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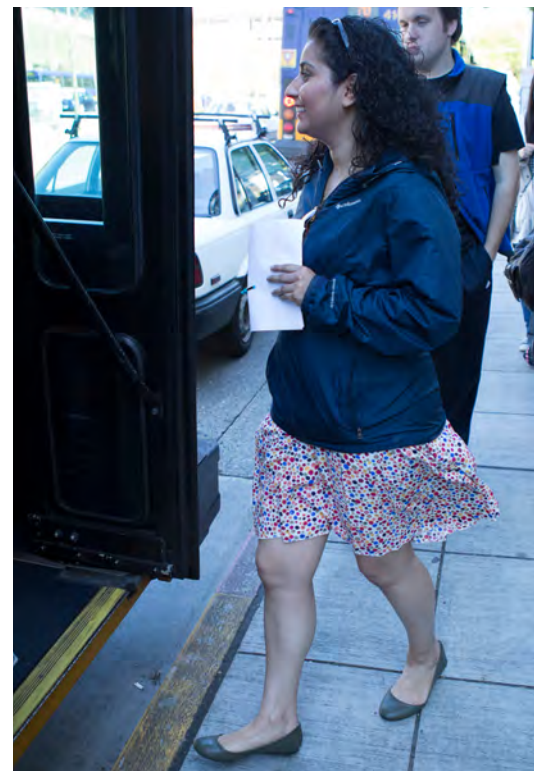
2017 Washington State Public Transportation Plan Near-Term Actions Report

Public Transportation Division

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The Washington State Public Transportation Plan identifies five goals to further integrate the state's modes of public transportation:

GOAL 1: Thriving Communities

Cultivate thriving communities by supporting health, equity, prosperous economies, energy conservation and a sustainable environment through transportation

GOAL 2: Access

Provide and sustain transportation that allows people of all ages, abilities and geographic locations to access jobs, goods, services, schools and community activities

GOAL 3: Adaptive Transportation Capacity

Use new technologies and partnerships to make better use of existing transportation assets and meet changing customer needs

GOAL 4: Customer Experience

Enhance everyone's transportation experience by providing public transportation that is safe, seamless, pleasant, convenient, reliable, relevant and understandable

GOAL 5: Transportation System Guardianship

Protect, conserve and manage Washington's transportation assets in a manner that maximizes and sustains their value to the public, public transportation and the statewide transportation system

INTRODUCTION

Public transportation is critical to the health of Washington state's economy, communities and environment.

The state's unprecedented growth in industry and population over the past several years increases demand on all modes of transportation. This growth also comes at a time when traditional methods for funding mobility are becoming unsustainable. The challenges and opportunities posed by this growth require changes to the way the state plans and manages public transportation.

In 2016, the Washington State Department of Transportation (WSDOT) published the Washington State Public Transportation Plan. The plan included 42 near-term actions, developed with public transportation partners throughout Washington state. The near-term actions were designed to help maintain the momentum of the plan's five 20-year goals. This report documents the progress made by public transportation partners and WSDOT in achieving 38 of the 42 near-term actions. Four actions were not completed due to limited resources and complex scopes to champion the efforts.

The Washington State Public Transportation Plan describes public transportation as:

The broad array of transportation services and systems, public and private, that are accessible and available to the public and do not involve a single person in a motorized vehicle.

The plan's five goals are intentionally ambitious, designed to navigate the evolving trends and demographics of the state over the next 20 years. The goals also require partnerships among transportation providers and coordination between transportation modes.

In short, all transportation partners share responsibility in achieving the plan's goals.

To maintain momentum towards the goals, each goal is accompanied by a set of near-term actions. Near-term actions were intended to be complete or made meaningful progress by December 2017.

The near-term actions were developed through a process that included panels of transportation partners and subject matter experts. They were subsequently approved by WSDOT and the Public Transportation Advisory Committee, who oversaw the development of the Washington State Public Transportation Plan.

Four task forces (human services transportation, data, system planning and customer service) were established to oversee near-term actions. Members represented public transportation partners throughout the state, many of whom were involved in the development of the Washington State Public Transportation Plan.

Task forces met throughout 2017 to:

1. Determine whether the near-term actions needed to be adjusted to better reflect available resources or priorities.

2. Share information about public transportation stakeholders advancing near-term actions.

3. Identify additional resources, task force members, partnerships and next steps to support near-term actions.

4. Oversee the development of white papers summarizing the status of near-term actions.

This report is an update on the progress of near-term actions in 2017. Please note that not all near-term actions were meant to be new initiatives. One of the hallmarks of the near-term actions is their ability to capture planned and ongoing work of public transportation partners to show alignment with the Washington State Public Transportation Plan. Additionally, many near-term actions support multiple goals but are listed under the goal to which they most pertain.

Throughout this report, near-term action progress is indicated as follows:

● Completed Action

◑ Action in Progress

○ Incomplete Action

Thriving Communities near-term actions:

1. Develop additional strategies for local jurisdictions and partners to reduce drive-alone vehicle trips

2. Pilot efforts to further integrate access to transit and land use in planning environment review and permitting

3. Continue to develop practical solutions methodologies to create a more integrated multimodal system

4. More clearly identify and address human services transportation needs and gaps

GOAL 1: THRIVING COMMUNITIES

Cultivate thriving communities by supporting health, equity, prosperous economies, energy conservation and a sustainable environment through transportation

Thriving Communities reflects a belief that the benefits of public transportation are multiplied throughout the community. In places where public transportation options are more accessible, people easily connect with others for work, education and other activities. The result is productivity gains, economic investment, better health and an improved quality of life.

Thriving Communities is consistent with other goals in the Washington State Public Transportation Plan, as well as federal policies related to strengthening families, communities and the economy. For more information, see *The Innovative DOT: A Handbook of Policy and Practice*.

Thriving Communities also aligns with the Washington Transportation Commission's Livable Communities Policy Goal: Transportation plans and actions will support and encourage partnering with local communities to achieve our mutual interests in promoting livable communities.

NEAR-TERM ACTION PROGRESS LEGEND

● COMPLETED ACTION

◐ ACTION IN PROGRESS

○ INCOMPLETE ACTION

NEAR-TERM ACTION 1

Develop additional strategies for local jurisdictions and partners to reduce drive-alone vehicle trips

Washington State's Commute Trip Reduction (CTR) Law was passed in 1991. The law aimed to reduce the negative impacts of drive-alone commuting, specifically poor air quality and traffic congestion.

CTR law has been successful in converting many commute trips (trips to and from work) into public transportation alternatives. However, traffic continues to be a problem for our highways and local streets. Public transportation partners continue to seek strategies to increase transit use beyond peak-hour commutes through new incentives, land use and research to understand potential public transportation markets.

● **Broaden the state's commitment to trip reductions to also reduce non-commute, drive-alone vehicle trips**

Local agencies and the state have typically focused demand management programs on commute trips. However, non-commute trips (e.g., running errands, going to school, visiting family and friends) account for more than five out of six trips on the transportation system. These trips offer great opportunities to improve transportation system efficiency through increased use of transit, ridesharing, walking, bicycling and other options. Local communities lead the way to encourage the use of other options for these trips. One example: Whatcom Smart Trips.

Whatcom County's Smart Trips, an all trips system, addresses commute and non-commute trips holistically. All trips systems perform rigorous data analysis to address the multimodal transportation needs of users. Smart Trips participants maintain a trip diary, which provides feedback about their transportation choices relevant to health, economic benefit and the environment. Smart Trips provides incentives and personalized data, and is able to show measurable reductions in single-occupancy vehicle trips.

● **Develop and propose a grant program to support local efforts to reduce non-commute drive-alone trips**

In 2017, the Legislature provided $250,000 to establish the Commute Trip Innovation Grant Program to improve the trip reduction techniques outside of peak hour and commute trips. The Legislature directed WSDOT to use the grant program to:

1. Expand public-private partnership trip reduction incentives.

2. Make measurable reductions in off-peak, weekend and non-work vehicle trips on the I-90, I-5 or I-405 corridors.

3. Test potential improvements to the state's CTR program.

◐ **Develop data methodology to support programs focused on reducing drive-alone travel for other types of trips**

Several research efforts conducted during 2017 help support a better understanding of all trips, including:

- Puget Sound Regional Council's 2017 household travel survey of over 3,000 Puget Sound households, offering insights into travel behavior.

- Spokane Transit's annual on-board survey, helping to understand travel behavior and identify improvements to the customer experience.

- Microsoft and the University of Washington's (UW) Washington State Transportation Center partnered for an analysis of One Regional Card for All (ORCA) data, gaining insight into the choices and tradeoffs that people make as they travel.

Additionally, the WSDOT CTR Program continues to explore other methods for gathering non-commute trip data, such as the National Household Travel Survey, purchased data (e.g., INRIX) and passive data collection models (e.g., Airsage cellular location data).

NEAR-TERM ACTION 2

Pilot efforts to further integrate access with transit and land use in planning, environment review and permitting

The Washington State Growth Management Act places a policy emphasis on planning integration. Achieving the act's goals requires ongoing, inter-jurisdictional coordination and continuous refinement of policies and practices.

In the context of the Washington State Public Transportation Plan, which addresses all modes of publically accessible transportation, planning means integrating public transportation into the broader transportation system. This integration makes it possible for people to get where they want to go without a single-occupancy vehicle.

Regional and local planning throughout the state also strives for system integration. An example is the Puget Sound Regional Council's Regional Transportation Plan prepared in 2017 through collaboration with multiple agencies. The Regional Transportation Plan goes beyond standard highway metrics to analyze mobility and access more comprehensively, and includes other transportation modes and how they may work together more effectively. As these metrics continue to evolve, they will be incorporated into the council's project evaluation, transportation improvement plans and project selection processes.

The Puget Sound Regional Council also released a transit access checklist and toolkit designed to help local jurisdictions and transit agencies assess transit access conditions at specific locations, as well as apply context-sensitive strategies and tools to improve access to transit.

The expansion of several transportation systems in the state present new opportunities for integration between land use and transportation modes. In the Puget Sound region, the Sound Transit 3 package, approved in 2016, includes project management approaches that will affect the transportation system for the next 25 years. For this reason, the Sound Transit project delivery process mandates early coordination, addressing the environmental and permitting requirements of investments. This early coordination will be helpful for making local land use decisions to develop parts of the Sound Transit system and optimize the value of this transit investment.

In eastern Washington, Spokane's West Hills Neighborhood Council and the Community Colleges of Spokane supported Spokane Transit Authority's successful application to WSDOT's Regional Mobility Grant Program for a new transit station. The transit station is part of the redevelopment of Fort George Wright Drive. The effort represents a culmination of a community-driven initiative to create a vibrant, walkable, multimodal neighborhood through coordinated transit and land use planning. Examples of other planned actions and investments for the redevelopment of Fort George Wright Drive include off-street loading for Spokane Transit Authority's transit station and space for bicycle and pedestrian improvements.

Spokane Transit addressed first- and last-mile challenges in 2017 during its comprehensive policy update. The update includes configuring key transit centers or park and ride lots as mobility hubs that support other modes of access, such as bikeshare and transportation network companies (e.g., Uber and Lyft). Additionally, Spokane Transit created a fare structure for its vanpool program that is more attractive for short trips from transit centers to employers. The program, called "Vanshare," uses a lower monthly fare for vans driven fewer than 220 miles per month. Vanshare participants also purchase a monthly bus pass, opening existing fixed-route service to people who otherwise would have a long walking distance to major transit stops.

In western Washington, the Lynnwood Transit Center Multimodal Accessibility Plan was developed in anticipation of a new light rail facility for the City of Lynnwood. The plan is an example of how first- and last-mile considerations integrate transportation planning and land use. The plan compares a baseline scenario that includes projects to be completed within the next six years against an enhanced scenario with pedestrian connections, new streets to reduce grid size, and a refined bike network. The plan also makes significant land use recommendations, including a city planning effort by Smart Growth America. This effort encourages transit-oriented development, using methods such as developing a boulevard to connect the transit center to the city hall. The study plan makes several near-term recommendations designed to improve multimodal access. These near-term recommendations extend to when Link light rail connects to Lynnwood in 2023. Other near-term recommendations affecting land use are supportive of development with housing, employment and access to healthcare.

The City of Seattle is partnering with transit agencies and private mobility services to develop its own network of shared mobility hubs throughout the city to provide more and better integrated transportation choices. Shared mobility hub features include:

- Bikeshare, car share and neighborhood electric vehicles.
- Bike parking and dynamic parking management strategies.
- Real-time traveler information, real-time ride-sharing and demand-based shuttle.
- Bicycle and pedestrian facility improvements.
- Wayfinding.
- Urban design enhancements and supporting systems, such as mobile applications, electric vehicle charging, smart intersections and a universal payment system.

Many other efforts are underway in Washington state to identify near-term and less capital intensive strategies to make transit more safe and accessible to those who would like to access transit. To this end, the City of Seattle hosted a series of mobility forums throughout 2017 to advance innovation and share best practices on the Mobility Hub Concept.

In addition, the Puget Sound Regional Council released a Transit Access Checklist and Toolkit designed to help local jurisdictions and transit agencies assess transit access conditions at specific locations and apply context-sensitive strategies and tools to improve access to transit.

● **Support training for land use and transit planners with a focus on transit planning, operations and transit-oriented development**

At the state agency level, the Transportation Efficient Communities Work Group, a partnership between WSDOT and the departments of Ecology, Health, and Commerce, developed a statewide web hub in 2017. The hub shares information, best practices and resources about a range of integrated planning strategies, including transit-supportive design and related issues for housing, environment and health.

The web hub also is a forum for state agencies to coordinate consistent planning information, enabling local governments to show connections between health, the environment, transportation and housing.

In the central Puget Sound region, the Puget Sound Regional Council sponsored a transit-oriented development event to explore upcoming opportunities as property becomes available with the development of Sound Transit's light rail expansion.

◑ **Engage local planners and transportation providers to determine strategies to support a more robust environmental review and comment process, complete streets and transit-oriented development**

The Puget Sound Regional Council, King County, Washington State Ferries and transit agencies in the central Puget Sound region have partnered to analyze the benefits of non-motorized access improvements to transit. To conduct the analysis, the partners are using the transit sketch planning platform called Remix. The software lease is partially funded by WSDOT's Puget Sound Transit Coordination Grant Program.

Remix makes it easier to look at demographic changes in areas served by specific transit lines and can be used to show how accessibility changes with various types of transit investments.

Tools like Remix help public transportation partners coordinate the development of an integrated regional transit network, the first ever in the Puget Sound region. For more information, please see Puget Sound Regional Council's *Remix Evaluation Report*.

Also in the Puget Sound region, rising housing costs have driven people with lower incomes to less expensive, more remote areas that are often underserved by transit. The Regional Equitable Development Initiative Fund, launched in 2017, addresses this access issue. Initiated by Puget Sound Region Council's Growing Transit Committees Strategy, the fund is a $21-million revolving loan created by a coalition of public, private and nonprofit partners to provide affordable housing options in new transit-oriented developments. The fund creates a regional pool of resources to secure land within walking distance of existing or planned high-capacity transit. The fund loans to target developers, who make a commitment to reach specific affordable housing targets. As loans are repaid, they are cycled back into the fund.

◗ **Expand the availability of maps that identify barriers to first- and last-mile access**

WSDOT worked with tribal transportation partners to develop maps that show public transportation services that provide access to rural areas and tribal reservations. The maps are intended to demonstrate the critical role of smaller public transportation providers in delivering first- and last-mile links to services.

Additionally, WSDOT helped to fund the UW Taskar Center for Accessible Technology's OpenSidewalks and Access Map. People with disabilities have particular difficulty navigating safe sidewalks. Once developed, the map will provide a cost-effective and standardized method for identifying navigation challenges in the sidewalk network. Instead of forcing people to rely on trial and error, the map will use sidewalk data to provide an optimized route, tracking elevation changes, construction and other sidewalk issues. The data for the map will be provided by members of the public, trained to use consistent definitions and methodology for cracks, curb cuts, crosswalks, elevation changes and sidewalk furniture. Map-a-thons hosted in Seattle have trained large groups to use the Open Street Maps software to gather sidewalk data for OpenSidewalks in specific areas of downtown Seattle. Long-term plans for this project include a pilot a smaller city using the same crowdsourcing technique.

NEAR-TERM ACTION 3
Continue to develop Practical Solutions methodologies to create a more integrated multimodal system[1]

Practical Solutions is an approach used by WSDOT to advance multimodal and systems thinking in the transportation system. Practical Solutions encourages consideration of all modes of travel, including transit and non-motorized modes, to address the performance needs of the system in collaboration with local partners.

The key to Practical Solutions is early stakeholder engagement. Using Practical Solutions, WSDOT works with community partners to identify operational improvements and demand management strategies. This is done prior to implementing large capital construction projects. This new approach makes better use of the state's existing transportation system, while increasing public engagement and support for integrating multimodal solutions.

◗ **Ensure multimodal transportation is included in Practical Solutions training involving state, regional and local agencies**

Throughout 2017, WSDOT conducted a series of Practical Solutions 101 courses across the state for WSDOT planners, engineers, managers and executive leadership. The course introduces the concept of Practical Solutions to support the integration of multimodal solutions alongside enhanced traffic operations, making better use of the existing transportation system. The course discusses the benefits of land use policies and various modes, including transit, active transportation, passenger rail, demand management and ridesharing. This is done to encourage participants to think holistically about the transportation system and to develop projects that

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[1] Three actions originally listed under Near-Term Action 2 have been moved to Near-Term Action 3:

- Ensure multimodal transportation is included in Practical Solutions training involving state, regional and local agencies.
- Collaborate on plans and identify opportunities to apply Practical Solutions strategies.
- Identify ways to better align grant programs with Practical Solutions.

meet the needs of all users. The course was piloted with WSDOT employees, and will later expand to include regional and local agencies.

Practical Solutions 201 builds on the first training by providing a deeper understanding of multimodal integration and designing transportation solutions that are sensitive to the community needs and that will improve performance. Using research and case studies, this training demonstrates that developing a transportation system that reflects the needs of all users requires collaborating with local partners and understanding their community needs.

● **Collaborate on plans and identify opportunities to apply Practical Solutions strategies**

Statewide planning efforts throughout 2017 presented opportunities to collaborate and share multimodal perspectives over long-term planning horizons. The Washington Aviation System Plan is an example of collaboration between modal interests that enhanced discussions around interconnected statewide issues and increased mobility for people and goods. The Washington Transportation Plan represented an opportunity for all modes to collaboratively discuss their interests to develop an integrated system and the near-term actions that would help implement a Practical Solutions approach.

In addition to collaborating on statewide planning efforts, WSDOT engaged in several initiatives aimed at implementing Practical Solutions. Corridor Sketch, the Performance Framework and Integrated Scoping are all parts of Practical Solutions that involve collaboration between WSDOT divisions. While many of these efforts are ongoing, developing methods for applying Practical Solutions strategies has been beneficial in demonstrating how WSDOT will work with local communities to develop a transportation system that works for all users.

Specifically, the I-5 Near-Term Pilot Project tested an early version of the Integrated Scoping process by identifying Practical Solutions strategies along two stretches of the I-5 corridor (north and south of the Seattle urbanized area). Lessons learned from the pilot

helped refine the understanding efforts needed for community engagement, as well as the performance metrics for addressing gaps in transportation performance.

● **Identify ways to better align grant programs with Practical Solutions**

WSDOT's Regional Mobility Grant Program supports local efforts to improve transit mobility and reduce congestion on the state's most heavily traveled roadways.

During the 2017 session, the Legislature approved 44 new and continuing Regional Mobility Grant -funded projects across the state for the 2017-2019 biennium, appropriating $93 million in state funding for:

- New transit services that connect urban centers.
- Park and ride lots and expansions.
- New buses.
- Rush-hour transit service along congested corridors.

The Regional Mobility Grant Program also took its first step toward alignment with Practical Solutions by adjusting its grant application processes to ensure better coordination between internal and external stakeholders. Applicants can now access online Corridor Sketch and Transportation System Management and Operations tools to identify WSDOT demand management projects to coordinate their proposals with WSDOT regional offices.

◗ **Engage public transportation stakeholders to review and provide comment on proposed changes to practical solutions methodologies**

WSDOT convened a long-range planning committee consisting of WSDOT staff, Regional Transportation/ Metropolitan Planning Organizations (RTPO/MPO) and public transportation partners to identify opportunities to align local and state planning using a Practical Solutions approach. The committee's work includes identifying new multimodal performance measures, as well as ways to better coordinate planning and outreach processes.

Some examples of multimodal performance measures are:

- Ferry ridership.
- Transit on-time performance.
- Park and ride utilization.
- Transit and vanpool ridership.
- Percent of person-miles traveled (interstate and national highway system).
- Annual hours of peak-hour excessive delay per capita (all vehicles).
- Person throughput.

One element of Practical Solutions implementation is Integrated Scoping. Integrated Scoping focuses on developing multimodal transportation options that can be coordinated to meet a performance target on a corridor. It requires the involvement of multi-agency, multidisciplinary and multimodal teams to identify needs, and analyze and recommend different transportation strategies to address performance gaps along a corridor.

Integrated Scoping was tested as part of an I-5 pilot to identify solutions to congestion discussed in this report. The result of this test was the I-5 Near-Term Action Agenda. Implementation of the agenda will be the shared responsibility of several agencies and stakeholders.

Another critical piece of implementing Practical Solutions is developing a method for addressing the limited funding available for the backlog of projects along corridors with the highest need of repair and update. This effort involves developing a complete Performance Framework to allow WSDOT to prioritize and manage corridors across the state. The purpose of the Performance Framework is to:

1. Provide a process for identifying which corridors to fix first.
2. Develop multimodal metrics that allow WSDOT to conduct comparative analysis between highway lane expansion projects and multimodal investments.

To develop a complete Performance Framework, WSDOT worked with stakeholders to produce a series of metrics that could be used to measure mobility. These include reliability, accessibility and efficiency.

WSDOT hosted a series of workshops across the state to understand the economic needs of communities and to develop metrics for measuring the impact of investments on economic vitality. Work to refine these metrics and integrate them into the broader Practical Solutions approach continued into late 2018.

Train and equip staff engaged in public transportation (transit, local jurisdictions, etc.) on how to use the Practical Solutions methodologies

Training is critical part of integrating Practical Solutions into WSDOT's project management practices. WSDOT established a team to develop curricula for Practical Solutions training, with the goal of institutionalizing Practical Solutions in the agency.

As described previously in this report, Practical Solutions classes based on the new curricula were held in 2017 for WSDOT executives and management, followed by classes for planners. The next set of classes is for WSDOT engineers responsible for implementing and designing projects in collaboration with local communities.

Continued WSDOT coordination with the public transportation community also helps to ensure plans reflect the perspectives of all users of the transportation system. WSDOT is in the planning phases for the Washington Transportation Plan, Highway System Plan, and Washington State Ferries Long-Range Plan, all of which include representation from the public transportation community.

As the implementation of Practical Solutions moves forward, there will also be opportunities to rethink how WSDOT's grant programs may be better aligned to target transportation gaps within corridors. The grant programs administered by WSDOT's Public Transportation Division are being reviewed to identify how they could be best applied to achieve the desired result when implemented as part of a package of solutions for a corridor.

Identify pilot projects to test new methodologies

Developing plans through the lens of Practical Solutions is critical to institutionalizing new practices within WSDOT and promoting the development of the state's transportation system.

In 2017, WSDOT launched a partnership to develop near-term solutions for the I-5 corridor, which is discussed previously in this report. WSDOT brought together professionals from local government, transit agencies, planning councils, transportation nonprofits and its own divisions to brainstorm and vet near-term solutions for improving transportation on the I-5 corridor. The result of this effort was the I-5 Near-Term Action Agenda. The agenda includes physical improvements in the I-5 corridor, as well as transit, high-occupancy vehicle and transportation demand management measures. These solutions will be sponsored by various agencies and will include the support and cooperation of all partners.

NEAR-TERM ACTION 4
More clearly identify and address human services transportation needs and gaps

WSDOT's 2013 Statewide Human Services Transportation Plan identifies statewide transportation needs and gaps. The plan draws from analyses of U.S. Census data, best practices research, local coordinated public transit-human services transportation plans and extensive stakeholder engagement. Additional work will be done to update the plan and identify strategic actions that can be taken to address transportation barriers for underserved populations.

Develop, test and provide methodologies to better quantify local human services transportation needs

The methods used to identify human services transportation needs and gaps at the local level are not always consistent. This lack of consistency is due to a number of factors, including limited local

resources and the complexity of the broader human services transportation system, which includes many types of systems serving different types of communities. For example, rural areas are more likely to depend on volunteer drivers, who may be less able to collect data than salaried drivers.

Another challenge to being consistent is the lack of common definitions about performance goals. For example, some communities may have a goal of providing "access" while others may aim to provide "good access." Further, even if these terms are standardized, there is still the question of how to quantify them.

Other complications to data gathering include recent changes to the U.S. Census that make criteria for human services populations more restrictive. Restrictive criteria make it more difficult for individuals to use trips to maintain health, address illnesses and maintain their independence. This change in criteria is also particularly relevant as resource shortfalls are predicted to increase with the state's aging population. The Washington State Department of Social and Health Services currently reports that the Legislature only has resources to help 10 percent of the 70,000 people identified as needing transportation assistance.

This shortage of resources requires a paradigm shift in how resources are used to provide for aging populations, including good data and a customer-facing orientation that prioritizes the needs of individuals and their independence over those of the systems.

To better understand the transportation gaps for vulnerable populations across the state, WSDOT's Public Transportation Division is piloting Sugar Access, a software solution by Citilabs. Sugar Access serves as the basis for an update of the Statewide Human Services Transportation Plan, providing a consistent analysis across all regional planning areas. The Sugar Access pilot is part of a larger pilot to test new methods for understanding the extent of accessibility for vulnerable populations across the state.

● **Provide technical assistance to help local coalitions use these data and methodologies as they update their Human Services Transportation Plans**

WSDOT identified the gaps of human services transportation providers throughout the state by streamlining the development of human services plans with a baseline template. The baseline template also identifies similarities and differences between regions, allowing for a better analysis of services, needs and gaps statewide. The template was deployed in July 2017 and will be used in the development of local coordinated public transit-human services transportation plans and Corridor Sketches (discussed earlier in this report), as well as to prepare local communities for the 2019-2021 WSDOT grant cycle.

The nonprofit Community Transportation Association Northwest also developed two tools to push human services transportation forward. The first is a checklist for siting public facilities. The second is a set of core indicators and nine strategic goals for developing an accessible transportation and mobility system. These two tools are included in a document that outlines best practices and performance measures for mobility management efforts. Both tools are the basis for a universal checklist that Community Transportation Association Northwest is currently developing.

In central Washington, the nonprofit People For People used a two-pronged approach that combines data from the U.S. Census and a survey distributed to the human services community. People For People also worked with community partners such as the Washington State Department of Social and Health Services, Catholic charities, senior centers and local agencies to identify key variables, gaps and needs. Additionally, People For People is working with the Healthier Washington campaign to identify how nonmedical issues are being addressed to encourage more preventative care.

Human services transportation providers continue to develop strategies to increase access for individuals who require human services transportation. Some examples of 2017 efforts include the process for developing local coordinated public transit-human services transportation plans. This process places a strong emphasis on public outreach to identify local human services transportation needs and gaps.

In addition to increased outreach, those developing local coordinated public transit-human services transportation plans are being encouraged to ensure more participation by non-transportation partners in developing and approving the plans. Additional clarification from the Federal Transit Administration, however, is needed to outline the role of non-transportation partners in the approval process.

The Access goal contains the following near-term actions:

1. Gather and use data that provides a more complete picture of public transportation performance gaps and opportunities

2. Develop recommendations to overcome barriers that prevent coordination and efficiency of human services transportation

3. Maximize the effectiveness of park and ride lots as part of the integrated multimodal system

NEAR-TERM ACTION PROGRESS LEGEND

● COMPLETED ACTION

◑ ACTION IN PROGRESS

○ INCOMPLETE ACTION

GOAL 2: ACCESS

Provide and sustain transportation that allows people of all ages, abilities and geographic locations to access jobs, goods, services, schools and community activities

The Washington State Public Transportation Plan defines access as, "the degree to which transportation helps people live productive, healthy lives regardless of age, ability or income."

Gaps in Washington state's current public transportation system continue to persist and grow. These gaps provide challenges to both rural and urban communities, human services transportation, fixed-route services, jobs and recreation.

NEAR-TERM ACTION 1

Gather and use data that provides a more complete picture of public transportation performance gaps and opportunities

Washington is a large state with many different public transportation systems, which each have different budgets, and which serve different communities. Despite this diversity, it is important to establish a consistent method for collecting data on transportation performance gaps and opportunities throughout the state.

A consistent method for collecting data also helps when setting statewide budget priorities, measuring overall system performance, and identifying emerging issues and the strategies for addressing these issues. Currently, there are no standardized methods for local jurisdictions in the state to gather data.

● **Identify priority attributes and a standardized approach to help local jurisdictions collect and store data about their public transportation systems, services and infrastructure, such as transit routes and stops, sidewalks, bikeways, accessibility and transfer points. Consider approaches that engage community members to help gather data.**

Several initiatives underway in the state provide useful examples of best practices and progress in using data to identify service gaps and improve system performance, including King County Metro's service guidelines. The guidelines provide a data-driven policy basis for identifying transit service needs and addressing them with a wide variety of mobility products. Additionally, many of King County Metro's programs, including the Metro Connects development program, are participating in an equity impact review tool to examine programs from an equity perspective. The programs will work to incorporate the tool into early stages of planning.

The Puget Sound Regional Council, King County Metro, Community Transit, Everett Transit, Kitsap Transit, Pierce Transit, Sound Transit

and Spokane Transit Authority are using the transit planning software Remix, which allows for tests on different improvement scenarios to be conducted and access time to be quantified. Remix can also be used to determine how scenarios could affect human services populations.

In 2017, the Seattle Department of Transportation developed a transit equity program. The program affirms the City of Seattle's race and social justice goals and provides safe, environmentally sustainable, accessible and affordable transportation options. The program supports and prioritizes communities experiencing disproportionate transportation equity outcomes. The program's guiding principles are to build community trust through engagement and accountability, provide affordable transportation options, and create opportunities for communities to thrive in a place.

Additionally, as discussed previously in this report, UW's Washington State Transportation Center has been working with the City of Seattle to develop tools for accessing robust data about sidewalks and bike routes to support transit and land use integration. The collaboration, OpenSidewalks, is a standardized approach for mapping pedestrian networks using open data from public agencies combined with public participation in the form of mapathons. OpenSidewalks provides a rich, more detailed way to identify and address system gaps and route optimization, meeting the needs of those with limited mobility, and making connections for all users of the sidewalk network.

● **Communicate data gaps learned through the WSDOT Corridor Sketch Planning process**

At the state agency level, WSDOT is implementing the Corridor Sketch Initiative, which is discussed previously in this report. Some data gaps have already been identified in Phase 1 of implementation. Phase 2 will further highlight the extent of data gaps. The WSDOT regions, excluding Northwest Region, are nearing completion of Phase 2.

Northwest Region's Corridor Sketch timeline is aligned with Puget Sound Regional Council's Regional Transportation Plan. This alignment allows WSDOT

to see priorities and engage stakeholders in a meaningful way to identify the needs of Puget Sound communities. As such, Puget Sound area Corridor Sketches highlighting the complexity of planning in an urbanized area continue to be developed.

The information gathered during the Corridor Sketch Initiative reveals new opportunities for WSDOT to use data and stakeholder input to strategically invest in transportation improvements.

WSDOT is also working with local jurisdictions to strategically install bicycle counters. The counters will collect a representative sample of bicycle and pedestrian use based on methods developed by the University of Portland. Bicycle and pedestrian data provides more comprehensive information about modal data gaps, and will aid in informing investments in the transportation system.

Additionally, WSDOT Southwest Region uses local six-year plans to map the locations of planned projects to inform WSDOT's project scoping. This process highlights ways that WSDOT projects can integrate with local projects to minimize the impact on the transportation system and improve system performance.

◐ **Gather and use data from the bicycle and pedestrian count program**

Linking public and private sources of data will be a useful way to understand the growing role of transportation network companies in the travel market. To do this, privacy and data sharing issues must be resolved.

While robust data is available through transit and bikeshare programs, transportation network company data is largely proprietary. However, there has been progress in data sharing for these companies. An example is Uber's Movement website, which shows patterns by time of day.

The National Association of City Transportation Officials has also developed sharing standards between cities and private transportation providers. These standards allow private mobility providers to exchange data with cities in the most secure, cost-effective and efficient manner possible.

The City of Seattle developed several shared mobility performance metrics that promote equity and the linkage between public transportation and economic outcomes. These metrics will be incorporated into a shared mobility webpage dashboard. With the webpage launch, Seattle will be the first city in the U.S. with a shared mobility dashboard.

King County Metro's long-range plan, Metro Connects, also includes strategies for integrating public transportation modes. Based on King County Metro and Sound Transit's Non-Motorized Connectivity Study, along with the investments made for parking, Metro Connects may fund bicycle and pedestrian access improvement to transit stops across King County in partnership with local jurisdictions.

◐ **Provide information about tribal transportation services in a way that can be incorporated into transportation maps**

WSDOT is working with tribal transit representatives to produce transit maps and graphics at both the statewide and local levels. The partnership has already produced prototypes, which continue to be refined based on feedback from tribal representatives.

Related to this work, General Transit Feed Specifications (GTFS) data is being collected from tribes across the state to provide a more comprehensive view of where public transportation is provided. GTFS is the standard method used to provide route and bus stop data. This data can be used in conjunction with Google Maps to assist the public in choosing public transportation options.

Tribes and WSDOT continue to format tribal transportation data in GTFS. Future maps will be able to show the broader integration of public transportation into areas of the state not covered by transit, demonstrating the role of smaller public transportation providers in delivering critical first- and last-mile links to services.

NEAR-TERM ACTION 2
Develop recommendations to overcome barriers that prevent coordination and efficiency of human services transportation

There are four, long-standing issues that continue to impede coordination of human services transportation:

- Medicare and Medicaid transportation funding have different requirements for medically necessary and covered services.
- Siloed funding translates into siloed definitions of program success, resulting in a reluctance to explore new types of partnerships and service delivery models that focus on a broader goal of independence for all people.
- Additional funding is needed to address the demand for human services transportation.
- Due to confidentiality agreements for patients, there are perceived data sharing barriers, specifically for mental health and substance abuse patients, who account for over 50 percent of trips provided.

The Moving Ahead for Progress in the 21st Century Act (MAP 21) directed the Coordinating Council on Access and Mobility (which includes all federal programs that fund transportation) to develop a cost sharing plan. Federal agencies are still in the process of completing this plan.

Again, these challenges are systemic and long standing. The near-term actions identified in this report are intended to make incremental coordination and efficiency improvements that can be accomplished at the state agency and local level.

◐ **Develop recommendations that will advance complete mobility solutions for people who use federally funded transportation programs. Base the recommendations, in part, on the work of the federal Coordinating Council on Access and Mobility**

The federal Coordinating Council on Access and Mobility is in the process of developing a strategic plan in response to Fixing America's Surface Transportation (FAST) Act requirements. The plan includes recommendations by the Federal Opportunities Workgroup that seek to address some of the long-standing issues described in the section above.

To facilitate this work, the coordinating council is sponsoring three interagency workgroups to oversee the implementation of FAST Act requirements. The workgroups are intended to focus on cost allocation, strengthen interagency collaboration and draft policies to eliminate barriers to local transportation coordination.

During 2017, human services transportation benefited from:

- Increased availability of more effective methods for treating opioid addiction, which may translate into more capacity for Health Care Authority trips for those with other needs.

- Community wellness and nutrition programs, which improve health and reduce the strain on social service systems.

- Programs supporting housing access, utility assistance and senior voucher programs, which help people maintain their social independence and health.

- Greater coordination among human services transportation providers and other human service agencies, which continue to create synergies and efficiencies to make more effective use of limited financial and human resources.

Related to this work, King County Metro has been working with the City of Seattle and Sound Transit on a program called Mobility as a Service. This program builds off similar models being developed in other cities and states, and has the potential to provide benefits to all users by improving service availability while reducing response times and delivery costs. King County Metro is assessing the possibility of demonstrations of the program in King County.

King County Metro also runs several reduced fare programs for low- or no-income individuals. Through ORCA LIFT, the agency offers a reduced fare of $1.50 to individuals below 200 percent of the federal poverty level. Through the Human Services Ticket Program, the agency allows human service agencies to buy tickets for their low- or no-income clients at 10 percent of the price (King County Metro subsidizes the remaining 90 percent). As of 2018, King County Metro will cap its subsidy of these tickets at $4 million. The agency has also been directed by the King County Council to explore the possibility of a very-low income fare, and is considering ways to administer the program through ORCA. The agency will also continue research to better understand the barriers facing very-low income riders, and developing solutions to help those customers in 2018. Finally, King County Metro will work with human services agencies to test the use of ORCA products in the Human Services Ticket Program in 2018.

Additionally, on-demand transportation services have the potential to increase accessibility for clients of human services transportation especially with the rise of transportation network companies such as Uber and Lyft. During 2017, there was extensive discussion about appropriate regulations for transportation network companies, such as background checks and insurance standards.

● **Pilot for the use of seamless data-sharing between two human services transportation service providers**

One promising innovation has been the development of Goin, a rider app and mobility management platform. Goin provides a cloud-based service that integrates ridesharing companies (such as Uber and Lyft) to the various human services transportation

markets, including paratransit, medical transportation, and others eligible for flexible services under the Americans with Disabilities Act (ADA).

Goin integrates with various transportation options to give riders a choice, facilitates access to ride subsidies and incentives, and uses real-time updates from both on- and off-line technologies to connect with riders the way that they prefer.

For transit agencies, Goin offers an easy-to-use platform to manage their transportation providers, services and riders for compliance and stewardship.

Goin currently serves transit agencies, government organizations and medical facilities. In Washington state, the app is used by Yakima Transit, Spokane County and Ride to Care. Goin is also a Federal Transit Administration Mobility on Demand grant partner. Early outcomes of the service are showing reduced wait times for riders and cost savings for mobility managers.

NEAR-TERM ACTION 3
Maximize the effectiveness of park and ride lots as part of the integrated multimodal system

Strategies to maximize the number of people who can easily get to and from a park and ride are essential to the success of the state's public transportation system. To develop these strategies, WSDOT convened the System Planning Task Force to coordinate near-term implementation of this near term action. The task force identified several outcomes that could be used to evaluate the success of a park and ride management system:

- Increase the number of transit users per parking space.

- Increase person throughput by shifting people from less to higher efficiency modes.

- Remove barriers that impede local management of parking facilities.

- Meet maintenance and preservation standards.

In areas with lower population densities where people are often not within walking distance of public transportation options, bus feeder systems and park and ride lots may support access. However, these

solutions are expensive and those that have been implemented are often near or over capacity.

In urban areas, it is increasingly necessary to facilitate access by alternative modes and to otherwise manage demand of park and ride spaces. The state and local governments have considered many innovations, such as pricing strategies, transit-oriented development and joint development to address the ongoing issue in urban areas of park and ride overcrowding.

Work is underway to obtain data to test for the most effective strategies from the standpoint of ridership and investment. For example, the Bel-Red Corridor Study's project team is modeling the comparative ridership potential between park and rides and transit-oriented developments.

● **Identify and act on issues related to park and ride management such as overcrowding, access for handicapped users, bicycle/pedestrian access, ease of customer use and safety. Support and implement pilot parking management strategies at selected overcrowded park and rides**

Park and rides are expensive to develop and difficult to expand. With increasing congestion at park and rides, jurisdictions are exploring ways to make more efficient use of these facilities. Strategies include providing preference to rideshare by allocating premium parking spots to rideshare users, as well as making it more convenient for people to get to and from park and ride lots without a car.

The Puget Sound Regional Council is leading a regional effort to improve the performance of central Puget Sound region park and rides, as well as to provide a consistent user experience. WSDOT, Federal Highway Administration, Federal Transit Administration and local transit agencies worked together to identify legal and policy barriers around the use of pricing and other demand management strategies.

Because park and rides are owned by a number of different entities (e.g., WSDOT, transit agencies, and cities), barriers to implementing pricing and other demand management strategies vary based on which entity owns the lot.

In recent pilot projects, local transit agencies increased the number of people using park and ride lots by

providing reserved parking for those traveling to the park and ride in a carpool or vanpool. For example, King County Metro and Sound Transit launched projects in February 2017 to test the concept of a high-occupancy vehicle permit for reserved parking for those traveling to the park and ride in a carpool or vanpool. This effort was part of a study to assess a range of multimodal and parking strategies. In addition, reserved parking allowed carpools and vanpools to arrive later, shifting some transit riders out of early-morning, crush-load buses and trains.

WSDOT is working with the City of Kirkland, Sound Transit and King County Metro Transit to explore a transit-oriented development pilot at the Kingsgate Park and Ride. This park and ride is owned by WSDOT and managed by King County Metro. Sound Transit is building a parking garage at this location as part of their I-405 bus rapid transit project, and are assisting in the analysis of transit-oriented development potential at this site.

Jurisdictions are also testing the use of Uber, Lyft and other transportation network companies as an alternative to expanding park and ride lots. King County Metro is piloting an app that allows riders to join a shared van at the Mercer Island Park and Ride on a day-to-day basis, rather than committing to a specific vanpool. Another approach is a vanshare program operating at King Street Station, transporting riders between the commuter rail station and work.

Pricing strategies, such as peak fares or variable toll lanes, have proven effective to manage demand in transportation. This strategy is under consideration by several transit agencies. It should be noted, however, that pricing cannot be used for park and rides that operate on state-owned land because WSDOT does not have the authority to charge for space in park and ride lots it owns. In these lots, at least for now, pricing is not a viable strategy for demand management.

● **Continue to implement strategies to promote development around transit stations**

One way to make park and rides a more integrated part of the public transportation system is to increase their function as something more than design guidance. Joint development and transit-oriented development reduce auto use and increase transit ridership by directly linking the transportation network with retail, commercial and housing opportunities. At the same time, these efforts help to meet the overall land use and economic development goals for the surrounding community, and can provide additional revenue based on the fair market value of a transit agency's property.

Other parking management efforts are focused on the connection between transportation and land use. For example, Pierce Transit required the developer of a transit-oriented development near the Tacoma Dome Station to provide ORCA cards to new tenants, which supports of the City of Tacoma's parking management policies.

In 1993, the Northgate Urban Design Framework described a vision that would transform a large and underutilized transit center and parking lot into a walkable, dense urban center. Since then, significant investments by King County Metro and Sound Transit have resulted in major improvements, including breaking up superblocks and the development of housing and entertainment venues. The current Urban Design Framework anticipates the opening of a new light rail station in Northgate in 2021. The station plan includes proposals for increased housing, street improvements and design guidance for new development. By facilitating public transportation access, the development will make it feasible to consider living in a community where no car is needed.

The Adaptive Transportation Capacity goal contains the following near-term actions:

1. Establish an interdisciplinary innovation center to foster and better support public transportation innovation and adaptation

2. Pilot the use of a multimodal, corridor level mobility index

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GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY

Use new technologies and partnerships to make better use of existing transportation assets and meet changing customer needs

The Washington State Public Transportation Plan defines Adaptive Transportation Capacity as "strategies that help transportation become more efficient, adaptable and resilient, often through advances in technology and innovative approaches."

These strategies improve system productivity and the user experience. For example, advancements in real-time rideshare, mobility management and fare payment help transit operators achieve greater efficiency with advanced tools for tracking and management of vehicles. At the same time, transportation providers can reduce their waits at bus stops with real-time data.

Real-time data (in conjunction with digital technology) can be used to track and improve system performance. It may also be used to evaluate new solutions and strategies for expanding person-carrying capacity within existing roadway constraints.

NEAR-TERM ACTION 1

● **Establish an interdisciplinary innovation center to foster and better support public transportation innovation and adaptation**

The UW Mobility Innovation Center and the Seattle Chamber led Challenge Seattle throughout 2017, establishing a partnership between UW, public agencies and the private sector. In line with its commitment to undertake interdisciplinary, short-term projects, the Mobility Innovation Center conducted a study to identify the major legal and policy issues that Seattle and other cities should consider as they prepare for the arrival of autonomous vehicle technology. The Mobility Innovation Center's analysis is informing cities and transportation agencies about the range of issues that must be addressed as AV technology pursues its rapid development. For more information, see the *Challenge Seattle 2017 Annual Report: Working Together for a Better Future* and *Driverless Seattle: How Cities Can Plan For Automated Vehicle*.

The Mobility Innovation Center is also engaged in the following studies, drawing from the three-way partnership of academia, government and private sector:

- **Improved Incident Response on I-5: Using Technology to Speed Clearance and Get Traffic Moving** – Designed to examine how technology may be leveraged to improve incident clearance in the I-5 corridor and mitigate the resulting traffic impacts.

- **Alternative to Gas Tax? Developing an App to Pilot a Road Usage Charge** – Designed to develop a mobile app to enable the state to pilot a road usage charge, a per-mile fee paid by drivers as a potential alternative revenue source for transportation infrastructure.

- **Virtual Command Center** – Designed to create a system where transportation agencies share data to enhance planning and operations and provide the public with accurate and real-time travel information to enable more informed travel choices.

NEAR-TERM ACTION 2
Pilot the use of a multimodal, corridor level mobility index

WSDOT's transition to a more multimodal and integrated focus for planning and project delivery requires the development of different types of performance metrics.

● Improve the quality, consistency and access to data sets

Measurement tools available today tend to be mode specific, which is not conducive to the concept of system integration.

Traditionally, the development of measurement tools for system integration start with a conversation about what represents success relevant to a multimodal and integrated system. The Washington State Public Transportation Plan Data Task Force suggested that metrics for success include:

- Single-occupancy vehicle trip data
- Person throughput
- Meeting accessibility standards
- Measurements of the transfer between modes
- Trip numbers and number of cars on the road during peak hours
- Interregional connections
- Public perception and awareness of the system and its features

In line with these recommendations, as discussed previously in this report, GTFS defines a common format for public transportation schedules and associated geographic information. GTFS provides transit agencies throughout the state with the ability to have their fixed route and bus stop information accessible in online maps. This allows the public to see their transit options when planning a trip. WSDOT has worked with local transit agencies to format their route and bus stop data for GTFS, and published the data to make it easier for the public to know about their public transit options. Future plans include working with nonprofit and tribal transportation providers (as discussed in *Improving Tribal Transportation Information* in this report) to upload their information into GTFS format for greater accessibility across the state.

● Participate in the development of federal, state and local categories for performance measurement

After MAP-21 became law, recipients of federal funds were directed to include performance management in their transportation programs in order to increase accountability and transparency of transportation investments that use federal funds. In 2017, using technical teams and working groups, WSDOT worked with MPOs to set targets in performance areas such as reducing emissions and congestion, as well as improving freight, vehicle and people movement.

Since the performance measurement mandate has been many years in development, this work will continue into 2018, when federal requirements for adoption of performance targets are due.

As a result of this coordination, WSDOT adopted safety performance targets proposed in August 2017, and is on schedule to review and approve the targets for pavement and bridges in 2018.

This process has resulted in a better understanding of local and state methods for collecting data, and the increased need for coordination to develop consistent data aligned with federal goals.

● Produce and use at least one mobility index

In 2017, WSDOT developed a draft mobility Performance Framework to enhance the ability to analyze the performance of modal investments and their contribution to the performance of the transportation system as a whole.

The following near-term actions were identified to support WSPTP's Customer Experience goal:

1. Support Target Zero Plan strategies intended to reduce pedestrian and bicycle fatalities and injuries

2. Provide tools and techniques to be used by transportation providers to enhance customer experience.

3. Support efforts to make it easier for customers to pay for transportation services and manage transportation payments, regardless of agency, organization or mode.

NEAR-TERM ACTION PROGRESS LEGEND

● COMPLETED ACTION

◐ ACTION IN PROGRESS

○ INCOMPLETE ACTION

GOAL 4: CUSTOMER EXPERIENCE

Enhance everyone's transportation experience by providing public transportation that is safe, seamless, pleasant, convenient, reliable, relevant and understandable

The Washington State Public Transportation Plan places a strong emphasis on customer experience. This is because public transportation systems only succeed to the extent that they meet the needs of their customers.

Public transportation services and market development strategies should be developed from the point of view of the customer. Customer-centered metrics must also be developed to measure their success. Standard measures of customer service include on-time performance, mode shift, travel times and customer satisfaction surveys.

One of the most effective strategies in Washington for connecting people with public transportation has been the Statewide Commute Trip Reduction Program. Since 1991, the program has worked in partnership with major employers to reduce drive-alone trips and vehicle miles traveled by commuters. Today, more than 1,050 worksites and 530,000 commuters statewide participate in the Statewide Commute Trip Reduction Program. Employers regularly report on their CTR programs, and jurisdictions report on progress toward meeting drive-alone and vehicle miles traveled reduction targets, as well as their use of state CTR funds.

Over the years, employers and local jurisdictions have developed many customer-focused approaches to reduce drive-alone rates. Some programs, such as Whatcom Transit Authority's Smart Trips, use a combination of incentives, logging trips and information feedback to provide a positive customer-focused experience. In this model, participants' commute choices are reflected in data that shows impacts to the environment, personal health and transportation cost savings.

As the nature of the modern work environment has changed to include flexible hours and workplaces, the Statewide Commute Trip Reduction Board and others in the field of public transportation look to move beyond the traditional focus on commuter travel. Their hope is to include all transportation modes, potential public-private partnerships, new tools such as customer relation management and big data to spur modal integration and customer centered innovation.

The Washington State Public Transportation Plan encourages collaboration among public transportation providers to improve the public transportation experience and to help the public better understand and use multimodal options. This work may lead to the development of a multimodal customer experience dashboard.

NEAR-TERM ACTION 1

◐ **Near-Term Action 1: Support Target Zero Plan strategies intended to reduce pedestrian and bicycle fatalities and injuries**

At the recommendation of their insurance provider, the Washington State Transit Insurance Pool, Intercity Transit installed cameras as a way to mitigate risk to their customers. The cameras are a valuable addition for the agency and the customers that use the system, instilling a sense of safety for the passenger.

The cameras have the added benefit of providing footage in high-risk locations where pedestrians cross the street to board the bus. In these areas, passengers may need to cross multiple lanes to catch the bus. Automobile drivers may pull around the bus, setting up a potential collision with pedestrians. The footage of these near misses and incidents can be used to enhance street design and driver awareness, reducing the potential for pedestrian collisions.

NEAR-TERM ACTION 2

Provide tools and techniques to be used by transportation providers to enhance customer experience

The Washington State Public Transportation Plan encourages sharing tools and techniques from various sectors to help make public transportation a more attractive choice for travelers. During 2017, public transportation providers throughout the state improved their customer services by developing more efficient ways for riders to plan their trips, to resolve customer concerns, and develop customer-focused solutions.

◐ **Conduct workshops focused on best practices and identify ways to implement customer experience improvements[2]**

Technology innovations improved the ability of public transportation providers to provide timely information to their customers. For example, King County Metro's new Real-Time Improvement Project integrates all-rider alert tools (e.g., Twitter, web, texts) into a single-entry portal. Today, riders in King County can access the platform of their choice to get real-time information about when their bus will arrive. The project also explores other capabilities, such as the ability to gather information on whether a bus is full or about capacity at park and ride lots. There is potential for other agencies to use this program.

Other innovations using vanpools to improve customer experience also show promise. King County Metro is piloting a new commuter van service that leverages a third-party mobile rideshare application, linking with RideshareOnline.com and offering empty seats in vans. The third-party service provides an optional notification to riders before pickup and is piloting text alerts. King County Metro also offers a vanshare program at King Street Station to transport riders between the commuter rail station and work.

King County Metro's SalesForce customer relation management system offers a powerful tool for obtaining data to improve customer service. In the system's first year, the turnaround time for responses to customer complaints decreased from 14 to 4 days. Because of the tool's analytical capability, the agency is able to quickly identify and address systemic problems.

Spokane Transit's real time information portal moved out of testing in 2017. The information portal is now accessible via Google Maps, and is available for developer use. This supports trip planning/GTFS data that has been produced for customers and developers since 2010.

Agencies, such as Intercity Transit in Thurston County, developed online platforms that allow customers with disabilities who use Dial-A-Lift or similar programs to schedule rides online. Similarly, Skagit Transit implemented an integrated voice response system for demand response services. The system sends automated reminders to a customer's phone in advance of a scheduled pick up (one day prior and 15 minutes prior). Implementing this system reduced the

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[2] This action was originally listed as two separate actions:
- Conduct workshops focused on best practices.
- Identify ways to implement customer experience improvements.

number of missed rides and dwell times while waiting on customers. Considering the long rural routes in the Skagit Transit service area, this customer-focused approach benefits both customers and the agency in time and cost savings.

The City of Seattle is leading an effort to improve wayfinding for mobility-impaired users. With funding through WSDOT's Regional Mobility Grant Program, the accessible pedestrian signal mobile application will create a centralized data platform to provide mobility-impaired users wayfinding information through audible and vibratory messaging, including safe intersection crossing.

Seattle's Downtown Transportation Alliance, a partnership between the Downtown Seattle Association, City of Seattle, King County Metro and Sound Transit, launched numerous projects over the last several years, including a coordinated response to the SR99 tunnel construction. In 2017, the group continued to work together to coordinate route planning and capital projects in anticipation of new light rail services that will displace buses from the downtown Seattle transit tunnel in 2018.

Additionally, the Downtown Transportation Alliance launched the jointly funded One Center City 20-year plan that addresses, among many issues, how people move through and experience Seattle's Center City neighborhoods as downtown Seattle grows by over 25,000 households and 55,000 jobs. One Center City will include short-term and long-term actions, including multimodal improvements, service coordination and capital improvements.

● **Develop and use technology that benefits users of multiple agencies, such as the next generation of ORCA, Rideshare Online and One Bus Away, dispatching systems, parking management systems, security systems and real-time transit location devices.**

The ORCA card, introduced in 2009, allows Puget Sound transit riders to use seven partner agencies' transit systems, and allocates farebox revenue to the appropriate agency automatically.

Kitsap Transit has offered a low-income fare since the original rollout of ORCA in 2009. In 2015, King County

Metro adapted the Kitsap Transit low-income fare and introduced ORCA LIFT. In 2016, Sound Transit also offered ORCA LIFT. The low-income fare is available to individuals who earn less than 200 percent of the federal poverty level. Additionally, King County Metro is exploring the possibility of a very-low-income fare or other options for very-low-income riders, described earlier in this report.

King County Metro and Sound Transit are also analyzing ways to incorporate ORCA into the Human Services Ticket Program, which provides subsidized bus tickets to eligible human service agencies.

ORCA continues to produce value for transit riders and agencies, reducing the costs associated with fare collection, maintenance and revenue allocation. ORCA also helps reduce customer boarding times, improving transit speed and reliability, particularly on routes with a high number of ORCA users.

The ORCA system, however, needs an update. The equipment is becoming obsolete and difficult to replace. To address this need, partner agencies are

working together to develop the Next Gen ORCA. Next Gen ORCA will use updated payment methods that more easily accommodate the Puget Sound region's growing public transportation system. The payment methods will also be more compatible with other modes of public transportation. Next Gen ORCA is expected to be fully online between 2022 and 2023.

◐ **Identify ways for public transportation data to be more accessible to application developers**

For several years, transit agencies around the state have made their data available to private developers. As such, apps continue to be developed to enhance the experience of travelers as they move between transit modes. Businesses such as Transit App, introduced in October 2017, tell travelers when their next bus or train will arrive, where to find a Car2Go, or even the nearest shareable bike. Transit App combines a person's location with real-time schedules and locations of transportation services to help passengers determine the best way to make a trip.

NEAR-TERM ACTION 3

● **Support efforts to make it easier for customers to pay for transportation services and manage transportation payments, regardless of agency, organization or mode**

Digital payment systems have existed in many other industries for years. Public transportation partners recognize that to stay competitive and meet the expectations of the public, payment options for their services need to keep pace.

In addition to the ongoing development of Next Gen ORCA discussed above, Pierce Transit piloted a digital ridership system in 2017 using a phone app. Riders activate the app when the bus is approaching and validate the ride token that appears on the screen. The pilot proved to be popular for users, who appreciated the simplicity of paperless transfers and bus passes.

The following near-term actions were implemented to advance the Washington State Public Transportation Plan Transportation System Guardianship goal:

1. Develop a plan and begin implementation to increase stakeholder and public understanding of the value of public transportation

2. Identify and report key risks that threaten public transportation infrastructure and performance

3. Begin development of supplementary measures to improve understanding of public transportation performance in the context of a complete, integrated transportation system

NEAR-TERM ACTION PROGRESS LEGEND

● COMPLETED ACTION

◐ ACTION IN PROGRESS

○ INCOMPLETE ACTION

GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP

Protect, conserve and manage Washington's transportation assets in a manner that maximizes and sustains their value to the public transportation system

The public transportation partners who shaped the Washington State Public Transportation Plan emphasized a shared responsibility for the health of the state's public transportation assets. System guardianship is defined as:

- Maintaining the physical condition of transportation infrastructure.

- Ensuring and demonstrating that transportation investments are made in a manner that maximizes value to the public – economic, social and environmental.

- Ensuring the transportation system continues to respond to the needs of Washington's residents, communities, visitors and businesses.

NEAR-TERM ACTION 1

○ **Develop a plan and begin implementation to increase stakeholder and public understanding of the value of public transportation**

This near-term action anticipates an inventory of current efforts, identification of gaps in understanding and development of goals, strategies and work plans.

Public transportation investment depends on public support. During the Washington State Public Transportation Plan planning process, many stakeholders expressed concerns with the low level of understanding about the value of public transportation in their communities. Increasing this understanding will help people make more informed decisions about different types of transportation investments.

Statewide public opinion data related to public transportation tends to be gathered rarely and on an ad hoc basis. Organizations at the local and regional levels conduct public opinion research more frequently, but much of this research is also on an ad hoc or project basis. However, agencies use other methods to gather public opinion information. For example, agencies conduct in-person and online community engagement regularly. The effect these efforts have on public understanding of the transportation system as a whole has not been determined.

NEAR-TERM ACTION 2

Advance opportunities for integrated multimodal investments

This near-term action is intended to support a transition from multiple transportation systems defined by different modes to an integrated system that prioritizes the movement of people and freight. While this transition has been slowly occurring over a number of years through the advancement of high-occupancy vehicle lanes, light rail and taxing authority, the Washington State Public Transportation Plan intends to increase multimodal investment opportunities. Ensuring these opportunities is made more urgent by the combination of Washington's aging transportation infrastructure and economic success.

○ **Identify and report key risks that threaten public transportation infrastructure and performance**

In addition to making investments in new facilities, integrating multimodal investments must also include protecting the existing public transportation system from challenges, such as:

- Lack of maintenance.

- Competing priorities.

- Changing community needs.

- Local natural disasters.

- Changing federal policy priorities.

The entire transportation system is vulnerable to these challenges due to the diminishing reliability of gas tax revenue and the deterioration of infrastructure and vehicle fleet. Alternative approaches to funding transportation, such as a carbon tax or road usage charges, have been challenging to implement for a variety of reasons, including:

- A general lack of public awareness about the urgency of the transportation funding crisis.

- Fears about the loss of privacy.

- Dual taxation.

- The role that public transportation can play in making better use of our transportation resources.

◐ **Identify and report key opportunities for public transportation that enhance mobility and solve transportation problems**

Voters in several Washington counties passed public transportation revenue measures, such as Sound Transit 3, a $53-billion package funded through a variety of taxing mechanisms. Other local efforts to increase sales tax include:

- 2017, Garfield County Transportation Authority, 0.4 percent increase.

- 2016, Spokane Transit Authority, 0.2 percent increase.

- 2016, City of Ellensburg, 0.2 percent increase.

- 2015, Grays Harbor Transportation Authority, 0.1 percent increase.

- 2015, Okanogan County Transportation Authority, 0.4 percent increase.
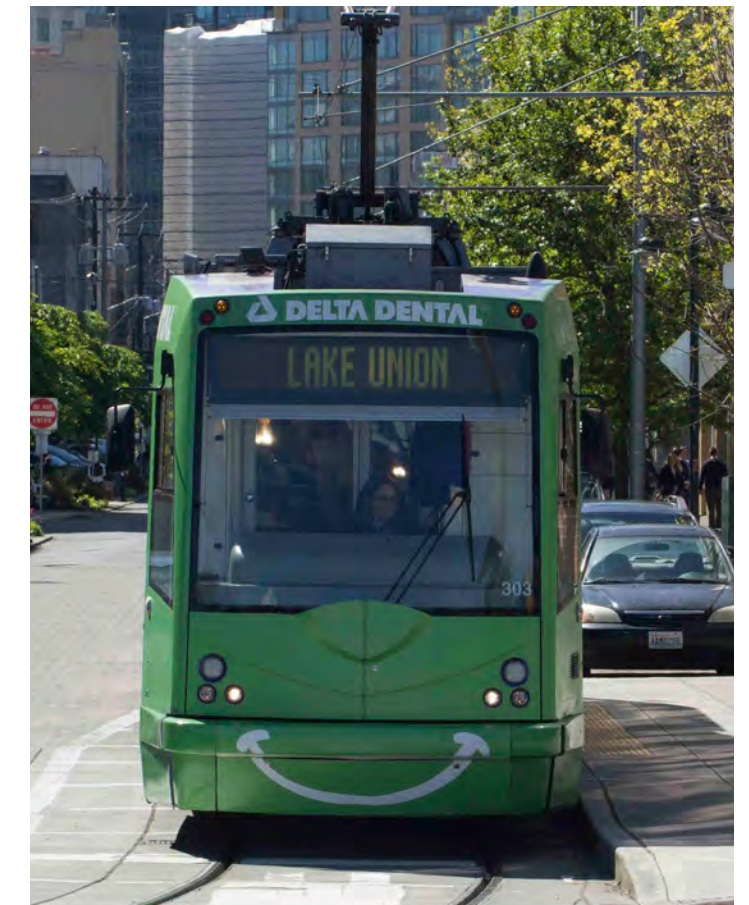
Additionally, in 2017 the legislature considered a bill allowing Intercity Transit to increase their local taxing authority by 0.3 percent. The bill was passed in early 2018.

Several cities across the state have also created transportation benefit districts to provide an ancillary benefit to public transportation. Transportation benefit districts support public transportation through the development and preservation of street and sidewalk infrastructure, improving access to public transportation facilities and bus stops.

● **Begin development of supplementary measures to improve understanding of public transportation performance in the context of a complete, integrated transportation system**

WSDOT embarked on a process to develop a set of multimodal metrics through the creation of a Performance Framework designed for making more informed multimodal investment decisions.

The Performance Framework seeks to go beyond traditional approaches for measuring capacity in terms of vehicle throughput. Instead, the framework captures the value of maintaining efficiency and providing transportation access to all users of the transportation system, regardless of mode. Supplementary measures focused on access, efficiency and predictability can transform the transportation system by using metrics that focus on the value of building thriving communities.

Another effort at WSDOT focused on the nexus of transportation and health through the development of measures that identify the health impact of transportation decisions. The collaborative research project between Washington State Department of Health, WSDOT and UW was designed to improve WSDOT's ability to incorporate public health considerations within planning and project development. This work also aligns with WSDOT's approach to environmental justice. The final report recommended several areas to improve how WSDOT measures transportation impacts on vulnerable populations. For more information, see *Incorporating Public Health in WSDOT Design and Project Development* earlier in this document.

NEAR-TERM ACTION 3
Identify ways to help jurisdictions and public transportation providers better prepare for emergencies and disasters

In recent years, the number and severity of natural and manmade disasters has increased in scope and scale. Public transportation systems can play a significant role during evacuation, and human services transportation providers can play a critical role in identifying and locating individuals that are mobility-impaired and providing vehicles that can be leveraged for evacuation.

● **Work with the Federal Emergency Management Agency and others to develop a model memorandum of understanding, agreements and other documents that support resource sharing and interagency coordination, and assess data about people with special transportation needs, identify gaps and opportunities and recommend improvements.**

In 2017, resources were directed toward inter-jurisdictional efforts by WSDOT, local government and public transportation agencies to address environmental risks posed by natural disasters and climate change.

Over the past several years, WSDOT has been involved in assessing the resiliency and vulnerability of transportation assets to the impacts of climate change. An example of this is WSDOT's partnership with the Federal Highway Administration and local agencies in Skagit County to conduct a pilot project for coordinating adaptation planning with ongoing flood risk reduction efforts. While not specifically using public transportation assets, this pilot offers promising applications for analyzing the impacts of climate change on the assets. To date, WSDOT has developed a risk assessment list for aviation and ferries modes to address climate change. This work has yet to be initiated for public transportation.

In addition to adaptation and resiliency, WSDOT's Risk Management division is considering new metrics for risk analysis. The division is currently working with a stakeholder group to identify these items. Once identified, the items will be ranked to form a scale of vulnerability.

● **Further incorporate and refine transportation for people with special transportation needs into emergency and disaster plans**

In 2017, Community Transportation Association Northwest facilitated a panel to discuss best practices and to develop memorandum of understanding templates that local agencies can use when coordinating with providers of human services transportation. These templates present additional resources for smaller agencies to prepare for effective and efficient respond in coordination with partners during an emergency.

Prior to 2014, the Washington State Department of Social and Health Service's Xena website provided information about where vulnerable populations reside for emergency management services. Some non-confidential data continues to be publicly accessible through a geospatial data library and portal.

ACRONYMS AND ABBREVIATIONS

ADA	Americans with Disabilities Act
CTR	Commute Trip Reduction
FAST Act	Fixing America's Surface Transportation Act
GTFS	General Transit Feed Specification
MAP-21	Moving Ahead for Progress in the 21st Century Act
MPO	Metropolitan Planning Organizations
ORCA	One Regional Card for All
RTPO	Regional Transportation Planning Organization
UW	University of Washington
WSDOT	Washington State Department of Transportation

WEBSITES FEATURED

Washington State Public Transportation Plan	www.wsdot.wa.gov/Transit/TransportationPlan
The Innovative DOT: A Handbook of Policy and Practice	smartgrowthamerica.org/app/uploads/2016/08/the-innovative-dot.pdf
Washington Transportation Commission's Livable Communities Policy	www.wsdot.wa.gov/sites/default/files/2017/08/09/PracSol-LivableCommunities.pdf
Washington State's CTR Law	apps.leg.wa.gov/rcw/default.aspx?cite=70.94.521
The Washington State Growth Management Act	apps.leg.wa.gov/RCW/default.aspx?cite=36.70a
Lynnwood Transit Center Multimodal Accessibility Plan	www.wsdot.wa.gov/sites/default/files/2016/12/08/LMAP_FINAL_Report_113016.pdf
Remix Evaluation Report	www.psrc.org/sites/default/files/remixreport_2017-final-070717.pdf
Washington Aviation System Plan	www.wsdot.wa.gov/aviation/Planning
2013 Statewide Human Services Transportation Plan	www.wsdot.wa.gov/sites/default/files/2017/05/02/WAStatewideHumanTransportationServicesPlan-2014.pdf
Community Transportation Association Northwest	www.ctanw.org
People For People	www.pfp.org
FAST Act	www.fhwa.dot.gov/fastact
Challenge Seattle 2017 Annual Report: Working Together for a Better Future	docs.wixstatic.com/ugd/e29733_a10a16bce4d70af45ed958948329d.pdf
Driverless Seattle: How Cities Can Plan For Automated Vehicle	www.mobility-innovation-center.uwcomotion-sites.com/wp-content/uploads/2017/02/TPL_Driverless-Seattle_2017.pdf
Next Gen ORCA	www.nextgenorca.com

WSDOT WOULD LIKE TO THANK ITS PARTNERS FOR PARTICIPATING IN THE 2017 WASHINGTON STATE PUBLIC TRANSPORTATION PLAN NEAR-TERM ACTIONS

City of Seattle

Coastal Transport

Community Transit

Community Transportation Association Northwest

Commute Seattle

Cowlitz County Human Services

Fehr and Peers

Goin

Governor's Committee on Disability Issues and Employment

Hopelink

Human Services Council

Intercity Transit

Jefferson County Public Health
Developmental Disability Program

King County
Developmental Disabilities Division

King County Metro

Medstar

Muckleshoot Indian Tribe

People for People

Pierce Transit

Puget Sound Regional Council

Quinault Indian Nation

River Cities Transit

Seattle Children's Hospital

Sound Transit

Spokane Transit Authority

State of Washington Transportation Improvement Board

Thurston Regional Planning Council

University of Washington

Washington State Department of Health

Washington State Department of Social and Health Service
Aging and Long Term Support Administration
Washington State Independent Living Council

Washington State Ferries

Washington State Health Care Authority

Washington State Transit Association

Washington State Transportation Commission

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