1,310,000			1,310,000
Grant Road Preservation	1,998,000			1,998,000
Grape & Maple Drive	1,319,125		205,875	1,525,000
Greenwood Ave N Sidewalks and 1st Ave NW Neighborhood Greenway	1,000,000	620,000	2,166,113	3,786,113
Greta to Whitworth Bike Route	345,636		53,017	398,653
Gun Club Road- Overlay & ADA ramps			93,850	93,850

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Gun Club Road Sidewalk & Bike Lane	345,997		54,000	399,997
Harrison Avenue Improvements	17,300		2,700	20,000
Harrison St Transit Pathway	4,200,000		2,000,000	6,200,000
Harvard Road Reconstruction Phase 2	5,481,000		739,935	6,220,935
Haven St. Grind & Overlay	1,108,038		391,947	1,499,985
Hazel Dell Avenue and Burnt Bridge Creek Trail Crossing	300,000	500,000	175,000	975,000
Hazel Street RR Grade Separation	4,266,000	19,461,674		23,727,674
Heights Elementary/Lincoln Middle School ADA Improvements (Phase 3)			15,000	15,000
Heights Elementary/Lincoln Middle School ADA Ramps & Sidewalk Improvement Phase 2	133,745			133,745
High School Connector Sidewalk Project Phase 1	99,850			99,850
Highway 99 Sidewalk	505,000		475,000	980,000
Hockinson Elementary School Flashers and Crosswalk		389,000	56,000	445,000
Huntington Avenue - River Front Trail Pedestrian Lighting - SRRTS Phase 2	373,852		58,348	432,200
Hwy 99 Revitalization Project - Stage 4 from 220th St. SW to 240th St. SW	2,597,500		3,002,500	5,600,000
I-5/Steilacoom-DuPont Rd to Gravelly Lake Dr - Corridor Improvements		26,888,987	0	26,888,987
INTERSECTION CORRIDOR SAFETY IMPROVEMENTS	502,935			502,935
Interurban Trail Connection	410,875		64,125	475,000
Interurban Trail Phase III (Jovita Canyon)	2,921,150	3,000,000	1,283,700	7,204,850
Ione Sidewalks - East of SR 31	105,000			105,000
Israel Rd & Linderson Way Pedestrian and Bicycle Improvements	663,250		1,331,750	1,995,000
J Street Bicycle Boulevard	2,500,000		1,466,243	3,966,243
Jackson Street Extension	1,259,709		196,602	1,456,311
Jadwin Avenue Sidewalk Improvements		225,324	79,169	304,493
Jefferson Street Realignment Project	1,840,000	3,000,000	3,635,000	8,475,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Jordan Creek Bridge	3,691,662		922,916	4,614,578
Kalama Crossing-Pedestrian Overpass			500,000	500,000
Kansas Street SW Reconstruct			67,000	67,000
Keene Road Pathway Phase 4	626,000			626,000
Kelsey Street At-Grade Rail Crossing Improvements	555,806		0	555,806
Kettles - Fort Ebey Trail Connector	132,700			132,700
Kirkland Neighborhood Greenway: Stores to Shores	1,608,900		251,100	1,860,000
Lake St ADA Upgrades	511,000			511,000
Lake St. & Kirkland Ave. Pedestrian Improvements	787,410		2,420,420	3,207,830
Lake Sylvia Sidewalk - Phase 1	301,020		46,980	348,000
Lake Tapps Pkwy/Sumner-Tapps Highway E Preservation	750,000		534,356	1,284,356
Lawrence ADA Improvements			75,000	75,000
Lea Hill Road/104th Avenue SE Roundabout	476,000		84,000	560,000
Lions Park Connectivity Trail	227,786		35,550	263,336
Lund & Hoover	2,279,363		626,953	2,906,316
Madison Avenue Nonmotorized Improvements (SR 305 to Winslow Wy)	1,410,000		5,345,000	6,755,000
Main St. Overlay from 6th Ave. to 8th Ave.	750,000		187,500	937,500
Main Street Improvements Project	1,959,620		4,104,880	6,064,500
Main Street Off-Street Multipurpose Pathway (108th Avenue to 112th Avenue)	1,041,000		162,000	1,203,000
Main Street Reconstruction	2,199,306	343,244		2,542,550
Main Street, Barrett Road to Old Settler Drive			840,000	840,000
Manitou Elementary Safe Routes to School	539,759		0	539,759
Maple St/Traffic Ave Pedestrian Signal & Signal Backplates	531,753		0	531,753
Marine Drive II			1,350,000	1,350,000
Market / Monroe / 29th	3,357,000		840,000	4,197,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
McKinley Ave ITS and Signal Coordination	395,000		70,300	465,300
Meet Me on Meeker - Thompson Ave to Interurban Trail	4,757,500		1,342,500	6,100,000
Meridian Ave S and 240 St SE roundabout	1,321,500		135,500	1,457,000
Meridian Avenue N Safety Improvements	1,112,470		6,000	1,118,470
Midway Blvd Improvement	950,000		148,266	1,098,266
Military Road South Preservation Project	600,000		600,000	1,200,000
Military Road SW; Edgewood to 112th	311,400		48,600	360,000
Millwood Trail - Children of the Sun Trail to Fancher	237,405		119,595	357,000
Mojonnier Road Reconstruction	220,000		40,000	260,000
Mottman Road Pedestrian & Street Improvements		7,608,000	5,000,000	12,608,000
N 175th Street, Stone Avenue N to Meridian Avenue N			4,400,000	4,400,000
N. Colville Reconstruction	1,767,000		1,978,338	3,745,338
N. Pekin Road - HMA Overlay			226,000	226,000
Naches Trail Improvements	389,380			389,380
National STEM School	1,848,752		300,000	2,148,752
Naval Avenue: 1st Street to 15th Street Pedestrian & Bicycle Enhancement	1,600,000		250,000	1,850,000
NE 137th Ave Corridor Completion	9,950,000		10,550,000	20,500,000
NE 152nd Avenue	4,000,000		5,828,000	9,828,000
NE 18th and NE 21st Streets Safe Routes to School Project	790,000		510,000	1,300,000
NE 18th Street - NE 97th Ave. to NE 107th Ave.	1,815,000		12,174,000	13,989,000
NE 195th ST Overlay	970,000		970,000	1,940,000
NE 68th Street Sidewalk	3,534,000		987,000	4,521,000
NE 7th Ave. Reconstruction	540,000		84,278	624,278
NE 8th Street	2,752,025		303,350	3,055,375
NE Spring Boulevard - 130th Ave to 132nd Ave NE	8,067,334		2,722,537	10,789,871

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
NE St. Johns Road Pavement Improvements	2,430,000		200,000	2,630,000
Newport Way NW Improvement Project - SR 900 to SE 54th Street	2,200,000		1,261,600	3,461,600
Newport Way NW Improvement project - SR900 to SE 54th St- Phase 1	5,380,000		1,023,085	6,403,085
Noll Road Improvements Segment North 3B	1,800,000	500,000	350,000	2,650,000
Noll Road North Segment 3A	1,970,000	1,210,000		3,180,000
North 1st Street Revitalization, Phase 3	9,813,300	1,500,000	1,884,900	13,198,200
North Bend Way & Mt Si Road	561,600		88,400	650,000
North Kelsey Overlay	696,481		419,919	1,116,400
North Levee Road & Frank Albert Road Intersection Safety Improvements	635,742		80,000	715,742
NW 15th Avenue/W Main Street Intersection Improvements		765,000		765,000
NW 38th Avenue Improvements Ph 3	5,044,300		787,294	5,831,594
NW 5th Street		2,298,415	501,585	2,800,000
NW 78th Street	2,197,000		200,000	2,397,000
Oak Street Improvements	457,500	71,402		528,902
Oakesdale Ave SW Pavement Preservation	1,300,000		758,110	2,058,110
Old Inland Empire Highway Improvements	4,497,527		1,451,935	5,949,462
Old Military Road Pavement Preservation	750,000		378,616	1,128,616
Olympic Discovery Trail - Anderson Lake Connection	1,178,347	3,277,085	252,362	4,707,794
Olympic Discovery Trail - Forks Calawah River Park to Sitkum-Sol Duc Rd (aka. "A" Road)	1,210,125		289,875	1,500,000
Olympic Discovery Trail - Forks to La Push	5,461,042	905,456	301,819	6,668,317
Olympic View Dr. from 196th St. SW to Talbot St.	700,000		800,000	1,500,000
Orchard Dr./Valley Rd. Grade-Separated Shared Use Paved Path	485,000		425,000	910,000
Pacific Ave SE	2,558,950		704,050	3,263,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Pacific Beach Sidewalk Project	90,000		45,000	135,000
Pacific Highway Non-Motorized Corridor - 16th Ave S (S 308th St to S 288th St)	5,435,000		1,573,000	7,008,000
Panther Lake Library Signal		875,420	20,000	895,420
Parkview ES Safe Routes to School Improvements	1,620,000	350,000	197,000	2,167,000
Pattison MOA Rehabilitation, Expansion & Modernization	5,850,000		6,852,045	12,702,045
Pedestrian Crossing Safety Improvements	1,330,000		0	1,330,000
Pedestrian Crossings	48,158			48,158
Pedestrian Path on Pacific Highway	700,000		2,778,703	3,478,703
Pedestrian Refuge Islands	810,000		0	810,000
Pedestrian Safety Improvement Project - City of Colfax	45,000		5,000	50,000
Percival Creek Fish Passage Barrier Removal	2,100,000	79,600	240,400	2,420,000
Perry - Stone to Sheridan	3,207,305		141,000	3,348,305
PETERSON ROAD (Urban)	261,613		40,830	302,443
Pfenning Road Shared Use Pathway	368,011		157,719	525,730
Pine Street TBD - 2nd Avenue to 9th Avenue	1,200,000	1,706,189	3,993,811	6,900,000
Port of Longview At Grade Rail Separation			2,150,000	2,150,000
Port of Tacoma Interchange Improvements	4,000,000	540,000		4,540,000
Puyallup Station Improvements			2,557,000	2,557,000
R Avenue Long Term Improvements	4,343,087		684,077	5,027,164
Redmond Central Connector Phase 3	2,130,000		4,602,000	6,732,000
Regents West Overlay	70,260		10,965	81,225
Renaissance Trail Segment 4			20,000	20,000
Renaissance Trail Segment 5			20,000	20,000
Republic Pathway Phase 2 - Safe Routes for Students Along SR20	62,000			62,000
Richardson Creek Bridge #300 Replacement			2,338,000	2,338,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Ridgetop - Mickelberry to Myhre	4,872,500		4,761,000	9,633,500
River Dike Trail System - Phase 1	263,000		41,000	304,000
Riverfront Park Trail	230,773			230,773
Rivergrove Community Pedestrian Bridge	500,000		553,000	1,053,000
Riverside Avenue - Wall to Monroe	161,000			161,000
Riverside Drive Improvements - 1			150,000	150,000
Riverside Drive Improvements - 2			100,000	100,000
Riverwalk Trail Phase V	1,650,000		635,000	2,285,000
Route 36 Speed and Reliability Corridor Improvements	2,449,000		2,901,090	5,350,090
Rush Road Stella to Newaukum Valley	903,150		142,954	1,046,104
S 11th St Earnest Brazill: Protected Bike Lane Couplet	1,567,711		388,420	1,956,131
S 218th Street/98th Avenue S from 94th Place S to S 216th Street	4,915,680		3,444,320	8,360,000
S 21st Street and C Street Signal	1,316,275		5,500	1,321,775
S 25th St Traffic Safety Enhancements	1,780,000			1,780,000
S 27th Street Shared Use Path	816,250		877,250	1,693,500
S 320th St Preservation Project	1,450,000		1,550,000	3,000,000
S 348th St Preservation Project	1,026,000		0	1,026,000
S 360th St and 28th Ave S	3,170,000		0	3,170,000
S 360th St at Military Road South Intersection Improvement	2,703,125		421,875	3,125,000
S 3rd Street - Oak St to Simpson Ave	453,320		207,368	660,688
S Cedar Street Active Transportation Enhancements		1,050,328	315,109	1,365,437
S Tacoma - 96th to Steilacoom Overlay	750,000		118,000	868,000
S. Barker Rd. (Appleway-Sprague)	1,804,291		1,346,193	3,150,484
S. Sullivan Road Preservation	1,029,000	1,572,415	133,162	2,734,577
S.R 2 PEDESTRIAN AND MULTI-MODAL ENHANCEMENTS	876,991		136,871	1,013,862
Safe Routes to School - 104th St E	1,077,000		15,000	1,092,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Safe Routes to School - School Zone Flashers		334,298		334,298
Safe Routes to Transit: RapidRide I Line	1,968,073		307,156	2,275,229
School Secondary Access	1,063,022	395,431	566,978	2,025,431
Schuster Parkway Trail		2,000,000	0	2,000,000
Scriber Creek Trail Phase 3	1,870,096	236,070	7,181,760	9,287,926
SE 1st Street - 177th Ave to 192nd Ave	2,500,000	2,000,000	8,500,000	13,000,000
SE 34th Street Safety & Mobility Project	800,000		530,000	1,330,000
SE Grace Avenue Phase 2 Improvements	2,000,000	3,000,000		5,000,000
Shaw Middle School - Garland Ave. Pathway	1,116,844		279,211	1,396,055
Shaw Road Widening, Phase 4A, 25th to 20th Ave Ct E	580,000		620,000	1,200,000
Shoreline Waterfront Trail	200,000	583,775	86,097	869,872
Sidewalks Alder and Cedar	100,000		310,000	410,000
Signalization Installation: Lincoln Avenue and Port of Tacoma Road	1,249,473		140,000	1,389,473
Silverdale Transit Center	3,641,587		6,523,393	10,164,980
Smokey Point Blvd & 188th St Roundabout	2,080,000		1,050,573	3,130,573
Snohomish County Rural Roads Preservation - Pioneer Highway	750,000		140,100	890,100
South 144th Street Bridge Sidewalks	500,000		78,035	578,035
South 3rd Street Sidewalk	138,400		21,600	160,000
South 7th Street Corridor Improvements	1,450,000	500,000	219,020	2,169,020
South Downtown Bellevue Arterial Overlay	1,450,000		2,102,000	3,552,000
South Fork Extension Bypass	967,500		157,500	1,125,000
South George Washington Way Intersection Improvements	2,761,793		1,985,631	4,747,424
Southworth Terminal Redevelopment Project	2,250,000		0	2,250,000
Sports Complex Recreational Trail, Phase 2	224,727		36,573	261,300
SR 104 Holding Lanes - ATMS	1,401,000		0	1,401,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
SR 125/Plaza Way - Railroad Crossing Improvements	897,825	18,323		916,148
SR 142/Lyle to Little Klickitat River Br - ADA		1,274,401		1,274,401
SR 155 & 155 Spur/Omak East School - Paving and Complete Streets	8,413,624	500,957		8,914,581
SR 160/Southworth Tml - Timber Trestle & Terminal Replacement	5,000,000	8,629,251	2,251,000	15,880,251
SR 167/I-5 to SR 161 Stage 2	5,480,000	592,257,358	33,846,230	631,583,588
SR 169 Pedestrian Bridge at SE 258th Street	878,148		137,052	1,015,200
SR 20/Campbell Lake Road ΓÇô Intersection Improvement	4,180,000			4,180,000
SR 20/Eagle Vista Dr to Ault Field Rd Vicinity - ADA Compliance	654,738	13,362		668,100
SR 202 Shared Use Trail Extension	467,597		73,603	541,200
SR 202 Widening and Trestle Replacement - Phase B	2,500,000	2,250,000	7,950,000	12,700,000
SR 224 PATHWAY	397,900		62,100	460,000
SR 224/Red Mountain Vicinity Improvements		30,000,000		30,000,000
SR 24 Pathway Extension	128,000			128,000
SR 24/I-82 to Riverside Rd - ADA Compliance	624,839	20,341		645,180
SR 26/Palouse River Adams Co - Bridge Repair	1,180,080	33,120		1,213,200
SR 285/North Wenatchee Area - Intersection Improvements		15,165,300		15,165,300
SR 305/Bainbridge Island Ferry Terminal - Pedestrian Loading Bridge Replacement	5,151,999		2,828,789	7,980,788
SR 516 - 185th Place SE to 192nd Avenue SE	1,084,233		169,216	1,253,449
SR 516 and Covington Way Intersection Improvements	1,069,000		250,000	1,319,000
SR 516 Pedestrian Crossing Enhancement (East of SE Bear Blvd)		302,400	49,600	352,000
SR 523 (N/NE 145th Street) & I-5 Interchange Improvements	4,920,000	5,000,000	10,000,000	19,920,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
SR 525/SR 525 Spur Vicinity to Mukilteo Ferry Terminal - Paving	5,406,477	154,043	0	5,560,520
SR 531/43rd Ave NE to 67th Ave NE - Widening		8,600,000	0	8,600,000
SR 539/Telegraph Road to Westerly Road - ADA Compliance	745,615	15,217		760,832
SR 544 S. Everson Sidewalk Improvements	1,719,217	474,292	492,698	2,686,207
SR 823/E Naches Ave to N Wenas Rd Wye - ADA Compliance		493,342		493,342
SR 823/Eleventh Ave to E Fifth Ave Vic - ADA Compliance		269,608		269,608
SR 99/Lincoln Way Vic to Evergreen Way - ADA Compliance	82,495		8,159	90,654
SR 99/S 272nd St to SR 516 Vicinity - Paving & ADA Compliance	9,756,292	234,752	0	9,991,044
SR 99/SR 516 to S 200th St - Paving & ADA Compliance	1,954,790	5,397,102	0	7,351,892
SR/20/Kearney Street Improvements	402,535		62,865	465,400
SR166/ Bay Street Improvements - Preservation	3,000,000		784,000	3,784,000
SR20 / Skagit Street Signalization Project	1,513,750		236,250	1,750,000
SR20 Nonmotorized & Safety Improvements	700,000		100,000	800,000
SR20/Cascade Trail West Extension Phase 2A, Holtcamp Road to Hodgin Street	408,742		63,758	472,500
SR3, S 7th St, Hulbert Rd E, Railroad Crossing Closure	678,409			678,409
State Avenue Corridor Pavement Preservation NHS	2,690,500		0	2,690,500
State Route 523 (N/NE 145th St) Aurora Ave N to I-5, Phase 2	5,480,000	2,120,000		7,600,000
State Route 523 (N/NE 145th St), Aurora Avenue N to I-5, Phase 1 (I-5 to Corliss Avenue)	4,920,000	6,098,195	767,863	11,786,058
Steele Street South	2,282,000		253,000	2,535,000
Steilacoom Blvd. SW Improvements: 83rd Av. SW to Weller Rd. SW	1,500,000		1,117,000	2,617,000

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Steilacoom Boulevard: 87th Av. SW to 83rd Av. SW	2,301,800		406,200	2,708,000
Stewart Road Corridor Completion: White River Bridge	14,647,380	9,000,000	5,973,006	29,620,386
Stewart Road ITS Corridor Improvements	402,289		92,996	495,285
STO - Port Gamble Trail AE	1,427,250		222,750	1,650,000
Stover Road Railroad Crossing Improvements	1,087,000			1,087,000
SUMMIT STREET, SILKE ROAD TO IVY STREET		1,255,608	139,492	1,395,100
Sumner Ave Sidewalk Improvements	350,000	450,000	583,562	1,383,562
Sumner Station Improvements			112,000	112,000
Sunset Hwy (US2) Bicycle Facilities/Shared Use Path	4,437,000			4,437,000
Sunset Trail	1,378,810		215,190	1,594,000
SW Eaton Boulevard Improvements	1,929,000		3,154,735	5,083,735
Sylvester Street Safety Improvements	1,143,600	2,294,800	650,100	4,088,500
Systemic Pedestrial Safety Improvements	539,000		0	539,000
SYSTEMIC PEDESTRIAN CROSSING IMPROVEMENTS	1,743,000			1,743,000
Systemic Pedestrian Crossing Safety Improvements	448,000	150,000	0	598,000
Systemic Pedestrian Safety Improvements	1,309,000		10,000	1,319,000
Systemic Pedestrian Treatments - Rectangular Rapid Flashing Beacons	776,500		8,000	784,500
Systemic Safety Improvements 2020	302,000			302,000
Tacoma Ave Overlay and Intersection	328,700		51,300	380,000
Tanner Trail Extension	158,087		24,672	182,759
Telegraph Road Multimodal Safety Improvements	6,041,294	100,000	1,065,706	7,207,000
Terminal 5 Truck Gate Complex	1,750,000		13,840,500	15,590,500
Third Avenue Sidewalk Improvements	417,120			417,120
Thor and Freya Couplet from Hartson to Sprague	2,282,716		336,090	2,618,806

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Thurston County Bicycle Map, 8th Edition	43,250		6,750	50,000
Tjerne Phase III (Woods Creek Road to Old Owen Rd)	460,000		90,100	550,100
Tommy Thompson Trail Trestle and Causeway Replacement	210,000	121,333	52,000	383,333
Totem Pole Road	1,489,950		2,829,250	4,319,200
Transit Connection Corridor	2,000,000		500,000	2,500,000
Truman School Sidewalk		1,104,000	861,000	1,965,000
TWO ADA CUTAWAY VANS & ONE SUPERVISOR LIFT EQUIPPED MINI VAN CTA 17-3	214,000		113,000	327,000
Tyler Street Overlay		379,609	103,990	483,599
University Way Gateway II		4,250,000	1,300,000	5,550,000
US 101 Safety Improvements	1,015,590		587,966	1,603,556
US 101/Fort Columbia Tunnel Lighting	1,268,377	29,403		1,297,780
US 12/I-5 to 0.5 Miles East of Harms Rd Vicinity - ADA Upgrades	165,098	5,392		170,490
US-2 / Main Street Roundabout	780,000		195,000	975,000
US-2 Route Corridor Trail Phase One	980,000		133,000	1,113,000
Valley Ave NW Overlay - Phase 1 & 2	1,500,000		900,000	2,400,000
Valley Ave Overlay - Sumner City Limits to Meade McCumber Rd E	749,410		116,970	866,380
Valley Road Overlay / Sidewalk	389,250		110,750	500,000
Vantage Highway Pathway - Phase 2	700,000	300,000	127,550	1,127,550
Viking Way Phase 2	865,000		135,000	1,000,000
W. 1st Street (SR 170) Pedestrian Improvements	367,625	57,375		425,000
W. Pioneer Ave. Reconstruction - 6th to 7th	276,800		43,200	320,000
Walk N Roll for 2025/ 2026 and 2026/ 2027	258,000		40,266	298,266
Washington & 11th Improvements	3,654,625	1,742,143	1,551,032	6,947,800
WASHINGTON WAY	3,894,000			3,894,000
Water Ditch Trail Phase IIIA	2,273,631		2,371,405	4,645,036

Project Name	Federal (\$)	State (\$)	Local (\$)	Total (\$)
Water Ditch Trail Phase IIIB	3,316,860		1,597,521	4,914,381
Wellesley Ave Freya to Havana	647,500		101,054	748,554
West Illinois Pedestrian & Bicycle Safety Improvements		1,907,000	500,000	2,407,000
West Pioneer Ave - Main to 4th	1,124,500	175,500	63,900	1,363,900
Westshore Drive Overlay / Sidewalk	1,384,000		216,000	1,600,000
Whitehawk Boulevard Extension			850,000	850,000
Wyatt Way Bicycle and Pedestrian Safety Improvements	777,000		371,095	1,148,095
Yelm Hwy SE	2,856,000		929,300	3,785,300
Total	1,017,054,637	944,176,411	654,787,615	2,616,018,663