

WSDOT Clean Transportation Update

Jonathan Olds

Climate Mitigation and Adaptation Branch Manager, Environmental Services Office

Barb Chamberlain

Director, Active Transportation Division

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Reducing Transportation GHG

Transportation Efficiency

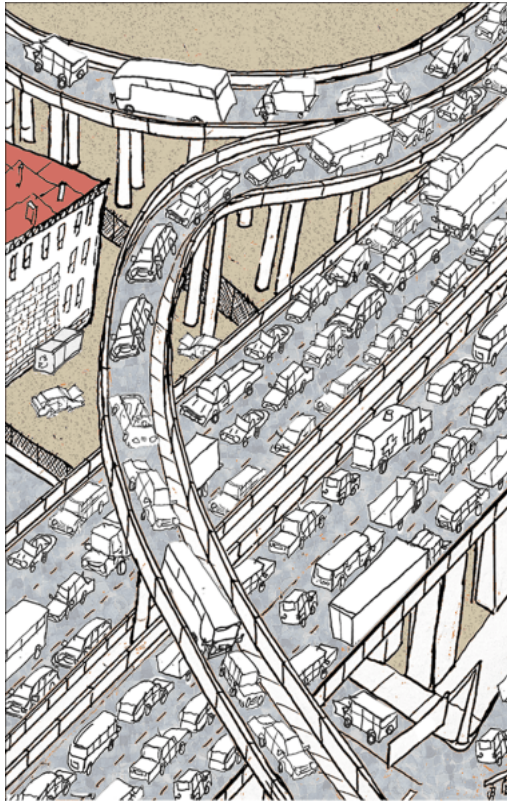
Decarbonization



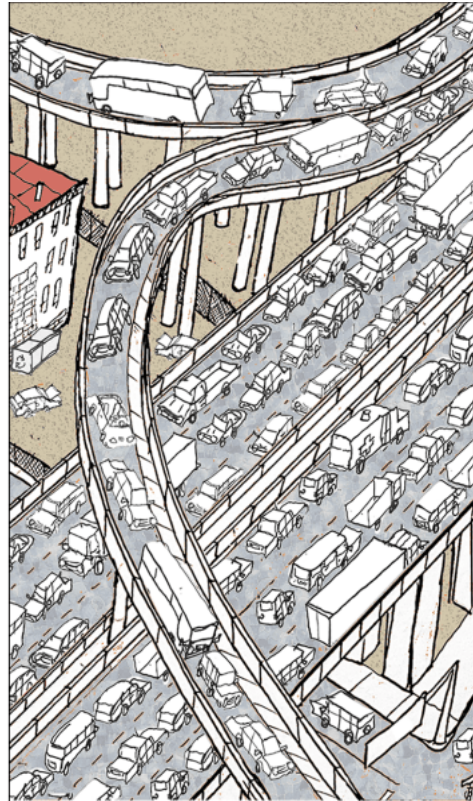
US National Blueprint for Transportation Decarbonization

Transportation Efficiency:
*moving people and goods more
efficiently and equitably*

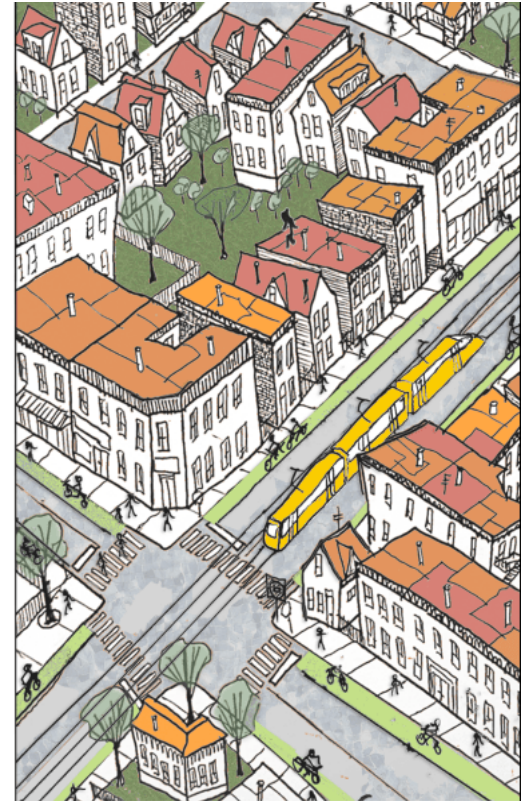
Why not just focus on electrification?



FOSSIL FUEL VEHICLES



ELECTRIC VEHICLES



WALKING, BIKING, &
PUBLIC TRANSIT

Source: https://yaleclimateconnections.org/2023/10/american-society-wasnt-always-so-car-centric-our-future-doesnt-have-to-be-either/yale_illustrationhero/

Transportation Efficiency and Decarbonization

Transportation Efficiency	Decarbonization
Reduce GHG	Reduce GHG
Reduce congestion	
Reduce collisions	
Reduce roadway & parking facility costs	
Improve mobility for non-drivers	
Improve social equity and health	Some improved health
Reduce sprawl	
Protect habitat	

Building Transportation Efficiency into Land Use



Proximity of destinations



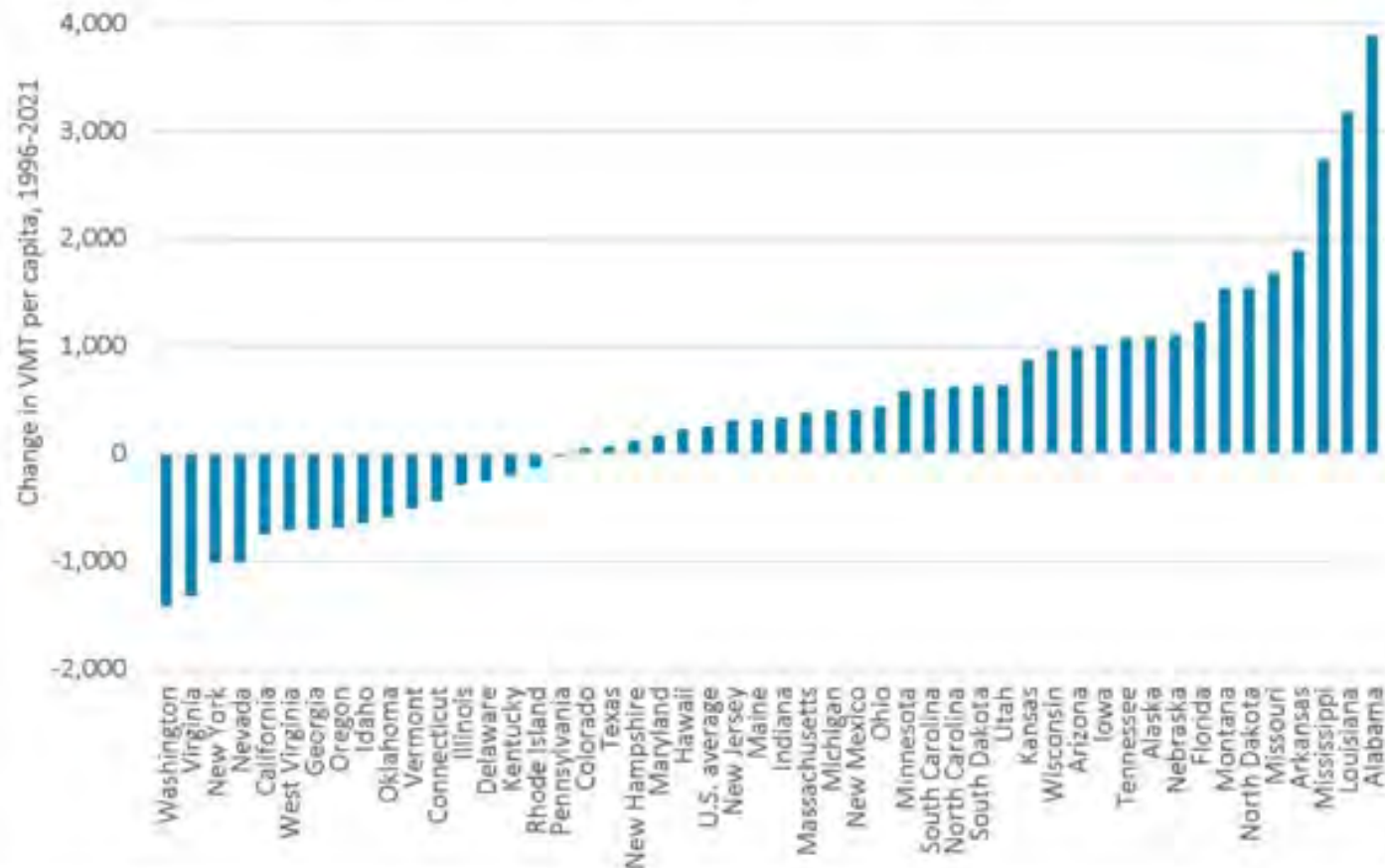
Complete low stress multimodal networks



Appropriate roadway characteristics for context and function

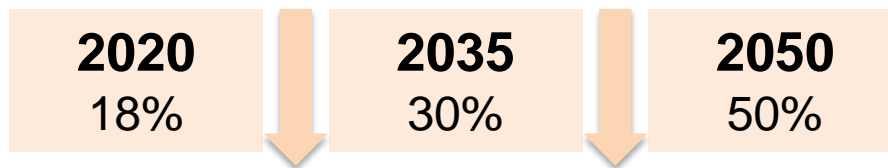
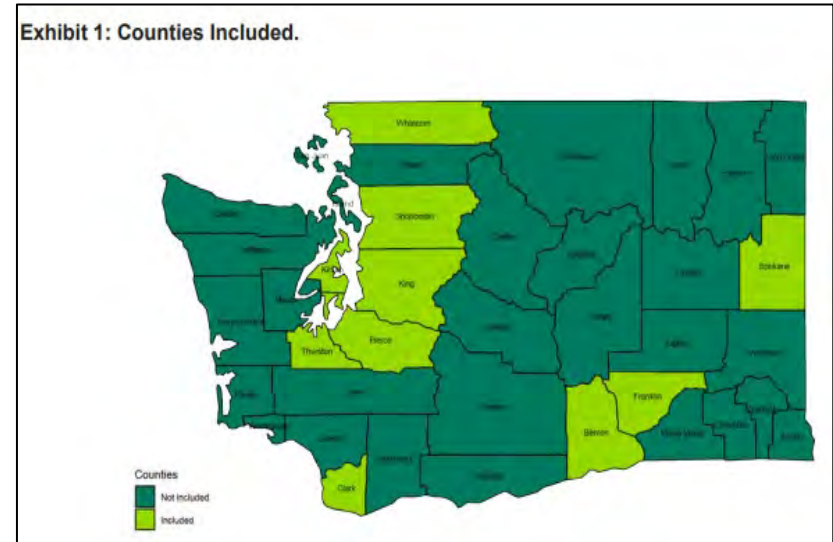
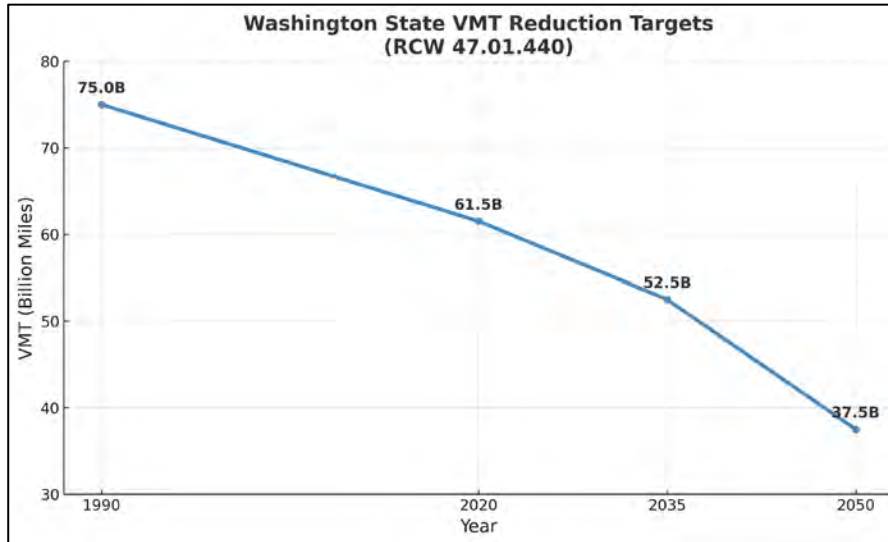
Per Capita Vehicle Miles of Travel (VMT)

Figure 2. Change in per capita VMT by state, 1996-2021



VMT – Legislative Leadership

Enacted in 2008, RCW 47.01.440 established per capita VMT reduction targets from statewide baseline.



WSDOT has published several reports and technical documents summarizing engagement efforts, strategies to reduce VMT, and implementation.

VMT Reduction Implementation

2023-2025 Proviso Funding (ESHB 1125) Implementation

- Benton-Franklin Council of Governments
- Thurston Regional Planning Council
- Whatcom Council of Governments
- Spokane Regional Transportation Council
- Southwest Regional Transportation Commission

Funding Focus

Enhancing regional transportation models



Evaluating data options for VMT

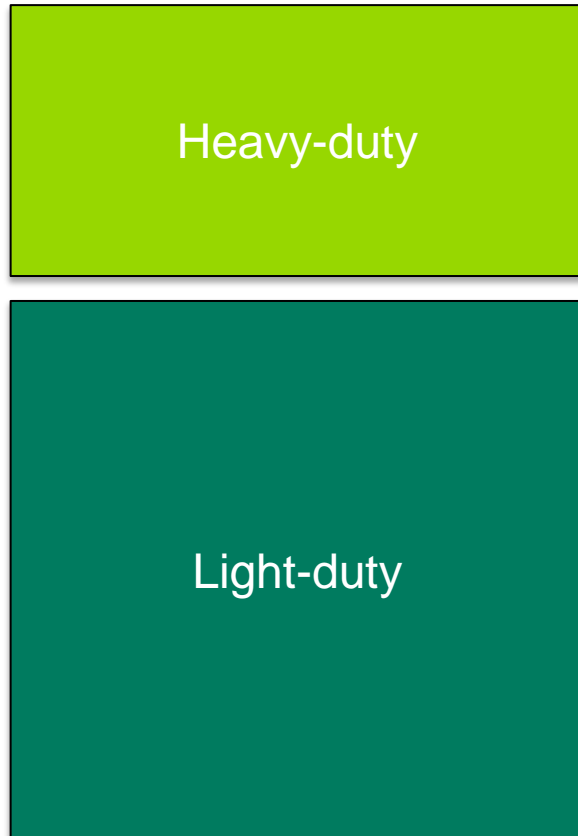


Supporting regional collaboration

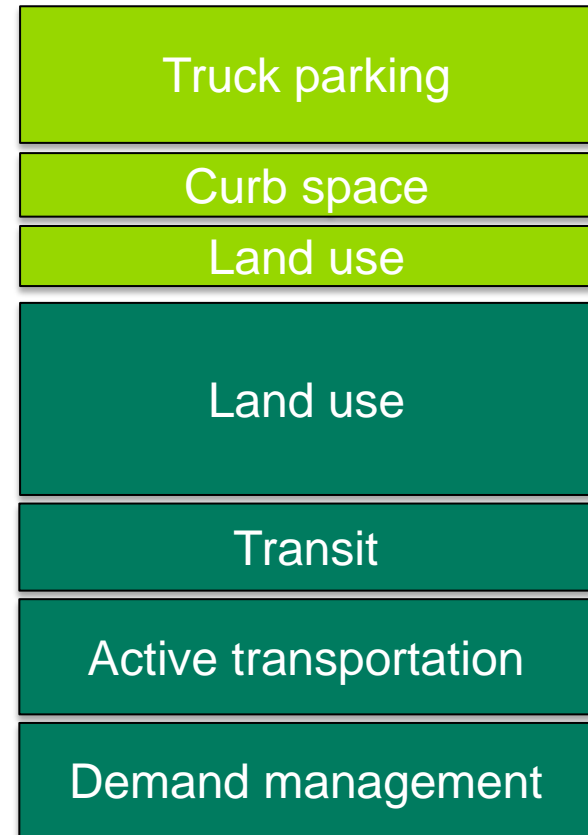


- 2025 Implementation of VMT Targets and Supporting Actions Final Report (soon)

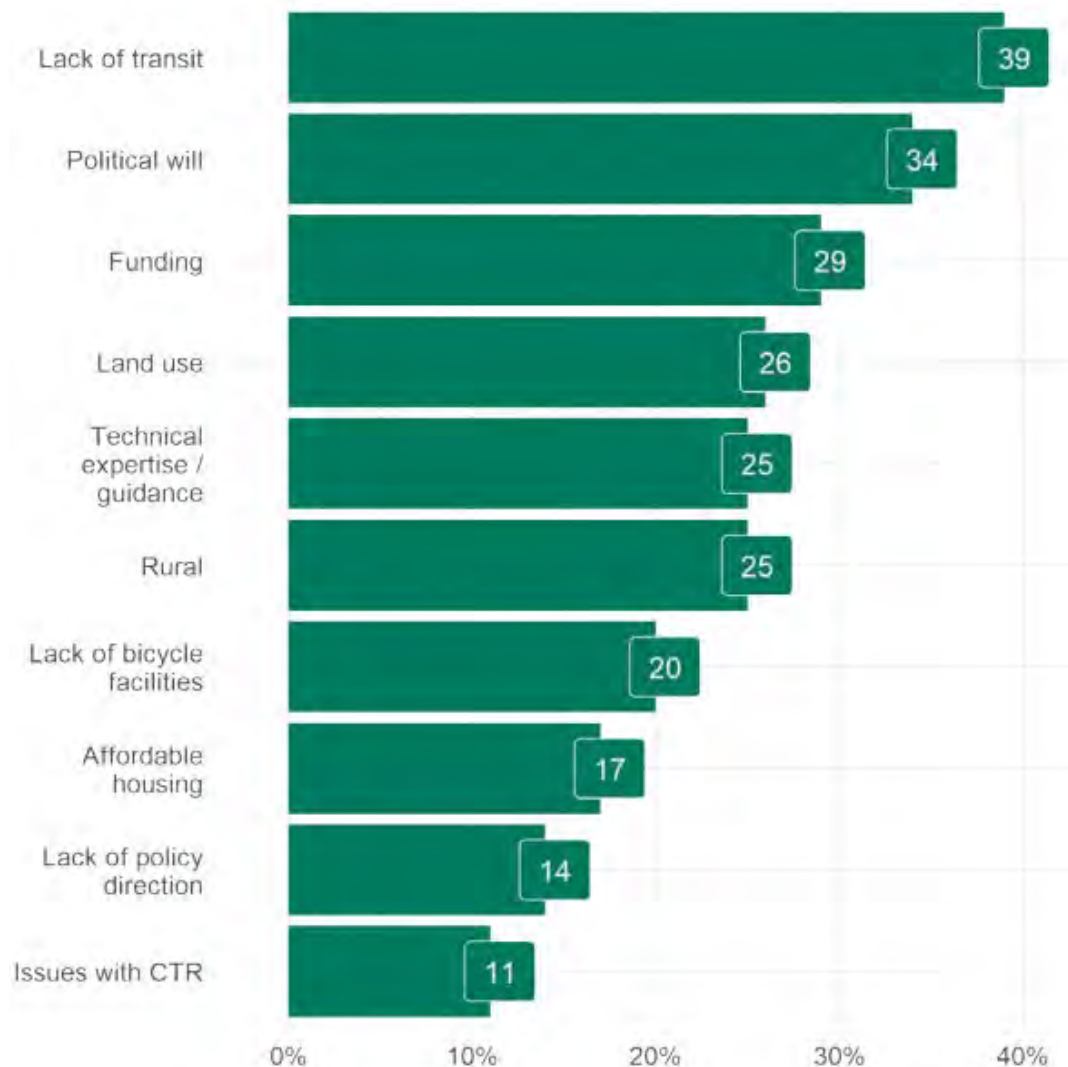
Types of VMT



Reduction Strategies



VMT Reduction Challenges



Retrieved from 2022 VMT Targets Interim Report – Survey of 97 organizations in WA

VMT Strategies - Successful Examples

Expanding Light Rail in Redmond and Increasing Housing Options in Spokane



2 MADISON DUPLEX

Front Elevation

Side Elevation

Ground Floor Plan

Second Floor Plan

Duplex from the Spokane Housing Catalog

POLICY

Spokane streamlines 'missing middle' housing

A house plan catalog is designed to expedite construction of compact housing that fits the neighborhood context throughout the city.

Sources: Sound Transit; Congress of New Urbanism

Creating more places to walk, roll and bike safely

- **Sandy Williams Connecting Communities Program:** Improve active transportation connectivity on current and legacy state highways. 2023-25: \$16.8M; 2025-27: \$33.2M.
- **Safe Routes to School:** Improve safety and mobility for children by enabling and encouraging them to walk and bicycle to school. 2023-25: \$72.236M; 25-27: \$83.39M.
- **Pedestrian & Bicyclist Program:** Improve the transportation system to enhance safety and mobility for people who walk or bike; 2023-25: \$70.896M. 25-27: \$81.752M.
- **Active Transportation Assistance Program:** Capacity building program under SRTS and PBP.
- Totals include reappropriation for ongoing projects. Primarily CCA funds.
- SWCCP: <https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/sandy-williams-connecting-communities-program>
- SRTS: <https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/safe-routes-school-program>
- PBP: <https://wsdot.wa.gov/business-wsdot/support-local-programs/funding-programs/pedestrian-bicycle-program>
- Legislative report: <https://wsdot.wa.gov/sites/default/files/2024-12/Active-Transportation-Funding-Programs-Report-December2024.pdf>
- Active Transportation Programs Design Guide https://wsdot.wa.gov/sites/default/files/2024-02/WSDOT-Active-Transportation-Programs-Design-Guide_0.pdf

Active Transportation: Getting more people riding with skills, equipment

School-Based Bicycle Safety Education

- 2023-25: \$16.8M CCA. **32,000+** children and youth in **271** participating districts.
- >4,000 bikes, 40 adaptive bikes/trikes, safety equipment given out; nearly 250 teachers trained.
- 2025-27: \$27.2M CCA. ~**160,000** cumulative students reached by end of biennium.

E-Bike Rebate Voucher Program: Launched April 2025

- 2023-25 pilot: \$5M CCA, ~\$4.66M in rebate vouchers. 60% \$1,200 vouchers to income-qualified, 40% \$300 vouchers to others. >33,000 eligible applications from all 39 counties. Random selection; >6,800 completed final steps for voucher. 148 participating bike shops. 75% expressed interest in participating in UW research on the program.
- 2025-27: \$7M CCA.
- WSDOT website: <https://wsdot.wa.gov/travel/bicycling-walking/bicycling-washington/e-bike-programs>

E-Bike Lending Library Program: Launching later this year

- 2023-25: \$432K CCA. 25-27: \$3.568M. Eligibility: Other state entities, local governments, tribes, for employees for CTR purposes; nonprofits or tribal governments that serve persons who are low-income or reside in overburdened communities.

Why public transportation?

Easing congestion • lowering emissions



Investments in the state's public transportation system help to improve air quality and public health by:

- ✓ Reducing the number of vehicles on state roadways
- ✓ Lowering carbon emissions and fossil fuel consumption
- ✓ Transitioning public transit to zero-emission fleets

2023-2024 greenhouse gas reductions

**Reduced in
2023-2024**

(14 projects)

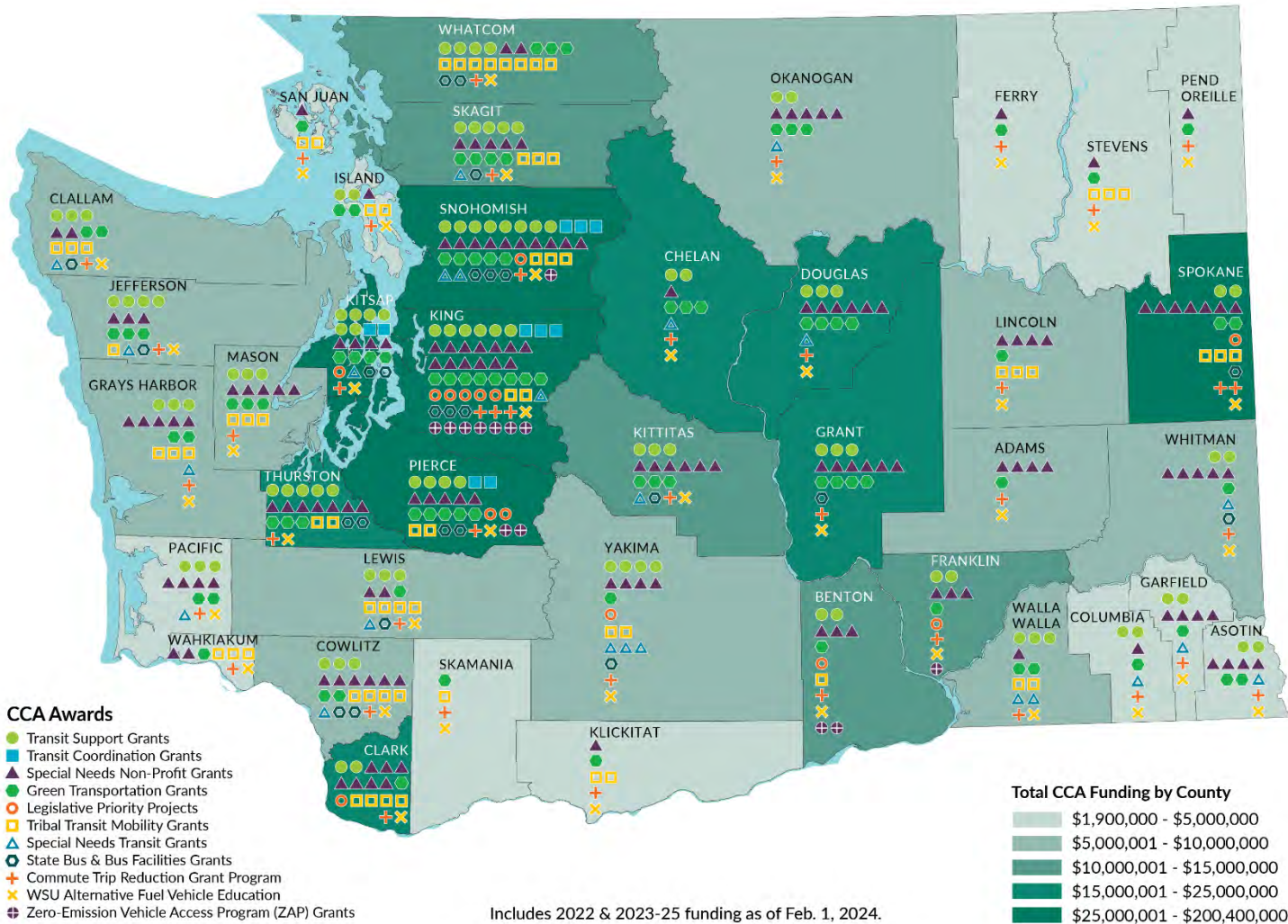
1,422 metric tons

**Anticipated
reductions for
current projects
(54 projects)**

124,955 metric
tons



Public transportation: Statewide investments (CCA)



Public transportation: Expanding electric transit



A maintenance worker prepares to charge one of the electric buses from Everett Transit's fleet.



One of Link Transit's electric buses makes its way through the beautiful countryside of central Washington.

Rail Freight and Ports: Amtrak Cascades

- 461-mile corridor, serving 18 cities between Eugene, OR and Vancouver, BC.
- Record ridership in 2024 with more than 993,000 passengers.
- Finalizing the Amtrak Cascades Service Development Plan in 2025 to meet growing intercity travel demand with more frequent, reliable and customer-focused service.
- Strengthen multimodal connections to improve accessibility and provide better travel options.
- Address transportation system equity issues along the corridor.
- Support greenhouse gas reduction goals.



Rail, Freight and Ports: New trainsets in 2026



- Eight new trains and two new locomotives
- Part of Amtrak's national procurement, funded through the federal IIJA infrastructure package
- Manufactured by Siemens in the United States
- Cascades first to be delivered by Siemens, with trains for routes in eastern U.S. following
- Each train seats 300 passengers
- More fuel efficient and produce significantly less air pollution
- Replacing 40 to 50-year-old passenger railcars with state-of-the-art trainsets
- Revenue service in 2026



Cascadia High-Speed Rail & I-5 Program

- **Cascadia High-Speed Rail** – connecting metropolitan areas of Portland, OR, Seattle, WA and Vancouver, B.C.
 - Jurisdictional partnership between British Columbia, Washington and Oregon, formalized by a memorandum of understanding in 2021
 - Awarded a federal grant as part of the Federal Railroad Administration Corridor Identification and Development Program
 - Anticipated as an electrified system with the potential to be powered by clean energy sources
- **I-5 Master Plan** – border-to-border in Washington state
 - Developing overall shared vision, strategies, prioritized projects and implementation plan
 - Builds on 2022-2023 corridor-wide listening sessions



Clean Fuels:
Zero or Low Carbon Alternatives

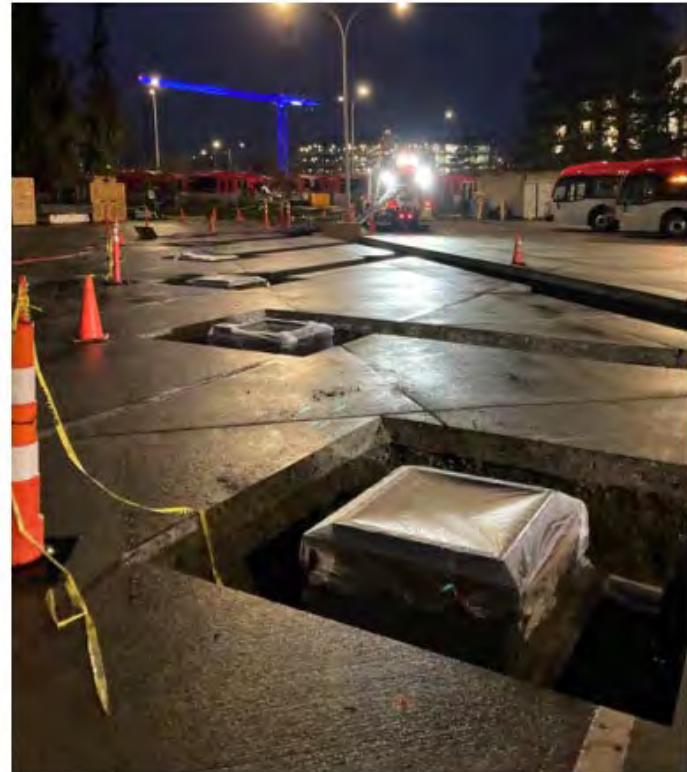
Rail, Freight and Ports Division: Port electrification program

- 2023-25 budget included \$89.8 million in funding.
- Grants funded primarily focused on two types of activities:
 - Constructing shore power that allows clean electrical power use while at dock rather than onboard combustion engines for ship operations.
 - Installing electric vehicle chargers and purchasing electric vehicles, including drayage trucks to move cargo to and from ships at port facilities.
- Competitive grants awarded to 11 public port districts.
- Six port projects receiving direct line-item funding from Legislature.



Public Transportation: Green Transportation Capital Grant Program \$51.5 million to be awarded in 2025-2027

- Provides funding for transit agencies to transition fleets to zero-emissions.
- Eight projects in eight counties, including:
 - Everett Transit's inductive charging infrastructure
 - Intercity Transit's hydrogen demonstration project
 - King County Metro's south annex base electrification



Washington State Ferries: System Electrification

- Current funding of \$1.7B to:
 - Convert one existing Jumbo Mark II vessel to hybrid electric power.
 - The two remaining Jumbo Mark II vessel conversions have been deferred until after the 2026 World Cup
 - Construct up to five new hybrid electric vessels.
 - Provide infrastructure for vessel charging system the first group of ferry terminals.
- The total Electrification Program is currently estimated at \$6B and when completed will have the following benefits:
 - Construct a total of 16 new hybrid electric vessels
 - Reduce diesel fuel consumption by 75-95% by 2040 (14-18 million gallons/yr.)
 - Reduce greenhouse gas (GHG) emissions by 70% by 2040 and reach near zero GHG emissions by 2050.

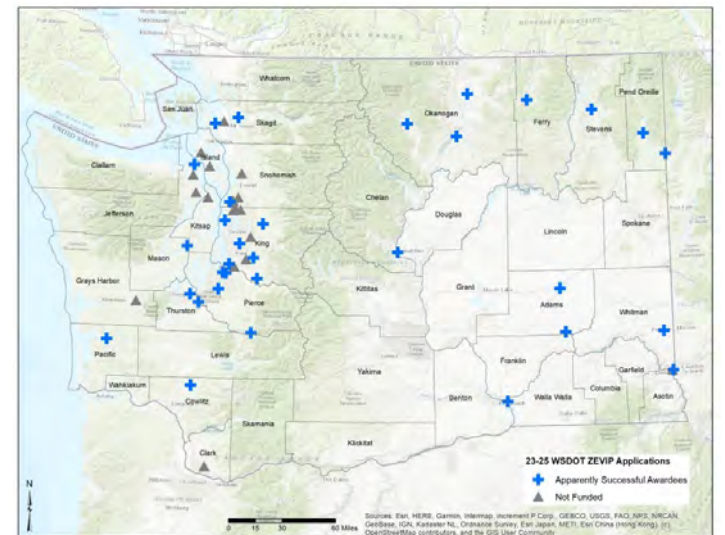


Innovative Partnerships: Zero Emission Vehicle Infrastructure Partnerships (ZEVIP)

23-25 Funding: \$30M + \$15M CERA and \$3.7M EV Account

- 32 sites across Washington in 19 counties and along 19 state routes.
- Awarded sites build out significant portions of SR 20, SR 99, and SR 169.
- 68% of sites are located within or immediately adjacent to a disadvantaged community.

25-27 Funding: \$25M CERA, including \$15M reappropriation



Innovative partnerships: Zero Emission Access Program (ZAP!)

23-25 Funding:

\$2M + \$3.4M CERA and \$1.2M Multimodal

- Goal: expand access to clean fuel options and provide opportunities for zero-emission carshare programs in low-to-moderate income and underserved communities where access to public transportation is less available.*
- Eligible applicants are local governments, including housing authorities, and nonprofits.
- WSDOT has funded 18 projects across eight counties for the 2023-2025 biennium.

25-27 Funding:

\$3.4M CERA appropriation

- WSDOT is currently evaluating projects for the 2025-2027 biennium.



*RCW [47.04.355](#)

Innovative Partnerships: Medium- and Heavy-duty Vehicle and Equipment Infrastructure and Incentives

- **Zero-emission commercial vehicle infrastructure and incentive program, and zero-emission school buses and refueling infrastructure program (\$120M + \$10M*-CERA).**
 - \$20M allocated for school buses to be contracted through Ecology.
 - Medium- and heavy-duty vehicle and infrastructure voucher incentive program expanded in supplemental budget.
- Electric charging mega site at Mount Vernon library commons (\$2.1M – CERA).



Innovative Partnerships: Additional Programs from the 2024 Supplemental Transportation Budget

- Hydrogen Infrastructure Grants and Federal Match Grant Program (\$10M - CERA).
- Bellevue/Redmond to Purchase Zero-Emission Vehicle Fire Engines (\$800,000 - CERA).
- Tacoma Public Utilities Medium-Duty Zero-Emission Utility Service Vehicle Pilot Program (\$1.7M - CERA).



Aviation – Sustainable Aviation Grant Program

Grants awarded
2023-25 Biennium
\$1,476,000

- Arlington Municipal Airport - \$250,000
 - Administration Building Solar Project
- King County International Airport - \$500,000
 - Electric Sweeper
- Friday Harbor Airport - \$200,000
 - Electric Vehicle Charging Stations
- Harvey Field - \$218,500
 - Electric Vehicle Charging Stations
- Pearson Field - \$237,500
 - Solar Panel System
- Skagit Regional Airport - \$70,000
 - Electric Truck



Sustainable Aviation Fuel

2025 – 2027 Budget

- Aeronautics Account \$6,850,000
 - Cascadia Sustainable Aviation Fuel Institute or Accelerator
 - To advance SAF ecosystem buildout, develop regional partnerships, and promote market adoption of SAF within Washington State and throughout the Cascadia region.
- Aeronautics Account \$1,200,000
 - Washington State University
 - Staff and support services for the temporary SAF research and development center at Paine Field.
- Multi-modal Transportation Account \$2,000,000
 - Snohomish County
 - Preconstruction and site readiness activities related to the SAF research and development center at Paine Field.
- Move Ahead Washington Account \$5,100,000
 - Snohomish County and Washington State University
 - Research and testing of SAF, electric battery storage, and hydrogen for aviation.

Aviation Sustainability Studies

Study	Date
WSDOT White Paper: Airport Centric Energy Systems	May, 2025
WSDOT Advanced Air Mobility Aircraft Plan	April, 2025
WSDOT Aviation Sustainability Plan	December, 2024
WSDOT Electric Airport Feasibility Study	December, 2022
WSDOT Electric Aircraft Feasibility Study	November, 2020

Questions?

Environmental Services Office, Climate Mitigation and Adaptation Branch

Jonathan Olds – Branch Manager

Active Transportation Division

Celeste Gilman – Strategic Policy
Administrator

Charlotte Claybrooke –Active
Transportation Programs Manager

Public Transportation Division

Molly Hughes – Acting Director
Don Chartock – Deputy Director

Washington State Ferries (WSF)

Todd Lamphere – Director of WSF Finance
and Administration

Innovative Partnerships / Alternative Fuel & Electrification

Tonia Buell – Alternative Fuels Program
Manager

Rail, Freight, & Ports Division

Jason Biggs – Director

Aviation Division

Ann B. Richart, AAE - Director