WSU Energy Program

Our mission is to advance environmental and economic well-being by providing unmatched energy services, products, education and information based on world-class research. Our staff of energy engineers, energy specialists, technical experts and software developers work out of Olympia, Washington. The WSU Energy Program is a self-supported department within the WSU College of Agricultural, Human and Natural Resource Sciences.

Green Transportation Program

In 2019, Washington passed legislation directing the WSU Energy Program to establish and administer a technical assistance and education program for public agencies on the use of alternative fuels and vehicles.

The WSU Energy Program established the Green Transportation Program to provide unbiased education and technical assistance to support the transition of public fleets to cleaner fuels, including electricity and renewable hydrogen. The public entities served in this effort include cities, counties, transit agencies, school districts, colleges and universities, utilities and PUDs, tribes, ports, and other state political subdivisions.

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WSUEEP23-006 • November 2023





Report to the Legislature November 2023 Update

The electrification of our transportation system is accelerating rapidly along the West Coast and across the nation. Historic investments by federal and state agencies, combined with forward-looking policies to address climate change, economic development, and resilience, are driving this transformation.

This update celebrates the growing momentum in Washington to use zero-emission vehicles (ZEVs) and alternative fuels in public fleets. With many successes to share, we appreciate this opportunity to describe the steps the Green Transportation Program (GTP) is taking to support this transition to clean transportation.



GTP Delivers "Next Step" Assistance

We often hear the transition to ZEVs described as a journey. Many fleet operators start down the road toward vehicle electrification with reluctance, others with enthusiasm, and all with a sense of inevitability.

Early on, the GTP team completed in-depth research about similar transition journeys and published our guide for fleets entitled: *Milestones for Electrifying Public Fleets*.

Wherever someone is on their electrification journey, the GTP strives to help them take their next step – whether it is their very first step or their fifth or sixth step. We do this by providing unbiased technical education and assisting

Milestones for Electrifying Public Fleets

Agreed Projects

Agreed Projects

Agreed Projects

Agreed Projects

Be best of the public Fleets

Flee

fleet managers through the various milestones toward integrating ZEVs into their fleets.

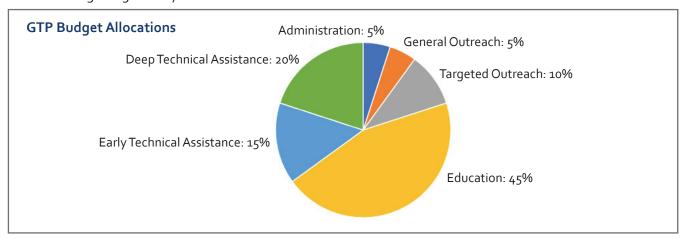
The electrification journey begins when public fleet operators ask: Can we save money and provide reliable, clean transportation with electric vehicles? The GTP helps them realize that the answer is **YES**.

Green Transportation Education Program

As policies, incentives, and market innovations evolve, the GTP adapts to ensure that we:

- Support all public fleets in Washington.
- Center equity and environmental justice by directing outreach toward disadvantaged and overburdened communities.
- Establish a vibrant education program with active online resources and virtual learning opportunities.
- Inspire action through peer-to-peer exchange.
- Lower barriers to adoption through direct, unbiased technical assistance.
- Make electrification accessible by explaining complex technology simply and without jargon.

The GTP budget is generally allocated as follows:



Here is a snapshot of the many activities in the GTP action plan.

Public Fleet Outreach

Through the years, the GTP has used many methods to reach out to the hundreds of public fleets that we count among our clients.

Our list of green transportation stakeholders numbers more than 3,000. Approximately 1,000 people who work with public fleets have subscribed to the GTP constituent database. We reach out to all or subsets of these subscribers every month or so with announcements, important news, and valuable information they can use.

Website - New

The GTP website (energy.wsu.edu/GreenTransportationProgram) now serves as a major clearinghouse of information, tools, and resources for our clients and stakeholders in transportation electrification. In addition, the website provides links to our legacy of recorded meetings and webinars. Since July 2021, the GTP website has recorded an average of more than 500 page views per month, with the Funding Opportunities and AFV-TAG pages being the most popular.

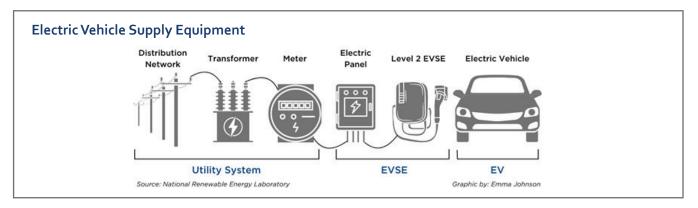


The GTP team regularly updates the website with new content, including:

- News and industry updates.
- Important events.
- Current funding opportunities.
- New publications.
- Innovative tools and resources.

Since 2021, we have added several new website sections:

- In the driver's seat to provide user-centric insights about all manner of EVs, especially medium- and heavy-duty vehicles with special focus on electric pick-up trucks, drayage trucks, fire apparatus, and refuse/recycling trucks.
- Clean Fuels Program (CFP) to highlight the value of the Washington CFP and other West Coast clean fuel markets.
- **Electric school bus resources** to help school districts apply for funding opportunities to integrate electric school buses into their fleets.
- EV charging resources to guide clients through the complexities of EV charging, including key calculations, such as vehicle-to-charger ratios, estimating power and charging station needs, determining where EV charging equipment should be located, and incorporating managed charging systems.



Publications - New

The GTP team prepares materials to address topics raised by our fleet partners. In addition to our early publications – *Milestones for Electrifying Public Fleets* and *EV Batteries: Getting Better All the Time* – we have published "Frequently Asked Question" papers about EVs and EV charging.

We continue to publish targeted fact sheets and reports. For example, in response to questions about EVs for police work, we published *Tesla EVs: Meeting the Use Case of Emergency & Law Enforcement*. Similarly, this year we added documents filled with resources about electric school buses and EV charging infrastructure.

Since their publication, the *Milestones* guide and *EV Batteries* fact sheet have been viewed an average of 70 to 80 times every month.

Alternative Fuels & Vehicles Technical Assistance Group (AFV-TAG)

The AFV-TAG has evolved into a central feature of the GTP and a dynamic partnership with state agencies, local governments, and industry leaders. Participants learn about electrification successes, alternative fuels, and challenges faced by different fleets and communities.

In 2022 and 2023, registrations averaged 110 per meeting and attendance averaged 72 participants per meeting. This is a 23 percent increase in average attendance over the average reported in 2021. Meeting recordings are posted to the GTP website and are sent to all who registered.

Technical Presentations

The GTP fields requests each month for presentations about green transportation. In this way, we have educated fleet operators, sustainability managers, transportation planners, tribal officials, decision-makers, and community members about the ongoing transformation of our transportation system. Since our last report, we have presented to more than 50 fleet and community organizations.

Webinars

The GTP hosts technical webinars when topics require more in-depth coverage than can be provided during AFV-TAG meetings. These virtual learning opportunities offer peer-to-peer exchanges on timely topics.

Webcasts – New

Webcasts are a new GTP feature. Like webinars, these recorded segments are available for people to view on their own schedule. We have prepared and published webcasts about third-party service providers in the Clean Fuels Market and about electric fire apparatus for a recent Ecology grant program. We expect to expand this concept to many additional topics in the future.

Workshops – New

Throughout 2022, with EPA support, GTP staff held a series of workshops about renewable natural gas (RNG), including its use in transportation. Held in Spokane, Yakima and the Tri-Cities, Portland-Vancouver, and Seattle, these workshops were attended by more than 200 individuals online or in person.

In spring 2023, we consulted with the Pacific NorthWest Economic Region (PNWER) to co-sponsor an in-person workshop about medium- and heavy-duty trucks. Nearly 100 people attended this workshop.

This fall, 137 people registered for and 89 people attended a technical electric school bus workshop presented in cooperation with the Dept. of Ecology, in advance of their fall grant opportunity for electric school buses. All who register get a recording of the workshop.

Infrastructure Field Trips – New

We sponsored two in-person field trips to demonstrate and show details of public Level 2 and DC Fast Charging (DCFC) stations.

In August 2022, we hosted a field trip with Puget Sound Energy staff at their public charging facility in Lacey. Thirty-six people from many state and local agencies from as far away as Port Angeles participated in the on-site walkthrough of the design, development, and installation of this facility. They enjoyed the peer-to-peer networking opportunity and learned about managed charging, vehicle-to-grid options, and integration of distributed energy resources.

In June 2023, two dozen local government officials from a variety of public fleets participated in a similar on-site EV infrastructure showcase at Tacoma Power's headquarter facilities.



Puget Sound Energy's Danielle Kievit leads the presentation and discussion for 36 fleet operators participating in the first EV infrastructure field trip – in August 2022 in Lacey.

Workforce Development Trainings - New

In 2023, the GTP began working with the Center of Excellence for Clean Energy at Centralia College on a series of training workshops (virtual and in person) with the deans and faculty of Washington's community and technical colleges. These workshops focused on the workforce transformation that will accompany transportation electrification. In the first workshop, attended by three dozen college representatives from around the state, attendees heard from experts in EV workforce training programs in California and Oregon. The second workshop this fall is being held at the auto training center at Clark College in Vancouver.

Technical Assistance

Technical assistance is at the heart of GTP's work with Washington's public fleets. From the beginning, we have provided technical assistance to every major type of public fleet in the state: local cities and counties; tribal nations; transit agencies; school districts, colleges, and universities; public ports; public utilities; and some state agencies.

Technical assistance can take many forms. This is what we mean when we say the GTP helps fleets take the "next step" in their EV transition journey. Here are some examples of common next steps:

- Team-building through informational presentations or trainings to EV transition teams.
- Introducing green transportation to decision-makers.
- Doing the research to answer specific questions about ZEVs and charging or fueling infrastructure.
- Analyzing current fleets to identify potential ZEV candidates and performing vehicle total cost of ownership (TCO) comparisons.
- Supporting infrastructure needs assessments of charging capacity in existing facilities.
- Connecting fleet operators with key partners, including utilities, vendors, and consultants.
- Reviewing and consulting about formal ZEV fleet transition plans.
- Discussing funding opportunities, reviewing grant proposals, or helping develop a business case for a budget presented to local councils.

During the 2023 session, lawmakers increased funding to the GTP. We are grateful for your vote of confidence. The new funding is allowing us to expand our team and respond to the increasing calls for technical assistance. Some of the constituents that benefitted from the GTP's expanding technical assistance are described below.



The GTP helps public fleets plan for EV charging at many types of facilities.

Local Cities

Key contacts

- Association of Washington Cities (AWC)
- Municipal Research Services Center (MRSC)

Results

- Connected with 195 individuals working in 140 separate towns and cities.
- Supported 52 next steps at these cities.

Working with MRSC has helped us reach hundreds of local government officials and generate new requests for technical assistance.

Examples of some individual successes include:

- Helped Spokane find RNG for their refuse fleet, while also supporting a pilot test of an electric refuse truck.
- Supported Bainbridge Island in their development of EV fleet transition plans.
- Assisted Longview city officials working in conjunction with the Cowlitz PUD and their regional planning group evaluate locations for fleet, workplace, multi-family, and public charging in response to a state funding opportunity.
- Worked with Yakima officials to help them consider alternative fuels, including hydrogen and RNG.

Counties

Key contacts

Washington State Association of Counties (WSAC)

Results

- Reached out to all Washington counties.
- Supported next steps being taken by more than 12 county fleets.
- Engaged with sustainability managers and programs at some larger counties
- In 2023, GTP staff gave a green transportation/climate policy talk at the annual meeting of the Association of County Prosecuting Attorneys.

In recent years, GTP staff engaged with municipal and transportation planning organizations as an additional way to reach individual cities and counties, and to coordinate ZEV transition activities by region. These organizations also provide opportunities to bring workplace and economic development issues into the discussion.

As an example, GTP staff collaborates with the Puget Sound Regional Council and the Puget Sound Clean Air Agency. This has contributed to the formation of the Puget Sound Regional EV Collaborative (https:pugetsoundrev.org/), which supports actions by cities in the Puget Sound region.



The Washington Green Transportation Program has proven invaluable to the City of Spokane as we undergo the shift to electric and clean fuel vehicles within our fleet. The AFVTAG meetings offer particularly insightful information, featuring expert perspectives on crucial subjects such as the development of charging infrastructure, vehicle selection, alternative fuel tax incentives, and the availability of grant funding for both vehicles and charging infrastructure.

99

Rick Giddings
Director
Fleet Services Department



Another example illustrates the impact this can have for rural communities. GTP staff presented a technical training for all rural transportation planning organizations (RTPOs). We have also made technical presentations for the Island County RTPO and the Peninsula RTPO. Both of these presentations have led to broader conversations about EV charging needs in these areas. Working with the Peninsula RTPO has also led to coordination among tribes, local communities, and their PUDs.

Tribal Nations

Key contacts

- Tribal Transportation Planning Organization (TTPO)
- National Tribal Air Association (NTAA)
- Affiliated Tribes of NW Indians (ATNI)
- Institute for Tribal Environmental Professionals (ITEP)
- WSU Office of Tribal Relations

Results

- Reached out to all tribes in Washington.
- Engaged directly with 15 tribes and provided next-step assistance to seven tribes.

West Coast states are leaders in ZEV sales, infrastructure deployment, and policies that support both. We see ZEV transitions occurring in urban areas, but worry about leaving behind rural residents, who often drive more miles and contribute more GHG per capita than their urban counterparts.

Transportation often accounts for a larger share of rural household budgets. Among the most disadvantaged rural residents with lower incomes and higher burdens are Native Americans living on tribal reservations and in surrounding communities.

In 2022, through our engagement with the Peninsula RTPO, GTP staff supported an application for funding by a consortium of the Squaxin Island, Skokomish, and Jamestown S'Klallam tribes. As a result, GTP staff will be developing community-based transportation electrification transition plans with these three tribes.

In 2023, GTP staff stepped forward to support a consortium of six tribes in Washington and Oregon to apply for \$15 million in federal funding to deploy Level 2 and DCFC public charging along the I-5 corridor.

Washington State University acknowledges that its locations statewide are on the homelands of Native peoples, who have lived in this region from time immemorial. We are incorporating WSU's Executive Policy 41 about tribal engagement and consultation into our Green Transportation Program practices.



The WSU Green
Transportation Program
provides valuable technical
resources and industry
contacts that are enabling
tribes and other small rural
communities in the Peninsula
Region to compete for grant
funding and participate in
vital system planning for
transportation electrification.

The team at the Green
Transportation Program is
connecting the Peninsula
RTPO's members with PUDs,
EVSEs, and other stakeholders in this arena. This
support has catalyzed active
engagement and
collaboration that would have
been much slower in coming
to fruition otherwise.

The Green Transportation
Program is a game-changer
for small rural
transportation agencies trying
to take part in these new
grant programs and ensure
the EV-readiness of their
communities.



Thera BlackRegional Transportation
Planner





With GTP assistance, the Stillaguamish Tribe of Indians developed a \$2 million plan to install Level 2 and DCFC stations at the Angel of the Winds Casino near Arlington.

Case Study - Stillaguamish Tribe

This past summer, the Federal Highway Administration (FHA) announced the first funding opportunity under the Charging and Fueling Infrastructure (CFI) Discretionary Grant Program. We learned through our partner network that a group of Northwest tribes, led by the Cowlitz Tribe, was pursuing a multi-million dollar funding request.

Building on prior project experience, the GTP contacted the Stillaguamish Tribe of Indians in Snohomish County and supported their participation in the tribal consortium. Over the next month, we assisted tribal planners and managers develop a \$2 million infrastructure plan.

In Phase One, the Stillaguamish Tribe plans to install two 160 kW DCFCs, four 62.5 kW DCFCs (that can be paired to provide 125 kW charging to two vehicles), and 20 L2 chargers at the Angel of the Winds Resort, roughly one mile from the exit on I-5.

Level 2 charging plays a significant role in the Stillaguamish plans for community charging. The resort area provides opportunities for tribal members, guests, and visitors to dwell for longer periods. The area is well lit and offers restrooms, restaurants, coffee service, and other amenities.

The DCFC stations will serve interstate highway travelers and will be constructed to support vehicles with trailers.

FHA decisions are expected by the end of the year. Meanwhile, the GTP continues to assist the tribe to pursue additional opportunities for adding Level 2 charging for other tribal businesses, at the elder center, and throughout their community.



With so much Green
Transportation technology
changing all the time, it is very
important that we have been
able to utilize your knowledge
and associated services. Your
explanations and presentations
have been critical for us to
remain current AND ready for
what the future may bring.

We are certain that we will continue calling on you for your expertise since you are already on top of the Green Transportation Movement and no one here is knowledgeable in your field. Yet, we will remain vigilant and try to keep improving our collective understanding of Green Transportation.



Casey Stevens
Tribal Planner



Transit Agencies

Key contacts

- Washington State Transit Association (WSTA)
- WSDOT Public Transportation Division
- Center for Transportation and the Environment (CTE)

Results

- Engaged directly with 90 percent of the state's transit agencies.
- Provided next-step assistance to more than half of these agencies.

Transit agencies are among the leaders in transportation electrification. Because of their extensive use of diesel fuels, they have a strong monetary incentive to switch to electricity.

To support all transit agencies, GTP staff assisted WSTA in their process to select a third-party contractor to administer the credit creation, documentation, and reporting needed to earn revenue from the Clean Fuels Program.

GTP staff also assisted WSDOT as outside reviewers of grant applications made for the Green Transportation Capital Grants that support the purchase of zero-emission transit buses and the infrastructure to charge or fuel them.

To our knowledge, more than half of Washington's transit agencies have taken first steps toward transportation decarbonization. Because many have long-distance routes and limited charging opportunities, transit agencies across the state are looking at hydrogen fuel-cell electric bus options in addition to battery electric.

We have assisted many transit agencies with individual needs. For example, we supported initial investigations into production and fueling with green electrolytic hydrogen by Twin Transit and Intercity Transit, which positions these agencies to become valuable elements of the Northwest Hydrogen Hub project.



From attending the fuel-cell bus tour in Washington to moderating discussions about battery electric and fuel cell electric bus deployments at the WSTA Annual Conference, the GTP supports green transportation advances for all transit agencies.



Island Transit, a rural public transit agency serving Whidbey and Camano islands, is grateful for the expert assistance of the Green Transportation Program. The GTP has directly assisted us in our zero-emission transition journey. This includes the development of our transition plan and reviewing the work of our consultant. The GTP presented about the latest trends at one of our monthly Board meetings.

In my capacity as the President of the Washington State
Transit Association, I know that our association and other transit agencies have similarly benefitted from the presentations and invaluable support provided by the GTP team.



Todd MorrowExecutive Director



President



Many other transit agencies have interest in the latest trends and developments in hydrogen fuel-cell buses, including C-Tran, Clallam, Island, Jefferson, Kitsap, Whatcom, Spokane, and Yakima transit agencies.

We have supported transit agencies from Grays Harbor, Clallam, and Jefferson, to Island, Yakima, and Spokane transits – making presentations for decision-makers, answering questions, doing research, and reviewing bid requests and transition plan drafts as they work to initiate and advance their journeys to zero-emission fleets.

In the alternative fuel space, we have supported transit agencies as they navigate delivery of renewable diesel products, including one agency that can transition more than 3 million gallons of diesel per year.

Public Ports

Key contacts

- Washington Public Ports Association (WPPA)
- Northwest Seaport Alliance
- African American Chamber of Commerce

Results

- Reached out to all of Washington's public ports.
- Presented to members of the WPPA on multiple occasions.
- Provided next-step assistance to 10 ports, including in-depth support to six ports.

Several ports in Washington, from Camas-Washougal to Longview and Olympia, have engaged with the GTP for assistance with plans for EVs and charging stations. Internally, ports have bigger issues, literally – much of their equipment is heavy-duty and still new to electrification.

GTP staff are engaged in several ways with issues around electrifying drayage trucks. We made technical presentations and consulted with the African American Chamber of Commerce (Tukwila), which includes many drayage drivers among their members. We helped them find a student intern to work on preparing for funding opportunities.

More recently, GTP staff have stepped up to serve on the Puget Sound Zero-Emission Truck Collaborative, a project of the Northwest Seaport Alliance to investigate and plan the transition to zero-emission drayage vehicles serving the Seattle and Tacoma ports.

School Districts, Colleges, and Universities

Key contacts

- Office of the Superintendent of Public Instruction (OSPI) Student Transportation
- Dept. of Ecology Clean Diesel Program
- School bus manufacturers
- School bus distributors in Washington
- Washington Association for Pupil Transportation (WAPT)
- World Resources Institute (WRI) Electric School Bus Initiative

Results

- Reached out to all 295 public school districts and six state-tribal schools.
- Engaged with people representing 132 school districts.
- Provided "next step" assistance to 15 districts and are currently working with another dozen districts on deep ZEV transition planning.
- Reached an additional 40 school districts through collaboration with electric school bus (ESB) manufacturers, distributors, and others.
- Provided assistance regarding use of propane autogas for buses upon request from several districts.
- Provided a series of training workshops to more than two dozen community and technical colleges about EV workforce development and on-campus charging.
- Engaged in ZEV transition planning with Western Washington and Central Washington universities.





Public school buses are going electric across the country. (Left): Photo courtesy of WRI – Electric School Bus Initiative. (Right): North Thurston School District, Lacey.

2023 Electric School Bus Campaign

Millions of dollars of funding are available from federal and state agencies to support school bus electrification. With our expanded budget, the GTP team was able to kick off a much expanded campaign of outreach and technical assistance to every public and tribal school district in the state. Building on prior collaborations with OSPI and Ecology, we developed new materials and resources about specific ESBs, manufacturers and local distributors, and the options for charging equipment for these buses.

After initial broad-scale outreach, we focused follow-up contacts on districts identified as low-income or disadvantaged by state or federal agencies. These efforts resulted in multiple requests for technical assistance. We worked with districts to evaluate and select electric bus candidates, supported conversations with local utilities, and assisted planning for ESB charging stations. As a result, more districts applied individually and in groups for the summer's EPA 2023 clean bus grants.

This summer and fall, we coordinated closely with Ecology to support their 2023 ESB Grant Program, opening in mid-November. This included developing and hosting a technical workshop for school districts that featured an in-depth presentation by the deputy director of the World Resources Institute's Electric School Bus Initiative (https://www.wri.org/initiatives/electric-school-bus-initiative) and discussion panels featuring transportation directors discussing the benefits and challenges of their EV transition journeys.

Direct "next step" assistance resulting from this campaign has taken many forms, from first steps by small, rural school districts to next steps by districts that already have one or two ESBs and are now ready to expand their ESB fleets and their infrastructure, including Highline and Mary M. Knight school districts.

While the 2023 ESB campaign has directed attention to new grant funding, our assistance is designed to support the long-term effort to transition to ESBs. We encourage districts to think into the future by planning infrastructure that meets immediate needs while future-proofing their investments for more ESBs in years to come.



WSU's Green Transportation division has been a tremendous supportive partner of the Pacific Northwest Center of Excellence for Clean Energy. Together, we are helping the state's educators learn about Washington's zero emission transportation transition. We're finding innovative ways of training our faculty, whom will train our future workforce.



Monica Brummer
Director



Centralia College

Public Utilities

Key contacts

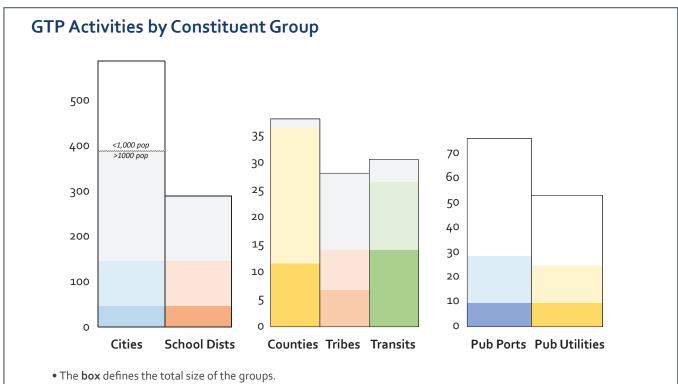
- Utility and Transportation Commission Joint Utility Transportation Electrification Stakeholder Group
- Washington Public Utility District Association (WAPUDA)
- Washington Rural Electric Cooperative Association (WRECA)
- Energy Northwest
- Bonneville Environmental Foundation (BEF)

Results

- Presented to the UTC stakeholder group and Energy Northwest partners.
- Currently collaborating with all three investor-owned utilities, major munis in Seattle and Tacoma, and major PUDs serving Snohomish and Clark counties.
- Collaborated with Energy NW on EV infrastructure developments.
- Promoted Douglas PUD's hydrogen electrolyzer program.
- Provided next-step assistance to several smaller PUDs around issues involving EV infrastructure developments in their service territories.

Connecting with smaller, rural utilities as transportation electrification advances remains a high priority.

In summary, as the following chart illustrates, the technical assistance element of the GTP has made great strides since the end of the pandemic, but there remains a lot of work ahead as more fleets see the transition to battery electric and fuel cell electric vehicles advance in the marketplace.



- The **lighter** shade box shows fleets provided with early technical assistance.
- The darker shade box show those who have asked for and received deeper technical assistance toward ZEV transitions.



The GTP monitors changes to industry charging standards to keep public fleets up to date.

Expanding Partnerships and Coordination

The WSU Energy Program continues to develop existing relationships and establish new and exciting opportunities to leverage collective resources to advance green transportation.

Agencies and organizations we work with include:

- Member agencies of the Washington EV Council, including the departments of Commerce, Ecology, Enterprise Services, Health, and Transportation, and the Office of the Superintendent of Public Instruction, among others
- Trade associations and advocacy groups, as well as regional planning organizations
- Federal Joint Office of Energy and Transportation
- Municipal Research Service Center
- Pacific NorthWest Economic Region
- Western Washington Clean Cities
- Columbia-Willamette Clean Cities
- · Forth Mobility
- Clean & Prosperous Washington
- Electrification Coalition
- Breaking Barriers Collaborative
- Automated Connected Electric and Shared (ACES) transportation group

- Various local EV associations
- Public Fleet Managers Association
- NAFA Fleet Managers Association
- Bonneville Environmental Foundation
- Renewable Hydrogen Alliance
- Pacific Northwest Hydrogen Association
- Regional EV Collaborative (Puget Sound)
- North Olympic Peninsula Development Council
- Tri-Cities Economic Development Council
- King County Fleet Committee
- Beneficial Electrification League
- Climate Solutions
- Edison Institute
- Auto manufacturers and dealers
- EV supply equipment industry
- Alternative fuel companies

The Green Transportation Program is guiding public fleets and Washington communities on the road to transportation decarbonization.

The Green Transportation Program at the WSU Energy Program has established itself as a cornerstone of the drive to electrify transportation for public fleets in Washington. The GTP also serves as an important and valuable clearinghouse of timely and unbiased information about EVs generally.

Looking ahead, the GTP expects to advance our mission in multiple ways:

- Continue to expand outreach, education, and technical assistance efforts by proactively engaging with disadvantaged, overburdened, rural, and tribal communities.
- Further build the GTP website to add the best information and data, install new features, and build or share tools that fleets need to plan and advance their electrification programs.
- Include equity and environmental justice advances on the GTP website and in GTP programming.
- Continue to track and announce funding opportunities and incentives for all our client fleets and our many partners.
- Collaborate with partners to win additional funding when it makes sense to advance transportation decarbonization.
- Promote infrastructure successes as more projects are installed in Washington, and highlight projects that demonstrate innovation and best practices.
- Create education programs and demonstrations that merge grid modernization; distributed clean energy resources, such as solar power; battery storage and electrolysis; and EV charging and hydrogen fueling.
- Work with partners to provide deep training for fleet operators about EV transition planning.
- Expand transit technical assistance by incorporating new technical information and studies about the development of hybrid fleets of battery electric and fuel cell electric buses.
- Consider opportunities to incorporate vehicle demonstrations or ride-and-drive events, especially for medium- and heavy-duty vehicles.
- Expand coverage and training for workforce development topics.

Since 2019, the GTP has made huge strides in connecting with and assisting public fleets that are leading the transition to clean transportation. The demand for GTP services by public fleets is expected to continue increasing in the coming years. We also see potential to expand our education and technical assistance services to other sectors, such as private fleets and the car-buying public.

The GTP is prepared to set an even more ambitious pace to realize a clean transportation future in Washington.

The **Green Transportation Program** wishes to acknowledge and thank staff members of the WSU Energy Program who have lent their considerable talents to transportation decarbonization, including: Jim Colombo (WSUEP Interim Director), Melinda Thiessen Spencer, Hari Nath, Matt Booth, Randy Thorn, Jason Selwitz, Lisa Terefenko, Bob Kirchmeier, Mike Steele, and Gerry Rasmussen.

-- Jim Jensen, GTP Director