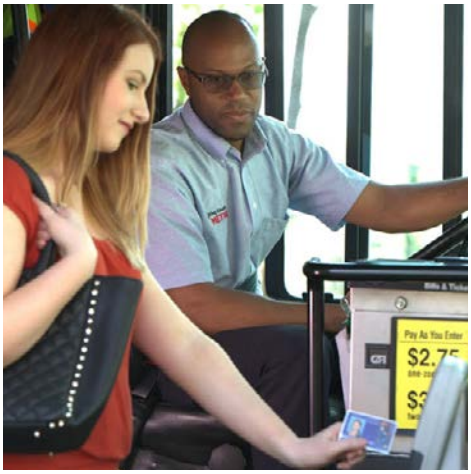


2016 WASHINGTON STATE PUBLIC TRANSPORTATION PLAN

Washington State Department of Transportation

CONTENTS

EXECUTIVE SUMMARY

VISION: All transportation partners in Washington state will work together to provide a system of diverse and integrated public transportation options. People throughout the state will use these options to make transportation choices that enable their families, communities, economy and environment to thrive.

Washington's multimodal transportation system supports seven million residents, a half million businesses, healthy economies and vibrant communities throughout our state. Washington's population is projected to grow more than 20 percent over the next 20 years, increasing demand for all transportation modes at a time when traditional methods for funding mobility are increasingly unsustainable. Concurrently, emerging technologies and business models are redefining the ways in which Washington residents and communities connect, travel and transact; our transportation infrastructure is aging; the number of people with special transportation needs is growing, and the effects of climate change are becoming increasingly apparent.

These challenges and opportunities necessitate changes in the way we plan and manage public transportation in Washington. To this end, the Washington State Public Transportation Plan offers a blueprint to further integrate all modes of transportation to meet the needs of Washington's people and communities. This update of the state's 20-year public transportation plan affirms the state's role in public transportation as defined in state law and described in the latest Washington Transportation Plan (WTP 2035). It emphasizes performance and the Washington State Department of Transportation's (WSDOT) practical solutions approach.

Near-term actions in the plan describe how public transportation partners will kick start progress toward the goals. See pages 57-88 for more information.

The plan represents a partnership among agencies, service providers, community organizations and others throughout Washington. WSDOT will continue to engage partners and will regularly report status and results.

GOALS AND STRATEGIES

This plan sets forth five goals for Washington's system of public transportation, strategies for supporting each goal, and a program of near-term actions for each goal to be complete by December 2017.

THRIVING COMMUNITIES

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

STRATEGIES

- Research, test and share tools and best practices to advance sustainable and equitable transportation planning and investment
- Quantify and communicate the economic, environmental, health and community benefits of public transportation to Washington state
- Test ways to improve the quality and cost-effectiveness of transportation strategies that support people throughout their lives
- Align and coordinate transportation investments to support local comprehensive plans and community priorities, such as improving first- and last-mile pedestrian connections to transit or connections between buses and ferries

ACCESS

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

STRATEGIES

- Allow for system gaps and deficits to be more quickly identified and addressed; for example, during routine congestion, incidents, emergencies and disaster response
- Remove barriers, such as conditions on special needs funding and other policy restrictions, and incentivize collaboration and integration between service providers
- Work with a broad range of partners to plan and invest based on systemwide needs, priorities and performance

ADAPTIVE TRANSPORTATION CAPACITY

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

STRATEGIES

- Use technology to improve access for people with special transportation needs and maximize efficiency and effectiveness, (e.g., develop systems to help providers better coordinate service delivery)
- Develop and implement integrated, multimodal system improvements that move more people in fewer vehicles and at least cost
- Foster innovation to respond to emerging market opportunities and other system changes through public-private partnerships and agency coordination

CUSTOMER EXPERIENCE

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

STRATEGIES

- Deploy best practices in safety and security, taking into account issues of equity
- Foster additional collaboration among Washington state transportation providers to identify, implement and sustain solutions that improve the public transportation experience
- Increase consideration and use of multimodal options by piloting systems and programs to help the public better understand, consider and use multimodal options; support widespread adoption of proven approaches
- Develop tools and processes to promote timely adoption of innovations that improve the customer experience

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

STRATEGIES

- Manage, preserve, maintain and operate the transportation network as a complete multimodal system
- Develop a dashboard that monitors Washington's transportation system around multimodal performance indicators that build toward a more integrated, connected multimodal system
- Test pilot service concepts to increase vehicle occupancy and use of public transportation, including transit, active transportation, ride-hailing, telework and more

Visit www.wsdot.wa.gov/construction-planning/statewide-plans/public-transportation-plans to get further information about the plan and the actions partner organizations are taking to achieve its goals and vision.

CONTACT INFORMATION:

Evan Olsen OlsenE@wsdot.wa.gov

ACKNOWLEDGEMENTS

The Washington State Public Transportation Plan was developed with the financial support of the Federal Transit Administration, the state of Washington and the contribution of individuals and agencies throughout Washington state, who spent many hours in conversation with the project team and each other offering insights, developing recommendations and reviewing documents.

Particular thanks are offered to current and past members of the plan's stakeholder advisory group, which included broad representation from public and private providers, tribes, modal advocacy groups, transportation planning agencies and state agency advisory groups. Additional thanks are due to:

LOCAL

- City of Bellevue
- City of Ellensburg
- City of Everett
- City of Kent
- City of Redmond
- City of Seattle
- City of Tukwila
- City of Yakima
- Community Transit
- Everett City Council
- Intercity Transit
- King County Metro
- Muckleshoot Indian Tribe
- Puget Sound Regional Council
- Quinault Indian Nation
- Seattle Department of Transportation
- Skokomish Indian Tribe
- Snohomish County
- Sound Transit
- Spokane Regional Transportation Council
- Spokane Transit Authority
- Thurston Regional Planning Council

STATE

- Agency Council on Coordinated Transportation
- Commute Trip Reduction Board
- Department of Commerce
- Department of Social and Health Services
- Department of Veteran Affairs
- Freight Mobility Strategic Investment Board
- Human Services Council
- Metropolitan Planning Organization/Regional Transportation Planning Organization/WSDOT Coordinating Committee
- Office of Financial Management
- Transportation Improvement Board
- Tribal Transportation Planning Organization
- Washington State Transportation Commission
- WSDOT

FEDERAL

- Federal Transit Administration
- Federal Highway Administration

NONPROFIT

- Cascade Bicycle Club
- Community Transportation Association of the Northwest
- Commute Seattle
- Downtown on the Go
- Feet First
- Hopelink
- Hopesource
- People for People
- Ride Connection
- Seattle Children's
- Sound Cities Association
- State Independent Living Council
- Tacoma Chamber
- Transportation Choices
- University of Washington
- Washington Bikes
- Washington State Rehabilitation Council
- Washington State Ridesharing Organization
- Washington State Transit Association

PRIVATE

- Coastal Transport
- Medstar Cabulance

The Washington State Public Transportation Plan was produced by WSDOT with consultant support provided by PRR, Inc.

Washington State Department of Transportation

June 7, 2016

The Washington State Public Transportation Plan is a guide for the next twenty years of public transportation in Washington, moving our state toward a more integrated, multimodal transportation system that can meet the needs of growing and thriving communities. The plan seeks to add significantly to the toolkit of transportation options available to the people of Washington.

In the 21st century, we are challenged to use all our transportation assets in more sustainable and cost effective ways. In this context, public transportation does far more than simply transport people from one place to another. It functions as an economic driver, a community builder and a tool to preserve and maintain our environment:

- Giving people a safer, more affordable way to get to work
- Providing access to affordable housing
- Providing everyone access to healthcare, education, social services, recreation and community groups
- Increasing property values
- Increasing the efficiency and carrying capacity of our roads and highways
- Keeping our air cleaner and our planet healthier

Public transportation is, at its core, a partnership—local transit authorities, social service agencies, planning organizations, local jurisdictions, private companies, state and federal agencies, tribes the Washington State Department of Transportation and the people who use the system. All must work together to provide a system of diverse, integrated public transportation options. Emerging technology can allow for new kinds of collaboration. Leadership and innovation will be required at all levels and from all sectors to meet our growing and changing needs.

Leadership starts with you. I invite you to review the Washington State Public Transportation Plan. It provides a framework for creating an integrated, multimodal system and it will drive the actions necessary to make that system a reality.

Best,

Roger M. Millar, PE, AICP
Acting Secretary of Transportation

Title VI Notice to Public

It is the Washington State Department of Transportation's policy to ensure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our nondiscrimination obligations, please contact OEO's Title VI Coordinator at (360) 705-7082.

Americans with Disabilities Act (ADA) Information

The Washington State Department of Transportation (WSDOT) is committed to providing equal access in its programs, services, and activities for persons with disabilities. Further, no individual with disability shall, solely on the basis of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any of the department's programs, services, or activities, in accordance with:

- Americans with Disabilities Act of 1990 (ADA), as amended
- Section 504 and 508 of the Rehabilitation Act of 1973, as amended
- Revised Code of Washington (RCW) 49.60 Discrimination - Human Rights Commission

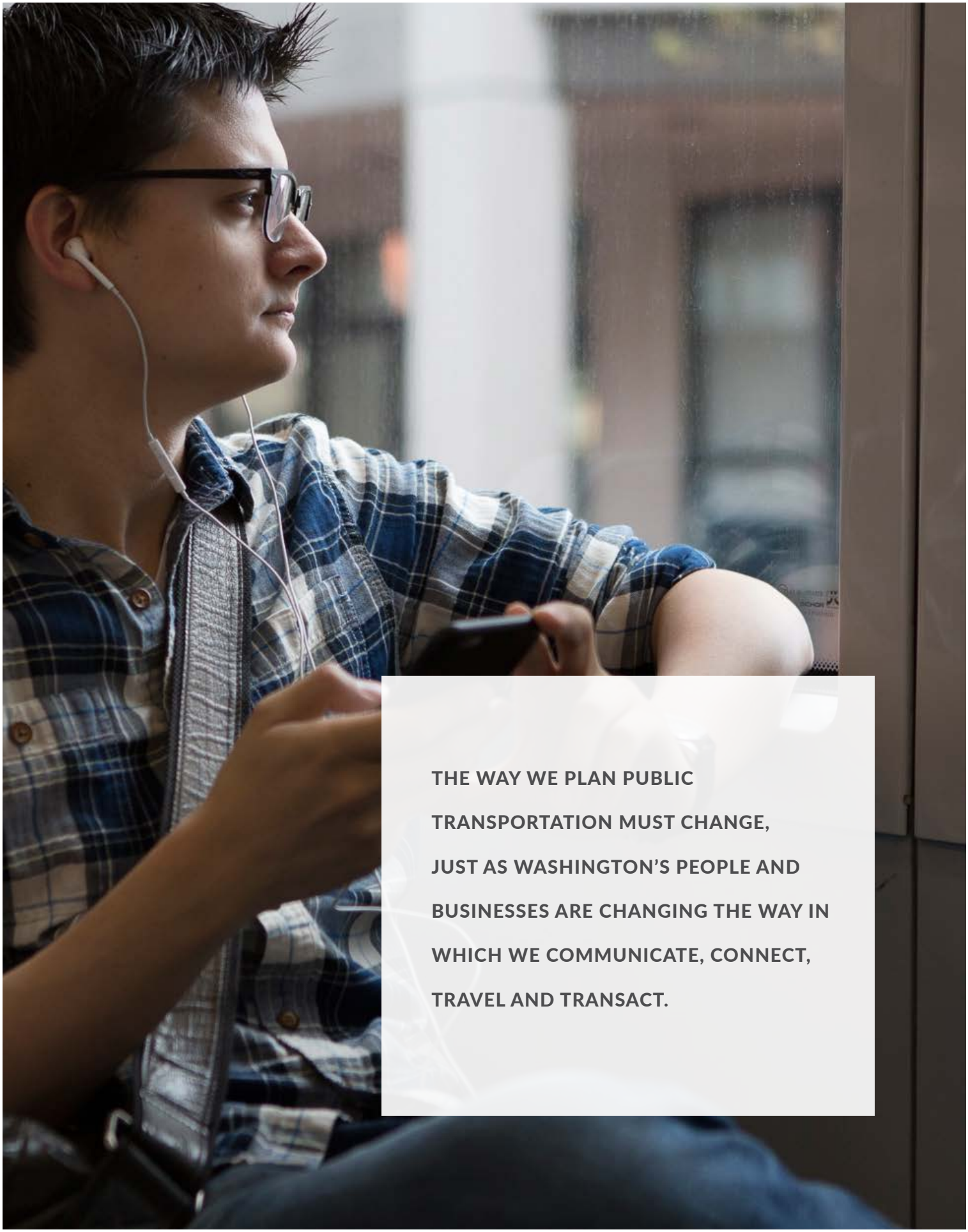
This material can be made available in an alternate format by emailing the WSDOT Diversity/ADA Affairs team at wsdotada@wsdot.wa.gov or by calling our toll-free number at 855-362-4ADA(4232). Persons deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Título VI: Aviso al Público

Es el principio del Departamento de Transportación del Estado de Washington de garantizar que ninguna persona sea excluida de utilizar o de que le sean negados los beneficios de los servicios financiados por fondos federales por motivo de raza, color, nacionalidad o sexo, según lo establece el Título VI de la Ley de Derechos Civiles de 1964. Cualquier persona que cree que su protección del Título VI han sido violada, puede hacer una queja con la Oficina de Igualdad de Oportunidades (OEO). Para más información del procedimiento de quejas del Título VI y/o información al respecto a nuestras obligaciones del Título VI, favor de comunicarse con el Coordinador del Título VI de la OEO al (360) 705-7082.

Información del Acta para los Estadounidenses con Discapacidades (ADA)

Este material está disponible en un formato alternativo. Si necesita un formato alternativo, mande un correo electrónico al equipo de Asuntos de Diversidad de WSDOT en wsdotada@wsdot.wa.gov o puede llamar gratis al 855-362-4ADA (4232). Los sordos y personas con problemas de audición pueden llamar al servicio de transmisión del Estado de Washington al 711 (llamada gratis).



THE WAY WE PLAN PUBLIC TRANSPORTATION MUST CHANGE, JUST AS WASHINGTON'S PEOPLE AND BUSINESSES ARE CHANGING THE WAY IN WHICH WE COMMUNICATE, CONNECT, TRAVEL AND TRANSACT.

KEY THEMES OF THE WASHINGTON STATE PUBLIC TRANSPORTATION PLAN

Recognizes that a connected, coordinated transportation system that serves all people is instrumental to thriving communities

Acknowledges that widespread innovation and continuous improvement are key to meeting ever-changing transportation needs

Advocates for ongoing emphasis on delivering positive customer experiences

Provides a framework for a more performance-focused and integrated approach to transportation

Advances the state's interest and role as a public transportation provider

INTRODUCTION

At the dawn of the 21st century, all signs point to a future fundamentally different than our recent past. Washington's seven million residents and half million businesses are changing the ways in which we communicate, connect, travel and transact.

At the same time, the state's population is projected to grow more than 20 percent during the next 20 years. In Spokane and Clark counties, the population is expected to grow to more than 500,000 people and Central Puget Sound is expected to add another million people in the coming decades.[1]

This population growth is accompanied by megatrends such as aging Baby Boomers and deteriorating public infrastructure; increasing economic inequality and diversity; urbanization and rising housing costs; the suburbanization of poverty; and a growing urgency to address climate change. All of these trends, coupled with striving to meet Washington state's six adopted transportation system goals (Revised Code of Washington 47.04.280), challenge us to develop new ways to think about how to best use and preserve all transportation assets. These assets include a 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. For the purposes of this document, **public transportation** refers to these systems and services. See Appendix F for other definitions of public transportation, including five different definitions in state laws.

The Washington State Public Transportation Plan takes those trends into account while recognizing that our need to connect with other people—to work, play, learn and meet fundamental life needs—is as strong as ever. This plan has been prepared to support state agencies, transportation service providers, policymakers, and other transportation stakeholders as they work together to create a transportation system in Washington for the 21st century. It is consistent with and builds upon a legacy of initiatives to shape a better, more multimodal system for Washington (see Appendix E for a crosswalk of how this plan aligns with Washington state's other modal plans and policy plans). It reflects the consideration and input of multiple partners who plan and provide direct services, make policy and fund the various components of Washington's public transportation system.

Since 2013, the Public Transportation Advisory Committee has worked extensively with WSDOT and other state agencies to develop goals, strategies and early actions to advance a complete and integrated multimodal transportation system for Washington state. Their vision, as set forth in this plan, is as follows:

All transportation partners in Washington state will work together to provide a system of diverse and integrated public transportation options. People throughout the state will use these options to make transportation choices that enable their families, communities, economy and environment to thrive.

FOUR KEY PUBLIC TRANSPORTATION CHALLENGES IN WASHINGTON STATE

- The demand for access to jobs, schools, services and community is growing, but public transportation providers' ability to meet this demand has never been more constrained
- Congestion is hurting our economy and quality of life, and we must find ways to move more people with even greater efficiency
- Traditional methods for funding transportation are increasingly unsustainable
- Emerging technologies and business models are redefining how people communicate, work and conduct trade

The need for public transportation in Washington continues to grow in many different ways. Washington is a diverse state with various public transportation with various public transportation markets such as urban and rural, commuter and off-peak, regional and local; and services, such as fixed-route, on-demand, bike/pedestrian facilities, telework, demand management tools and more. All are challenged within the context of our current methods of planning and funding to meet demand, accommodate future growth and address climate change.

A central premise of the Washington State Public Transportation Plan is that our public transportation systems and services should be considered valued assets that can be enhanced with new types of partnerships and strategic investments. Additional resources are needed, but to be good stewards of our system it is also necessary to maximize the value of the assets we already have in place.

That is why this plan emphasizes a focus on integrated multimodal outcomes and performance. For example, it identifies a need for further collaboration to more clearly identify transportation performance goals; even stronger partnerships, innovations and investments to achieve those goals; and better data and evaluation to measure and report our progress. Implementation of the plan is seen as a partnership between agencies, organizations, nonprofits and private businesses. The plan presents a range of early actions to be carried out within the current biennium.

THE STATE'S INTEREST IN PUBLIC TRANSPORTATION

There is ample policy precedent that supports the state's interest in increasing and leveraging the benefits of public transportation. The RCW 47.66.010, adopted by the Washington State Legislature in 1993, states that "there is significant state interest in assuring that viable multimodal transportation programs are available throughout the state." In 2005, RCW 47.01.330 passed with the intent "that the state department of transportation be a leader in public transportation. The department shall play a guiding role in coordinating decentralized public transportation services, increasing connectivity between them, advocating for public transportation as a means to increase corridor efficiency, and increasing the integration of public transportation and the highway system."

Additionally, the state's six transportation system policy goals[2] (RCW 47.04.280) helped lay the foundation for the public transportation plan:

- **Economic Vitality:** To promote and develop transportation systems that stimulate, support and enhance the movement of people and goods to ensure a prosperous economy
- **Preservation:** To maintain, preserve and extend the life and utility of prior investments in transportation systems and services
- **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system
- **Mobility:** To improve the predictable movement of goods and people throughout Washington state, including congestion relief and improved freight mobility
- **Environment:** To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities and protect the environment
- **Stewardship:** To continuously improve the quality, effectiveness and efficiency of the transportation system

Planning and policy initiatives contain language that reinforces the need for collaborative and integrated transportation planning and investment. Examples include the Washington State Bicycle Transportation and Pedestrian Walkways Plan, Washington State Freight Mobility Plan, Washington State Department of Transportation Ferries Division Long-Range Plan, Human Services Transportation Plan, Americans with Disabilities Transition Plan, Aviation System Plan, Target Zero and Washington State Rail Plan.

The Washington Transportation Plan (WTP 2035)[3], based on the state's six transportation policy goals, was adopted by the Washington State Transportation Commission in January 2015. This plan places particular priority on the need to increase the person-carrying capacity of key transportation corridors to decrease congestion, support special needs transportation, connect communities with transit and expand local options for transit funding authority. Partnership is an essential component of WTP 2035, as well as other state modal plans, because no single solution will work for every community. For example, the Practical Design methodology and Corridor Sketch Planning (discussed further in Chapter 2) are based on the premise that WSDOT and local jurisdictions partner to create solutions that are customized to meet the unique needs of communities. Through that collaborative process, more cost-effective and relevant solutions will emerge.

The Results WSDOT[4] strategic plan for 2014-2017 emphasizes the need to work collaboratively across all modes of transportation to get the most out of existing transportation system capacity. Results WSDOT recognizes that, despite the state's strong interest in public transportation, the responsibility for managing public transportation lies primarily among its 360+ direct service providers. Moving toward an integrated, multimodal transportation system will require a new level of partnership and collaborative planning.

THRIVING COMMUNITIES, CONNECTIVITY AND MOBILITY FOR ALL PEOPLE ARE THE DRIVING PURPOSES OF PUBLIC TRANSPORTATION IN WASHINGTON.

At the state level, Results Washington,[5] the Governor's data-driven continuous improvement plan, calls for sustainable transportation to help state agencies meet and deliver on the goal of a prosperous economy with sustainable, efficient infrastructure. Additionally, it calls for a reduction in transportation-related greenhouse gas emissions to meet the goal of a clean transportation system and help mitigate climate change impacts.

Subsequent actions taken by the Washington State Legislature, Governor, Washington State Transportation Commission, various citizen panels and commissions, and WSDOT have all made clear statements that support Washington state's interest in public transportation and have emphasized the state's role relates to leadership and coordination.

Chapter 2 of this document, A Decision-Making Framework Focused on System Performance and Multimodal Integration, provides more detail on how the state's role in public transportation can be better defined. Chapter 3, Goals and Action Strategies, provides a path toward strengthening that role.

PUBLIC TRANSPORTATION TO MEET OUR STATE'S AND RESIDENTS' DIVERSE NEEDS

The Washington State Public Transportation Plan is a multimodal response to the growing and evolving transportation needs of our diverse state and its residents. Its vision is for a coordinated system of providers, services and facilities that can provide mobility and access for all. It presents strategies and early actions to give us a way to better manage and leverage our existing public transportation assets and it recommends evaluation metrics to meet federal laws and gauge progress toward broader community and system goals.

The plan's intent is to facilitate the ability of transportation partners to provide even more options to people, communities and the overall system. Because of its strong emphasis on partnership, the strategies and early actions contained in this plan will be carried out over a number of years.

Statewide system integration cannot happen overnight because it involves an alignment of vision and practice for the varying interests of customers, public transportation partners and the state. Nevertheless, steps can be taken to better integrate transportation planning and delivery. For example, common definitions of what constitutes success in transportation could encourage greater efficiencies and better customer service. Further integration in gathering and use of data could support more robust analysis, accountability and investment. There are potential opportunities where use of common resources can better take advantage of technological innovation to create additional choices for the traveling public in both urban and rural areas.

Intriguing new transportation approaches, largely fueled by technology, are rapidly emerging from both the public and private sectors. These are particularly evident in major cities such as Seattle and Portland and through services like carsharing, bike sharing, tech-enabled workplace buses, ride-hailing services, electronic transit fare cards and toll transponders. New approaches are also emerging that serve rural communities and people with limited access and mobility—from the rural tribal elder who now can access preventative care through virtual medical consultations, to the low-income urban commuter who needs reliable, all-day transit service to arrive on time to his or her job. These new approaches, often combined with existing forms of public transportation, are helping to keep people and goods moving.

This plan envisions Washington state will be flexible and supportive of practical innovation in public transportation by continuing to support transit and other foundational services and systems. This innovation may involve new technology, but the innovation is just as likely to manifest into new types of partnerships, new business models and new systems for measuring and ensuring mutual accountability and better services. Through the plan, the state will promote access and mobility for all and continue to work with its partners to promote strategic investment in the long-term sustainability of public transportation in Washington state.

CHAPTER 1
PUBLIC TRANSPORTATION TODAY IN WASHINGTON STATE

Throughout Washington, our integrated, multimodal transportation systems, services and facilities drive our economy and build stronger communities. From riding a bus to walking, teleworking, vanpooling or getting a ride from a social service agency or tribe, people depend on public transportation to reach their jobs, enjoy leisure activities and complete essential day-to-day tasks. Public transportation connects people to each other and to their communities.

USE OF THE TERM PUBLIC TRANSPORTATION IN THIS DOCUMENT

It is the intent of this document to broadly support transportation system integration and multimodal transportation, not to redefine public transportation. By taking this approach this plan intends to support, not supplant, local and state human services transportation plans, regional and local transportation and comprehensive plans, regional and local transit plans, the WSDOT Ferries Division Long-Range Plan, Washington State Bicycle Facilities and Pedestrian Walkways Plan, Washington State Rail Plan and other plans.

Public transportation refers to a broad array of transportation services and systems, public and private, that are accessible and available to the public that do not involve a single person in a motorized vehicle. Some of these tools may not yet have been invented. By accessing all available transportation tools, now and in the future, we can better support an evolution toward a more integrated, performance-driven transportation system. In doing so, we hope to maximize the customer experience, enhance the function of our communities and leverage the value of transportation investments.

The state has a broad interest in providing a reliable, safe and integrated multimodal transportation system in partnership with others. Mobility is a collaborative effort, crossing organizational boundaries at all levels. If one element falters, the effect cascades, impacting employers, schools, health care providers, community groups, developers and others.

This plan explains approaches the state and its partners will use to deliver high-performing public transportation and to respond to trends impacting elderly

EXAMPLES OF MULTIMODAL TRANSPORTATION

TRANSIT

- Bus
- Light rail, commuter rail, street car
- Vehicle and passenger ferry
- Park and ride lot
- Direct access ramp and transit bypass lane

SHARED MOBILITY

- Carpool and vanpool
- Carshare
- Bikeshare
- HOV lane
- Reserved vanpool and carpool parking

DEMAND MANAGEMENT

- Commute trip reduction and employer commute benefits
- Congestion pricing (parking, toll lanes)
- Telework
- Flexible work schedule, remote work program, staggered work shift
- Transit priority traffic signal

ACTIVE TRANSPORTATION

- Bicycle lane, bicycle rack
- Sidewalk
- Trail

ON REQUEST

- Paratransit
- Demand response (dial-a-ride)
- Private shuttle
- Transportation network (Car2Go, Lyft, Uber, Zipcar)

INTERCITY

- Airplane
- Passenger rail (Amtrak Cascades)
- Bus

and special needs populations, housing and transportation affordability, Millennials in the workforce, diversity, fast-emerging technologies, new business models and climate change. To be successful in providing diverse public transportation options, a broad array of partners must collaborate. These include the federal and state governments, 29 federally recognized tribes, 32 public transit providers, 12 metropolitan planning organizations, 15 regional planning organizations, and hundreds of local communities, countless nonprofits, community organizations, employers and private sector transportation providers.

Providing a variety of transportation options to people across Washington, enables the entire transportation system to function more efficiently. The benefits are significant and wide-ranging—a cleaner environment, a stronger economy and a more mobile and healthier population.[6] The state's role in public transportation includes serving as a leading advocate for integrated, multimodal transportation directed toward overall system performance and clearly focused on people and their highest-priority needs.

Hundreds of local governments, countless nonprofit organizations and many private sector providers of additional travel options like shuttle and bingo buses participate in these transportation planning opportunities, as well. They, too, are included in regional transportation planning and initiatives outlined in this plan.

WSDOT's role in public transportation is to administer state and federal funds, to support coordination of public transportation, to advocate for integrated transportation investments consistent with legislative direction (RCW 47.6.100) and to provide technical assistance. In addition, the state operates more than 300 HOV lane miles, 300 miles of passenger rail, and the largest ferry system in the US, carrying more than 22 million people annually.

The 2015 Connecting Washington transportation funding package will invest billions of dollars in transportation programs and projects that support public transportation over the next 20 years. State funds will support capital construction (e.g., transit facilities, ferry terminals, HOV lanes, sidewalks, bicycle paths, accessibility improvements, complete streets), operations (e.g., transit, special needs transportation, tribal transportation, rural transportation, Amtrak Cascades) and equipment (vanpools, buses, accessible vehicles). In addition to providing financial support to cities, counties, transit agencies, nonprofit transportation providers and others, the state is leading public transportation improvements such as HOV lanes and bicycle/pedestrian paths connecting to the new University Link Sound Transit station, HOV lane expansion south on I-5 to Tacoma, new ferry vessels and terminals and improvements to Amtrak Cascades service between Seattle and Portland for faster, more frequent and reliable service. And the Washington Aviation System Plan, currently under development, is considering transit connections and access to airports. The state also has the authority to establish public transportation funding districts, to define local funding tax authority and to support intercity service in parts of the state where there are service gaps.

Similarly, the federal government provides funding for an array of transportation projects and programs that support public transportation. It also provides policy direction on issues such as safety, air quality, freight movement, environmental processes and public involvement.

Transit agency funding in Washington state, however, is largely local. Local transit authorities and local governments provide 81 percent of direct transit agency funding. Federal agencies provide 17 percent and the state provides 2 percent. Local direct transit funding comes from sales tax revenue and is subject to economic fluctuations. During the Great Recession,[7] many transit agencies saw significant drops in sales tax revenue coupled with significant increases in ridership demand.[8] Other factors also affect the costs of local transit services:

- Soaring costs of transportation infrastructure, combined with lower gas tax revenue from increased fuel efficiency, constrain state and federal resources for all transportation investment including the construction of facilities that support transit and HOV speed and reliability, ferries, bicycles and pedestrians.
- Paratransit costs are mounting across the state. For example, King County increased 25 percent in six years.[9]
- Traffic congestion and fluctuation in oil prices significantly impact the costs of transit operations.

All transit agencies are limited in the amount of local revenue they can raise because of a legislatively-authorized maximum sales tax rate. Several agencies, such as King County Metro, Jefferson Transit and Island Transit, are at the 0.9 percent maximum. Others are not. For example, the 2015 Connecting Washington package allows Sound Transit and Community Transit to raise new revenues beyond 0.9 percent with a public vote, while Kitsap County can now develop a passenger-only ferry district and implement new local taxes with a public vote.[10]

Coordination among planners, funders and providers of transportation services has become increasingly essential. As the demand for integrated public transportation increases, competition grows for limited funds.[11]

DEMOGRAPHIC TRENDS

Washington state's public transportation systems and services continue to evolve as our state grows and changes. In the 21st century, Washington's demographic and socioeconomic profile will experience even greater change, most likely at a faster rate than the prior two centuries combined.

Increases in elderly and special needs populations, changes in housing and transportation affordability and related transportation preferences of the Millennial generation[12] alongside changes in population distribution are among several factors that will change how Washington's residents travel.

WASHINGTON'S URBAN AREAS ARE GROWING.

Washington's population grew from 4.1 million in 1980 to 6.7 million in 2010 and is expected to reach 8.8 million by 2040, mirroring national population growth rate projections.[13] In 2015, Washington's population grew by an additional 93,200 to a total of over 7 million[14]—the largest one-year gain since 2008. New residents accounted for 57 percent of the increase. And most of that increase, roughly 75 percent, occurred in the states' five largest metropolitan counties: Clark, King, Pierce, Snohomish and Spokane.[15]

These growing communities also experienced growth in the use of transit. Pierce Transit saw a 6 percent increase in vanpool passenger trips in 2014. Spokane Transit Authority experienced a 2.7 percent increase in fixed-route passenger trips from 2012 to 2014, and Community Transit experienced a 10.6 percent increase from 2013 to 2014. C-TRAN in Clark County also saw an increase in its vanpool passenger trips—up 2.1 percent from 2013 to 2014. Mode share in 2014 increased for all public transportation in Seattle—even higher for biking and walking than for transit.[16]

ONGOING URBAN CHALLENGES

- How can public transportation meet the increasing demand for mobility?
- Are there ways in which service should be distributed to meet growing urban demand?
- How will the change in demographic profile shift the demand for public transportation?
- What are the consequences of meeting, or not meeting, demand?

WASHINGTON'S RURAL COMMUNITIES EXPERIENCE AFFORDABLE HOUSING AND TRANSPORTATION CHALLENGES.

Rural areas face transportation issues that differ from those in urban areas. Rural areas consistently experience higher numbers of crash-related fatalities and serious injuries than urban areas.[17] In Washington's rural communities, housing is generally more affordable than urban areas but transportation can be a barrier to meeting basic life needs. Lower density and distance from regional and urban centers mean rural residents must travel greater distances to work, school, shopping and healthcare. The lack of population and employment density in rural areas significantly affect the cost to build, maintain and operate public transportation. This leads, for example, to transit service concentrated on key corridors with limited frequency and limited origin-destination offerings.

ONGOING RURAL CHALLENGES

- What kind of public transportation can best support economic development?
- What measures can be taken to improve safety for bicyclists and pedestrians?
- Can technological innovation be applied to make rural transportation more accessible and efficient?
- Could public transportation be used to improve access to jobs and healthcare?


CWU
drive

Long distances and fast-moving traffic on roadways with narrow shoulders limit many people's ability to bicycle or walk. "Thirty-five percent of bicyclists' fatalities occur in rural areas and, although fewer pedestrians are injured in rural areas than urban areas, they are more likely to result in fatalities because of the time it takes to get to the hospital."[18] Special needs transportation providers, which include transit agencies, must carry customers long distances and cannot achieve cost advantages through economies of scale.

THE POPULATION IS AGING. As of 2015, there were 1,022,000 people 65-and-older in Washington, which accounts for 14 percent of the state's total population.[19] Growth in this age group will continue, with an annual gain of 44,000 in 2015 and peaking at 49,000 per year by 2020. By 2040, the 65 and older population is forecast to reach 1.85 million, representing 21 percent of the state's total population.[20] Another way to look at it: by 2030, more than one of every five Washingtonians will be 65 or older. And as the population ages, more people are likely to have a disabling condition or otherwise experience limitations to their mobility, which will create a greater need for public transportation.

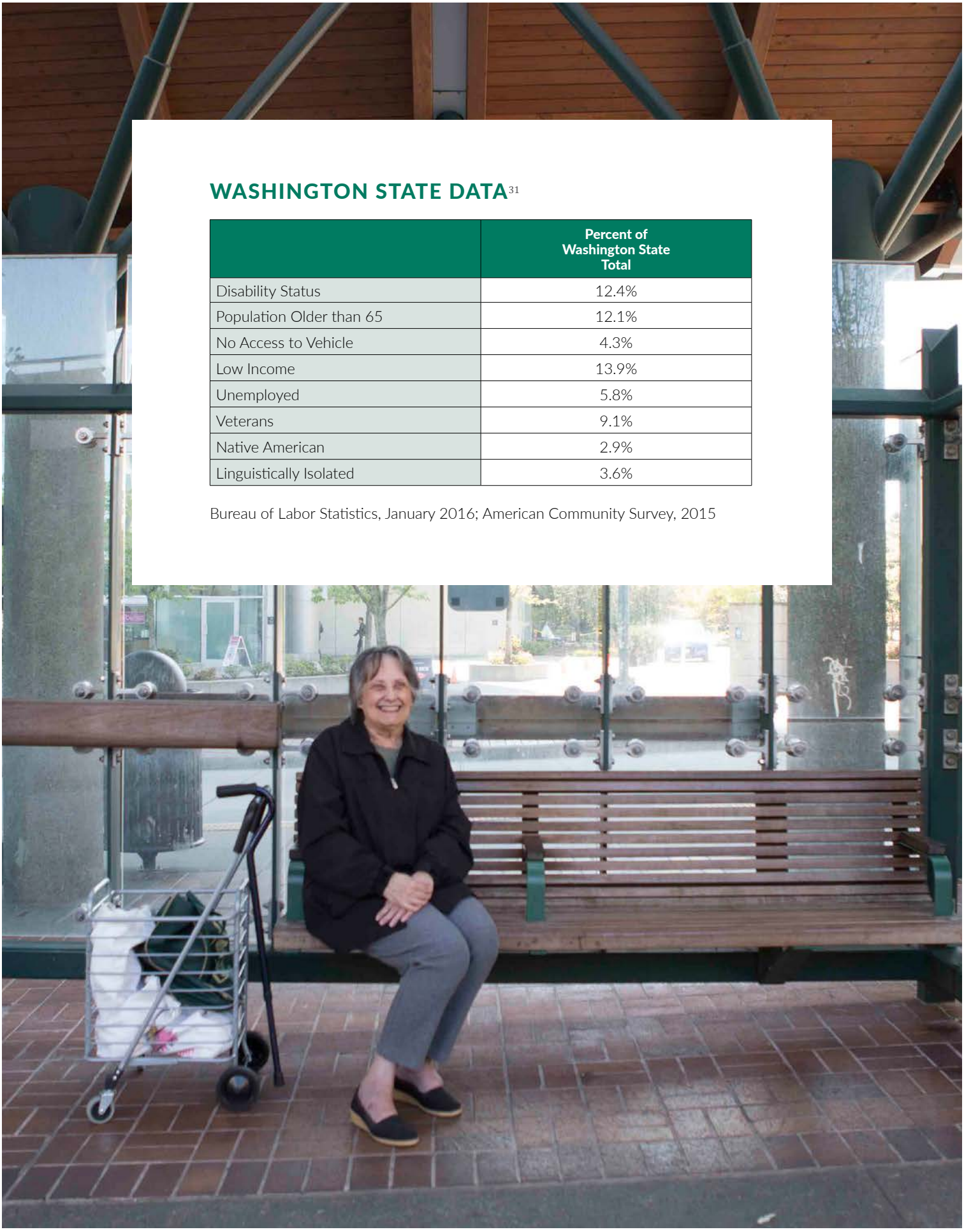
THE POPULATION IS AGING

- How can we provide better access to grocery shopping, healthcare, family and community to older adults with limited incomes living in rural and suburban communities?
- What types of transportation services will be needed for this growing sector of our population?
- How can public transportation help people live independently and age in place for a longer period of time?
- Are there emerging technologies that could help meet the mobility needs of seniors more efficiently?

WASHINGTON STATE DATA[31]

	Percent of Washington State Total
Disability Status	12.4%
Population Older than 65	12.1%
No Access to Vehicle	4.3%
Low Income	13.9%
Unemployed	5.8%
Veterans	9.1%
Native American	2.9%
Linguistically Isolated	3.6%

Bureau of Labor Statistics, January 2016; American Community Survey, 2015



WASHINGTON'S POPULATION IS BECOMING MORE DIVERSE. The ethnicities and spoken languages of Washington's people are growing. In 2014, people of non-white ethnicities and races accounted for about 30 percent of the population,[21] while just over 36 percent of population under one year old were people of non-white ethnicities and races.[22] Nationally, Washington has the fifth-highest percentage of Asians, fourth-highest percentage of Native Hawaiians/Pacific Islanders, and fourth-highest percentage of people who are two or more races. At the state level, Washington is the third most linguistically diverse state in the country with 163 different languages spoken.[22] In King County alone, the percentage of people who speak languages besides English rose from 18.4 percent in 2000 to 26.4 in 2014.[23]

Linguistic isolation can occur in urban and rural settings and presents a barrier to accessing services that may not have translation available. Accessing information about transportation services presents a compounding issue for people who do not speak English as a primary language.

INCREASINGLY DIVERSE POPULATION

- How can we ensure equal access and mobility for Washington's growing diverse populations?
- Are there geographical and social equity issues that need to be addressed?
- How can transportation systems and services offer solutions to meet the needs of people with varied cultural backgrounds?

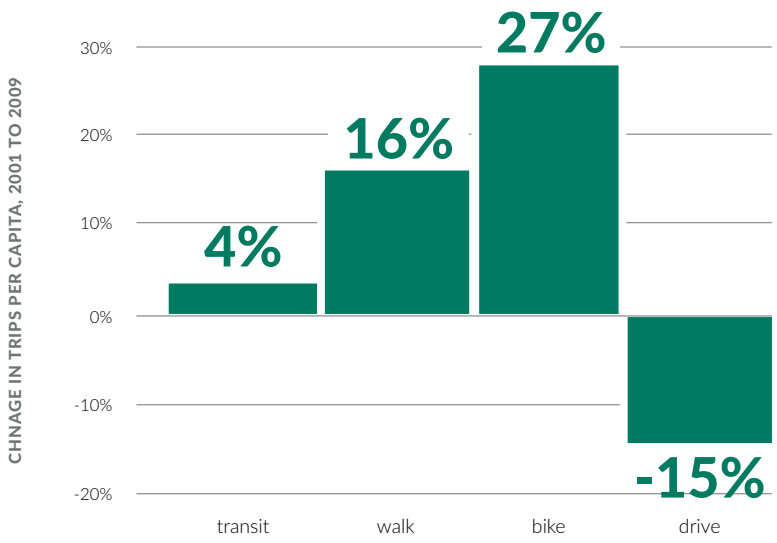
THE NUMBER OF PEOPLE WITH SPECIAL NEEDS IS GROWING THROUGHOUT WASHINGTON STATE. Washington state law defines special needs populations as "persons, including their personal attendants, who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase appropriate transportation."[24] Using this definition, more than 30 percent of Washington residents meet the criteria for special needs. And, as Washington's population increases by more than 2 million people by 2040, close to 40 percent of residents will meet the criteria.[25] For some people in this population group and others unable to drive themselves or without access to a vehicle, public transportation is often the only option for completing essential day-to-day tasks like getting to work, medical appointments, visiting family and friends or buying groceries. Additionally, as a result of the Americans

SERVING PEOPLE WITH SPECIAL NEEDS

- How will the demand for special transportation services change and in what areas of Washington state?
- Are there emerging technologies, business models or design approaches that could improve access for everyone?
- Are we meeting the needs of those with special transportation needs? Where are the most significant opportunities and gaps?
- How could we improve access to employment for people who have no access to a privately owned vehicle?

IS THE TIDE CHANGING FOR TRAVEL PREFERENCES?

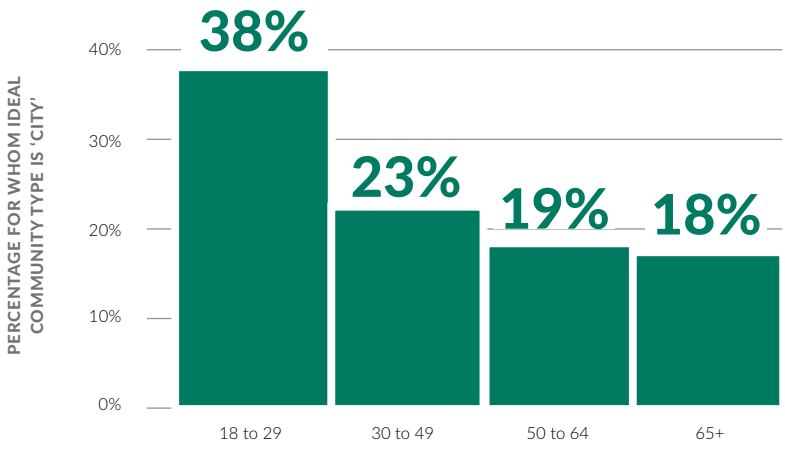
CHANGE IN NUMBER OF TRIPS PER CAPITA AMONG 16 TO 34 YEAR-OLDS, 2001 TO 2009[24]



Source: U.S. PIRG, Millennials in Motion: Changing Travel Habits of Young Americans and the Implications for Public Policy

Unlike older generations, young adults are more likely to prefer living in the city. They are also more likely to rely on other modes of transportation instead of driving.

PERCENTAGE OF PEOPLE PREFERRING TO LIVE IN A CITY, BY AGE[25]



Data from Pew Research Center

HOW WILL THEY CHANGE IN THE FUTURE?

with Disabilities Act, more people with disabilities are actively participating in their community, using public transportation to contribute economically and socially.

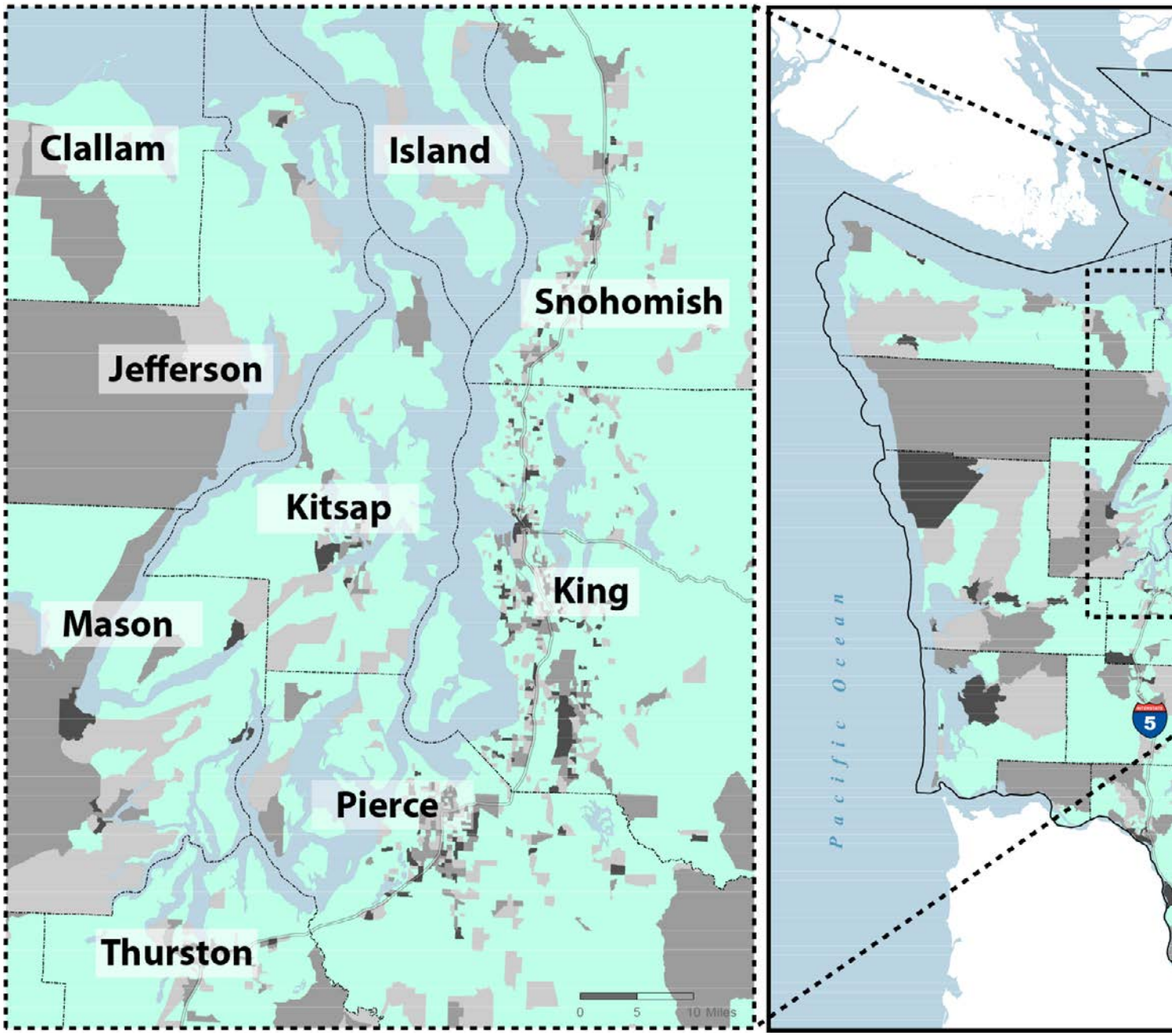
Special needs can also include those who are geographically isolated in rural areas of the state with limited access to services. In some rural areas, tribal transportation represents the only connection for residents living on or near tribal lands to services in more urbanized areas.

MILLENNIAL POPULATION IN THE WORKFORCE IS GROWING. In 2015, Millennials surpassed the Baby Boom generation as the nation's largest living generation.[26] This group promises to influence a range of policy decisions across the state and the nation, including transportation. This segment of the population includes people born in the 1980s through the late 1990s and accounts for just over 27 percent of Washington state's population.[27] This generation is, thus far, largely choosing to live in affordable neighborhoods and suburbs in and around urban areas. Numerous studies show they are choosing to live in areas that provide the best options for transportation that do not involve driving their own cars alone.[28] According to Puget Sound Regional Council's 2014 Regional Travel Study, the most significant decreases in automobile use for the Puget Sound region between 2006 and 2014 were among Millennials. Those aged 18 to 25 decreased from over 85 percent in 2006 to a little more than 70 percent in 2014.

GROWING MILLENNIAL POPULATION

- Are there emerging technologies that could make public transportation even more appealing to Millennials?
- As Millennials age and have families, how might their housing and transportation choices change?
- How do we better address the needs of Millennials in suburban and rural communities?
- How do we help people, particularly Millennials, spend less time and money commuting and more time with their families and communities?

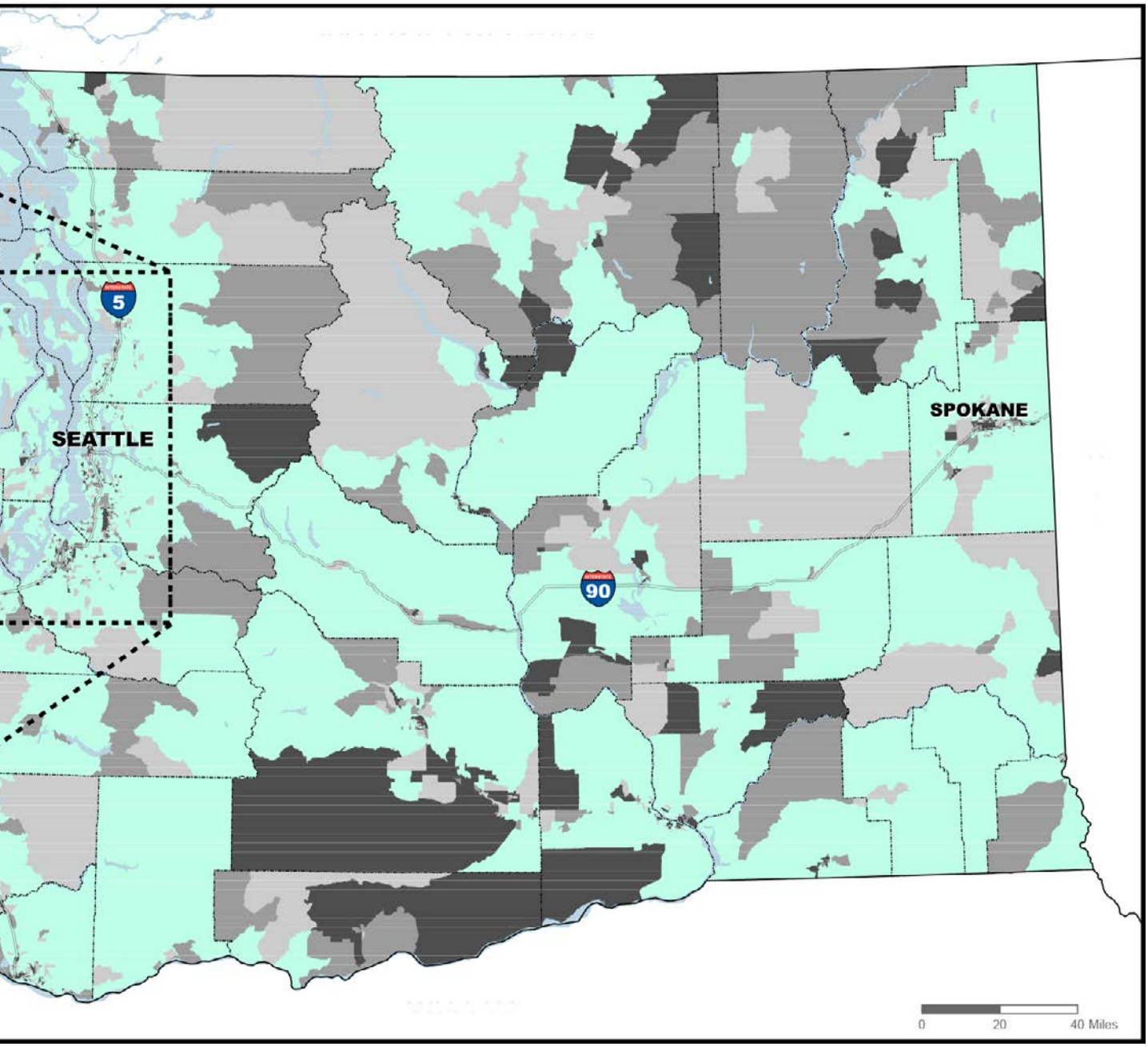
Areas of



ESTIMATED PERCENTAGE OF POPULATION IN POVERTY BY CENSUS BLOCK

- Over 30% of Population Earns Less than Federal Poverty Level
- Between 20% and 30% of Population Earns Less than Federal Poverty Level
- Between 13.4% and 20% of Population Earns Less than Federal Poverty Level
- Under 13.4% of Population Earns Less than Federal Poverty Level

Poverty



FEDERAL POVERTY LEVEL FOR A HOUSEHOLD OF THREE PEOPLE

$20,090

GROWING POVERTY IN WASHINGTON

- How will Washington's growing poverty levels alter demand for public transportation in both urban and rural communities?
- With more affordable housing in outlying areas, how will we need to rethink access to public transportation outside of urban centers?
- How can public transportation break the spiral of poverty?
- How can we ensure transportation innovation benefits everyone, including people who are in or near poverty and/or live in rural and suburban communities?
- How do we address the transportation needs of people in or near poverty who work non traditional hours, particularly those with childcare considerations?

POVERTY IS GROWING THROUGHOUT WASHINGTON STATE. Fourteen percent of Washington residents live in poverty (for a single-parent family with two children, poverty is defined at $20,090 per year or less), and 19 percent of Washington's children live in poverty.[29] Overall, 28 percent of Washington residents live in or "near poverty," which is below 185 percent of the federal poverty threshold,[30] or an annual income of $37,166.50 per year.[31] An estimated 94 percent of welfare recipients do not own a car.[32]

There are large differences among Washington counties—over half the residents in nine of the 17 "high-poverty counties" in Washington state meet the federal poverty threshold.[33] Tribal transportation is often cited as a need in rural areas for residents to access jobs and vital services due to the higher than average levels of poverty on tribal lands.

As housing prices increase in urban areas, many lower-income families are moving to suburban and rural areas, where housing is considered more affordable. For example, in South King County communities, such as city of Sea-Tac, poverty increased about 8 percent between 2010 and 2014.[34] While the price of housing may be lower, these more remote communities often have lower levels of transit service and are further away from places of employment. Sprawl increases the distance between homes, businesses, services and jobs, which raises the cost of providing infrastructure and public services by at least 10 percent and up to 40 percent. Additionally, households in or near poverty in Washington are 6.8 times more likely to not own a vehicle than households with higher incomes.[35] These combined factors are resulting in a widening of the income gap for racial minorities and residents of less dense areas of Washington.

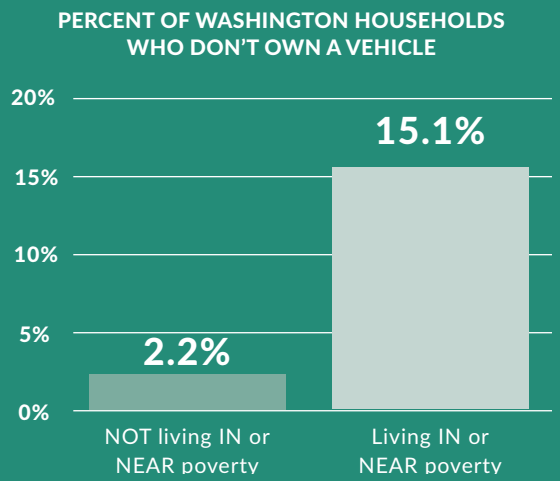
A national longitudinal study of upward mobility has found that shorter commuting time is the single strongest factor in the odds of escaping poverty, even stronger than the relationships between crime, test scores or the percentage of two-parent families.[36] Ensuring transportation connections to outlying areas is critical in fostering access to jobs and maintaining community connections in rural areas.

COMMUTE TIME AND POVERTY

28%

of people in Washington live in or near poverty

"In or near poverty" means earning $37,166.50 per year for a household of 3



Households in or near poverty in Washington are

6.8 times

less likely to have a vehicle than households with higher incomes

WHY DOES THIS MATTER?

A national longitudinal study of upward mobility has found that shorter commuting time is the single strongest factor in the odds of escaping poverty. Public transportation plays a critical role in breaking the cycle of poverty by providing access to jobs.

Strategies and plans, such as the Puget Sound Regional Council's Growing Transit Communities and the state's Livable Communities Policy, are working to better connect communities with transit options and ensure transit planning is incorporated into housing developments and the locations of businesses and services. This is consistent with Complete Streets and Smart Growth philosophies. According to Smart Growth America, development of transportation infrastructure, such as streets connected in a complete network, is a "fiscally responsible investment that cost(s) less to build and maintain."[37] Additionally, smart growth transportation strategies reduce the amount families spend on transportation costs.

ECONOMIC TRENDS

Whether the goal is to build a stronger economy or help people endure an economic downturn, public transportation options can play a major role. The American Public Transportation Association found that "for every dollar communities invest in transit, approximately $4 is generated in economic returns."[38]

Washington's economy benefits demonstrably from public transportation's contribution to access, mobility and capacity of the transportation system. Delays on state highways, which are only a portion of the transportation system, cost Washington citizens and businesses over $800 million in 2014[39]. By increasing the person-carrying capacity of our roadways, public transportation supports the speed and reliability of freight movement critical to our statewide economy, while also increasing the people-carrying capacity of roadways. For example, every weekday in King County, transit removes over 175,000 cars from the roadways, which means that during peak commute hours transit frees up the equivalent of seven lanes of traffic.[40] Tribes and rural areas also benefit economically from public transportation because it provides access to jobs unavailable in remote areas.

A robust transit network can also support the development of compact, walkable, bikeable communities with lower infrastructure demands and can create hubs of activity that support local economies. Public transportation connects employers and workers to each other and provides communities and businesses with safe, reliable, cost-effective travel options. The Brookings Institution found that over three-quarters of jobs in the 100 largest metropolitan areas are in neighborhoods with transit service.[41]

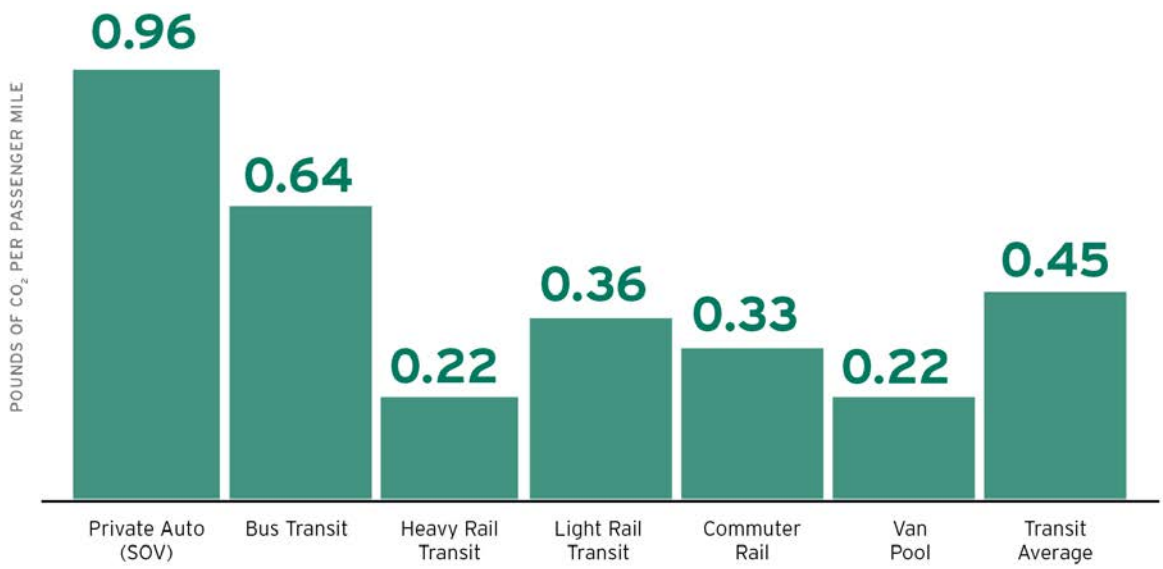
Public transportation also benefits the financial well-being of individuals in Washington state. For example, a person who lives in Seattle can save up to $11,000 a year by simply switching from driving to riding the bus. In rural areas, work is the primary destination for public transportation users.[42]

PUBLIC TRANSPORTATION AND THE ENVIRONMENT

Transportation is one of the largest contributers to greenhouse gas emissions in Washington state.[43] According to United States Environmental Protection Agency (EPA), the average annual temperature has risen two degrees Fahrenheit due to greenhouse gas emissions. An international panel of scientists warns that sea levels could rise by more than three feet by the end of the 21st century if steps aren't taken to drastically reduce emissions.[44]

Bicycling, walking and working from home produce little or no green house gases. The EPA and Federal Transit Administration noted that utilizing other public transportation, such as light rail and bus transit, can help reduce green house gas emissions. On average, light rail systems produce 62 percent less and bus transit produces 33 percent less greenhouse gas emissions per passenger mile than private vehicles.[45]

NATIONAL AVERAGES SHOW SIGNIFICANT GREENHOUSE GAS EMISSION SAVINGS FROM TRANSIT



Source: Federal Transit Administration, "Public Transportation's Role in Responding to Climate Change"

Agencies across the state are working to incorporate sustainability measures into their planning. WSDOT has laid out strategic direction through a Sustainable Transportation Action Plan, which promotes:

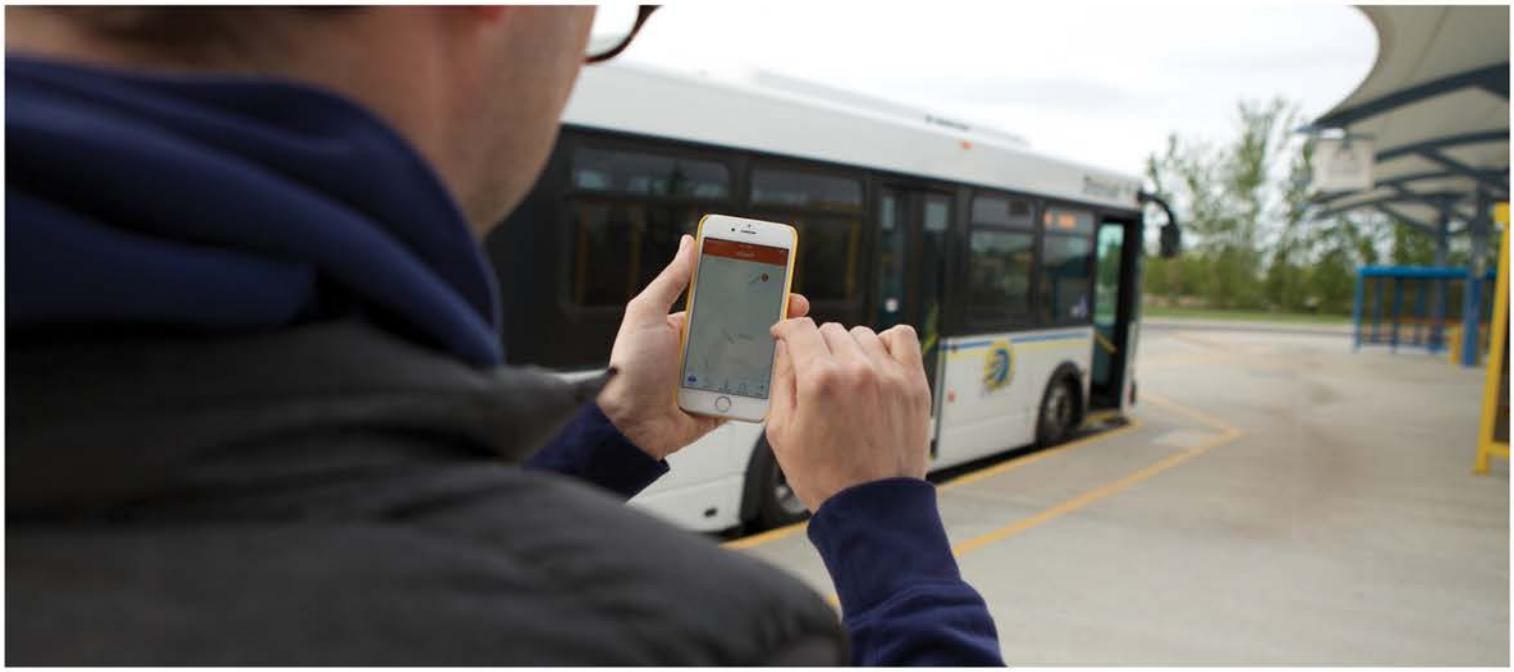
- Reductions in vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions
- More cost-effective and sustainable practices for construction and operations
- Efficient and sustainable transportation for users
- The use of new technologies
- Alternative fuels and electric vehicle (EV) infrastructure
- Preparing our communities and the transportation system to adapt to climate change

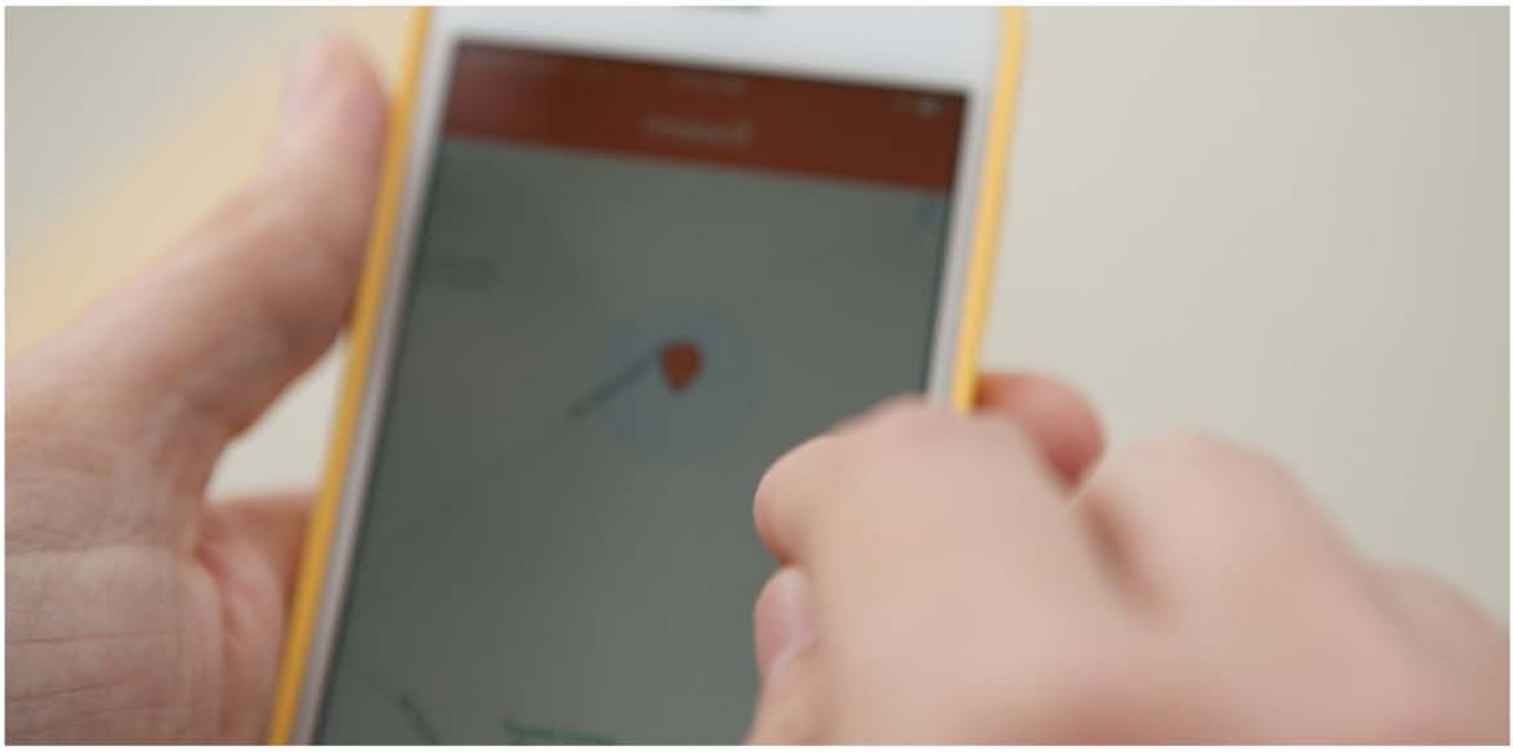
The more people utilize public transportation, the more emissions and fuel consumption are reduced. If 10,000 drive-alone commuters left their cars at home and took transit instead for a year, fuel consumption would be reduced by 2.7 million gallons.[46]

TRENDS IN TECHNOLOGY AND PUBLIC TRANSPORTATION

Technology solutions can be a tool in helping to create a more seamless public transportation experience across transportation modes. Shifts in technology, such as mobile phone applications, are allowing people, regardless of age or ability, to access all forms of transport, such as car sharing, vanpooling, transit and bike access. Today, transit riders in many parts of Washington can use a smartphone app to find the time of the next bus and adjust their


LUKE'S!!
LUKE'S CARPET






YAKIMA VALLEY FARM WORKERS CLINIC


PLEASE DO NOT STORE LUGGAGE IN
THIS AREA RESERVED FOR SENIO
AND PERSONS WITH DISABILI
LUGGAGE UNDER YOUR SEAT O

schedule accordingly. This is changing the perception of transit, which is no longer one-size-fits-all, and is instead customizable to customer needs. Furthermore, Google Maps provides travel times for walking, driving and taking transit—further allowing for customers to see the full range of options and make an informed decision.

Technology is also changing how transportation operates. Improved traffic signal control supports transit prioritization and traffic flow in response to real-time conditions. Electronic transit passes reduce boarding times and improve schedule reliability and efficiency. Electric buses reduce diesel emissions and support cleaner air.

Customer service advancements in other industries have potential to facilitate the ways in which customers interact with public transportation services—specifically, by applying knowledge management applications to make things like fare payment easier across systems and modes. With these innovations in technology, however, issues of equity also arise. If all Washingtonians are to benefit from these emerging technologies, information sharing is necessary to ensure they become more affordable and readily available.

More intriguing are discussions about impacts of sociological trends such as a growing and non-driving Millennial generation, the emergence of a sharing economy (which includes cars, homes, tools and more), the increasing feasibility of solar-sourced electricity and rapidly evolving autonomous car technology.

A number of semi-autonomous cars are already on the market and many major manufacturers plan to introduce autonomous vehicles. The United States Department of Transportation has announced that it will be issuing driverless car guidelines in June 2016.

While it is uncertain what the adoption rate will be for this new technology, it is certainly not too early to begin considering related policy and practical implications such as accessibility for people with limited incomes, data privacy issues and the effects of technology on roadway capacity, the need for parking and land use.

CONCLUSION

This chapter highlights numerous demographic, economic, environmental and funding trends in Washington that affect public transportation. With continued changes and growth in the population, public transportation will be even more integral in ensuring people have access to their jobs and daily life requirements.

CHAPTER 2
A DECISION-MAKING FRAMEWORK FOCUSED ON SYSTEM PERFORMANCE AND MULTIMODAL INTEGRATION

Growth, demographic changes, traffic congestion and financial challenges present a growing crisis for communities in Washington state. Addressing these challenges requires changes in the way transportation is planned and managed. Increased focus on system performance, continuous improvement, innovation and stronger partnerships are necessary to further integrate transportation elements to meet communities' mobility needs.

Public transportation is playing a growing role in this new way of doing business. Public transportation is about making the most of existing infrastructure as well as contributing to the quality of life in our communities by:

- Ensuring access to jobs that benefit employees, employers and the state's economy
- Providing affordable transportation options for those who do not otherwise have access
- Reducing transportation costs for households throughout Washington
- Increasing the efficiency and person-carrying capacity of the transportation system
- Supporting the quality of air and water in Washington by increasing the ratio of person-miles travelled to vehicle-miles travelled

Both the Washington Transportation Plan 2035 and Results Washington[47] policy documents reinforce the need for collaborative and integrated transportation planning and investment among those who fund and deliver transportation systems and services in Washington state. To fulfill these recommendations and to achieve the transportation system performance that communities need, transportation providers must shift approaches and strategies. These emerging methodologies will rely more heavily than ever upon shared performance goals, engaging the community, building partnerships and integrating modes and services.

There is already significant coordination and collaboration among transportation and community partners in transportation planning, funding, design, construction and operations. The concept of integration takes this collaboration to the next step by further aligning organizations and resources around shared performance goals. Integration is a strategy for making the whole greater than the sum of its parts.

This approach is effectively demonstrated by the Center City Mobility Plan being developed by Seattle's Downtown Transportation Alliance (a partnership between King County Metro, the city of Seattle and the Downtown Seattle Association) to meet transportation needs related to a projected 23 percent increase in jobs by 2036. Together, these organizations are developing a plan that integrates strategies for transit service, corridor designations, public realm and funding.

Progress toward integration can also be seen in changes at WSDOT to support a more integrated, community-focused approach to transportation. WSDOT endorsed the National Association of City Transportation Officials' design guidelines for multimodal design in urban areas. The agency also overhauled its Design Manual in early 2016, which guides design of projects on interstates and state highways, to emphasize safe movement of people, multiple modes, cost effectiveness and community engagement.

All of this requires partners to create shared goals and processes for decision-making about the highest-value approaches toward meeting those goals. Case studies presented in this chapter offer examples of how integrative approaches to transportation are delivering for communities.

THE STATE ROLE IN PUBLIC TRANSPORTATION

Building on policies described in state and federal law, state reports and strategic plans (alongside feedback from communities and partners), this plan establishes the state's role to:

1. **Facilitate the creation of a more complete transportation system that delivers the performance communities need**
   - » Operate state assets efficiently to support public transportation
   - » Facilitate the integration of public transportation into planning, design, construction, operations, policy and funding at all levels of government
   - » Continue to encourage efficient multimodal systems as part of the Growth Management Act
   - » Integrate public transportation into a complete transportation system by developing, maintaining and promoting statewide policies, data, best practices and tools
   - » Increase the use of public transportation systems and services by working with existing and emerging partners to remove barriers
   - » Operate transportation in collaboration with public transportation partners in all travel markets and at all levels

2. Invest strategically to integrate transportation modes and enhance transportation system performance

- » Assess transportation needs and solutions from integrated system performance and people-focused perspectives
- » Identify integrated system performance targets; prioritize and provide state public transportation funding to meet those targets; work with state partners to find other funding to bridge remaining performance or funding gaps
- » Further develop public transportation strategies that maintain or improve transportation system viability during disruptions like catastrophic events, environmental changes, emergencies or major construction
- » Invest in developing new methods to integrate organizations, services and systems

3. Monitor system performance to inform decision-making and investment

- » Improve and support quality, consistency and access to data
- » Enable better and more innovative collaboration between providers (particularly smaller agencies) and both public and private partnerships
- » Establish and maintain consistent multimodal system performance measures to support performance-based decisions, investments and reporting in transportation corridors and communities
- » Establish decision-making approaches and frameworks that are responsive to the real-time performance of the investments

This direction is reflected in this plan's strategies and early implementation recommendations presented in Chapter 3 of this document.

MOVING TOWARD AN INTEGRATED SYSTEM: PRACTICAL SOLUTIONS

Integrating all forms of transportation to meet growing community needs is essential in an era of fewer resources. As demonstrated by recent legislation, planning goals and directives, transportation providers at the state, regional and local levels must plan, fund, design, build and operate a transportation system for the 21st century.

This message is reinforced in a 2014 National Cooperative Highway Research Program report that suggests states change to "a maturity model in which DOTs enhance their ability to support sustainability by gradually shifting toward broad decision-making partnerships, risk-sharing between public and private sectors, integrated infrastructure ownership and operations strategies and sustainability-focused stewardship and regulation" that is routine and institutionalized throughout the state.

Transportation system integration requires all partners to pull from a larger, multimodal toolbox to consider solutions that can best serve the interests of communities and the traveling public. Highways and streets need to be considered as not just a stretch of roadway, but as a community asset with transit facilities and services; bicycle and pedestrian

connections; major employment, education, social service and residential destinations; and other aspects that affect and respond to the needs of people and communities around it. For WSDOT and our local partners, this means a continued evolution from a focus on a single roadway, highway or transit route toward collaboration focused on transportation system performance and thriving communities.

In Snohomish County, Community Transit's Long Range Transit Plan placed a strong emphasis on "integrating land use, infrastructure and transit service in a multimodal corridor vision" through tools such as encouraging transit-oriented development typified by mixed use, more densely populated neighborhoods that can be linked to regional transit and non-motorized infrastructure.

WSDOT's Practical Solutions approach facilitates more flexible and sustainable transportation investment decisions at every step in the transportation lifecycle, from planning and investment through design, construction and operation. Learn more about the approach at www.wsdot.wa.gov/engineering-standards/advancing-practical-solutions.

WSDOT employees were recently directed to adopt the Practical Solutions approach via Secretary's Executive Order Number E 1096.00:

> *The citizens of Washington expect the delivery of transportation services, programs, and projects that are necessary, high quality, appropriately scoped, and delivered efficiently at the right time and in the right location. In meeting this expectation, our systems must be sustainable. Recognizing this importance requires maintaining, preserving, and operating systems to achieve lowest lifecycle cost. When this cannot be achieved within a constrained budget, a process that considers cross asset tradeoffs that balance between performance and risks is necessary. The department is expected to develop clear base line condition assessments and identify quantifiable, evidence-based performance outcomes and predictable, consistent processes for planning, developing, and delivering projects to facilitate safety, mobility, and economic vitality, while promoting local business and jobs and providing for stewardship of the environment. The goal here is to maximize safety, enhance mobility, and encourage economic development through optimization of the transportation system at the lowest cost for as many communities as possible.*

Corridor Sketch is an example of WSDOT's efforts to work with community partners to develop integrated, multimodal transportation solutions. Its objective is to shift community and agency focus from high-cost highway and roadway capacity investments to cost-effective and sustainable strategies in order to meet performance goals and community needs. For example, it supports consideration of demand management and operational improvements as a more cost-effective and sustainable way to address mobility needs before moving to capacity expansion. It engages communities and partners to develop integrated corridor goals and performance targets, assess corridor strengths and challenges, and develop integrated, multimodal investments that will deliver the needed performance. The ultimate outcome is more collaborative solutions that deliver maximum benefit and the lowest lifecycle costs.

CASE STUDIES

Transportation providers at the local and state level have been able to leverage resources and enhance system performance approaches using a Practical Solutions approach. The results demonstrate that successful partnerships and modal integration are facilitated when departments and agencies collaborate on decisions and share ownership for the success of integrated outcomes. The following case studies describe how this approach has worked.

CASE STUDY #1: THE HEALTH EXPRESS SHUTTLE ILLUSTRATES HOW ORGANIZATIONS CAN COME TOGETHER TO FILL A PEOPLE-FOCUSED TRANSPORTATION GAP.

Rural residents needing critical healthcare can face daunting challenges when their treatment facility is many miles away. Patients who cannot drive have few dependable, accessible or affordable options. Sometimes, transportation for a return trip home is not available until the following day, necessitating additional costs for lodging.

Through a public-private-nonprofit partnership, Grant County and Adams County residents have a low-cost, reliable and frequent mode of transportation for participating medical facilities. The Health Express Shuttle was created in 2004 to fill the need for cancer patients residing in rural areas to receive critical healthcare. The service operates weekdays to transport patients some who live more than 60 miles away, from the Moses Lake Clinic, Quincy Valley Hospital, and Columbia Basin Hospital to Central Washington Hospital, Wenatchee Valley Medical Center and Veterans Administration Clinic. The healthcare providers schedule appointments for their patients so a fixed route is feasible instead of costly demand response trips by individuals and their families, friends and caregivers. The shuttle returns patients the same day to their locations in Moses Lake, Ephrata and Quincy.

The funding and project development for the shuttle service was made possible by the collaboration of People for People, WSDOT, Grant Transit Authority, Moses Lake Clinic with Confluence Health and Columbia Basin Cancer Foundation. From 2004 to 2015, the number of patient trips has steadily increased to over 3,000 trips per year. Increased ridership has required purchasing a larger vehicle to provide the service. People for People operates the service with a low fare and the fare is waived for medically-referred riders.

The highest users of the shuttle service have been cancer patients requiring radiation therapy because their small towns do not provide this kind of treatment. Without this service, transportation options for rural residents needing critical medical treatment is limited to costly private services or relying on family or friends to make the frequent long-distance trips for treatment.

The Health Express Shuttle provides a cost-effective, dependable, safe and reliable transportation option for individuals to receive critical life support healthcare. Through the public-private-nonprofit partnership, this service gives hundreds of individuals each year the opportunity to receive critical healthcare and improves their quality of life.

CASE STUDY #2: SPOKANE'S HIGH DRIVE ILLUSTRATES INTEGRATED PLANNING, DESIGN AND CONSTRUCTION.

Like most communities in Washington state, the city of Spokane is faced with major infrastructure and mobility challenges and an electorate that is reluctant to approve additional taxes. Street maintenance, water delivery system upgrades, overflows from combined sanitary and stormwater sewers and parks compete with each other for limited tax dollars. The city of Spokane's approach to the major rehabilitation of its High Drive is a municipal-level example of how a multimodal approach —in this case, bicycle, pedestrian and traffic calming strategies— has been integrated with design and construction of other major city infrastructure. The integrated approach used by the city of Spokane has minimized construction impacts by leveraging public investment and creating value-added solutions.

Consider a three-dimensional view of a street. Included in that view are the traditional surface transportation uses—sidewalks, bike lanes, vehicle travel lanes—along with below-ground connectivity for water, wastewater and room for on-site management of stormwater. In this view, streets serve multiple functions and link together much of the infrastructure that sustains a community's way of life.

This perspective is being utilized on projects throughout the city. Additionally, the city is combining its comprehensive plan chapters for transportation and utilities into one, embedding the change in the organization for the long term.

Recently, the approach transformed a project to upgrade what was originally planned as an asphalt reconstruction project to one that is providing a host of new benefits to the community. In the summer of 2014, the city expanded the High Drive reconstruction project planned as part of a 2004 bond issue into one that supports the bicycle network, pedestrian safety and a major upgrade to sewer and water systems.

The success of this project can be attributed to an interdepartmental group of capital programs, design engineering and utilities which the city formed to consider the overall infrastructure needs from the underground to the street surface. The integrated approach to funding, planning and construction management considers a variety of needs, including:

- New paving
- Sidewalks
- Bike lanes
- Water main replacement
- Storm water management
- Drainage swales
- Storage for excess water from combined sanitary and stormwater sewers

In the case of High Drive, the city's $6.8 million project included bike lanes on both sides of the 1.89 mile road, meandering paved sidewalks with incredible views, on-street pedestrian islands, traffic-calming devices such as roundabouts, planting strips to separate parking from sidewalks, crosswalks and grass stormwater swales on the medians.

In the end, the city disrupted neighbors only once to provide the community with a superior project that provides multiple benefits, and at a lower cost than if the work had been divided into multiple projects. The city estimates it delivered the improvements for at least 25 percent less.

Perhaps best of all, the city's voters like the idea too. In November of 2014, the voters approved a new street levy with a clear focus on adding value through integration. That measure passed with nearly a 78 percent "yes" vote.

"We are taking a common sense approach to making lasting change for our community," Mayor David Condon said. "Streets and utilities go together and it's time we started thinking about them universally."

CASE STUDY #3: LYNNWOOD I-5 TRANSIT BYPASS LANE ADOPTS LOWER-COST SOLUTION TO QUICKLY ADDRESS TRANSIT DELAY.

Increased economic and residential growth is leading to significantly greater travel demand along the I-5 corridor between Everett and Seattle. Between 2013 and 2014, the average one-way commute trip in this corridor jumped more than 10-minutes during rush hours,[49] compounding a 10-minute increase that occurred during 2011-2013.[50] HOV lanes, transit service and park and ride lots play a key role in this corridor. On I-5 at Northgate, a single HOV lane and the buses, vanpools and carpools that use it carry nearly 40,000 people (or 43 percent of person trips) during peak hours.[51] This occurs despite HOV lanes performing substantially below travel speed standards, with travel times well above target.[52] Also, increasingly frequent traffic breakdowns produce even longer delays.[53] The HOV travel time advantage, 20 minutes in 2013, has shrunk to 15 minutes.[54] At the same time, more crowded buses indicate greater demand for transit and a greater number of people standing for 65+minute trips.[55] Transit reliability is also suffering, with more than 25 percent of bus trips arriving late.[56] Park and rides that serve as a key access points for transit on the corridor are chronically overcrowded.[57]

There are two primary ways to address this mobility challenge: increase the level of transit service provided on the corridor and improve transit flow. Transit agencies, local road agencies and the state have created a rapid response effort designed to boost transit's contribution to I-5 performance. This effort focuses on increasing overall corridor performance through increased transit ridership. Examples include:

» Since 2013, Community Transit and Sound Transit have added trips, buses and service to accommodate longer and less predictable travel times, and both agencies will be adding additional time into their schedules to reflect the new reality. In fall 2015, Community

Transit and Sound Transit purchased higher capacity, double-decker buses to help reduce overcrowding.

» A work team comprised of experts from Community Transit, WSDOT, First Transit and Spokane Transit developed a list of potential transit bypass locations and other possible actions at a workshop in 2015. Since then, WSDOT and Community Transit have developed a proposal to test the use of freeway shoulders as transit bypass lanes during heavy traffic congestion on southbound I-5 in Lynnwood. The agencies are working to identify the source for $450,000 in design and construction funding for the pilot project. Tight budgets and competing demands for limited resources, however, have proven to be formidable obstacles.

Providing a more reliable path makes transit more attractive to commuters in the I-5 corridor. It also amplifies the effectiveness of transit investments in additional equipment and service by reducing the amount of money spent on buses sitting unproductively in traffic. These investments support the overall performance of the region's transportation system. While the rapid response efforts proceed, regional discussions continue about longer-term solutions for I-5 performance and the impacts of increased demand.

CASE STUDY #4: HOP FASTPASS™ FEATURES A TWO-STATE COLLABORATION ON A REGIONAL PASS FOR CUSTOMER EXPERIENCE.

Three transit systems across two different states reached across the river that divides them to improve customer experience for transit services between the cities. This is a big change for public transportation in southwest Washington.

Through a unique collaboration among transit and local agencies in Washington and Oregon, a regional transit pass called the Hop Fastpass™ integrates a fare system for customers who travel over the Columbia River to get to their destination in Vancouver or Portland. The new fare payment system will fully launch in 2017 through a partnership by C-TRAN, TriMet and the city of Portland. In the meantime, equipment is being installed on buses, light rail and streetcars, as well as on platforms and stations for testing in 2016.

The benefit to transit riders is a better customer experience. A person can travel on a TriMet bus or light rail train, Portland Streetcar or C-TRAN bus on the same day using the regional all-zone fare. Hop Fastpass™ will speed up passenger boarding and simplify transfers without penalties between the two cities that are served by different transit providers.

With Hop Fastpass™, all three agencies will have the same payment process. Passengers pay as they go, rather than pay the full price up front. Once they reach the cost of a day pass or a monthly pass, the rest of the rides within that day or month are free, meaning that the customer will no longer pay for more than what they use.

Technology is a big part of the better customer experience. For those who choose e-fare, paying for each ride will be easier because the customer just taps the Hop Fastpass™ smartcard on an electronic reader located on the buses, streetcars or at the light rail stations. Also, a smartphone with payment systems like Android Pay or Apple Pay, as well as a contactless bank cards, can use the electronic reader. Loading value to the card is easy and convenient through a through a mobile app; over the phone; on the website; at C-Tran, Portland Streetcar and TriMet customer service offices; or in many grocery and convenience stores. Customers will also be able to auto-load funds when the customer balance gets low.

Traditional fare, such as cash, will continue to be an option and discounted fares will continue for youth and honored citizens (seniors and people with disabilities).

"The new system is a TriMet initiative that C-TRAN is able to participate in. It's a perfect opportunity for us to partner with TriMet and City of Portland on a regional scale," said a C-TRAN spokesperson. "Our passengers ride Tri-Met and Portland Streetcar, and their passengers ride C-TRAN. This partnership demonstrates how the transit services can integrate with the customer in mind."

DEVELOPING PERFORMANCE MEASURES FOR PUBLIC TRANSPORTATION

Performance-based targets and trends can be powerful tools to help transportation providers, policy makers and communities achieve a more integrated, high-performing and adaptable transportation system.

Achieving the vision of an integrated, multimodal system requires moving beyond compliance with performance reporting requirements set forth in federal law, Washington state's Biennial Transportation Attainment Report, RCW 35.58.2796, Results Washington and Results WSDOT. The underlying themes of the Washington State Public Transportation Plan, which include concepts such as multimodal integration, system efficiency, resilience and vibrant communities, will require a different set of evaluation measures and associated data. Although Washington state is one of the nation's leaders in the development of transportation performance measures, existing data and evaluation tools may not be adequate to support more integrated, performance-focused transportation system management and integrated decision-making. The Washington Transportation Plan 2035 recommends going beyond performance areas identified in federal law (including safety, infrastructure conditions, traffic congestion, freight movement, environmental protection and project delivery) to demonstrate funds are being wisely applied and are returning measurable benefits to individuals and the state as a whole.

Many transportation providers throughout Washington state expend considerable resources to provide data to respond to local, state and federal information requirements and requests. Others, such as private providers and carpoolers, provide no data and are not required to do so. A move toward more integrated, performance-focused measures will require us to build from a foundation of existing data and continuous improvement, keeping in mind the costs and challenges associated with gathering, storing and using transportation data.

EXAMPLES OF CURRENT REPORTING:

- Transit agencies provide data to the Federal Transit Administration via the National Transit Database, which was established by Congress to be the nation's primary source for information and statistics on the transit systems of the United States. Recipients or beneficiaries of grants from the Federal Transit Administration under the Urbanized Area Formula Program (§5307) or Other than Urbanized Area (Rural) Formula Program (§5311) are required by statute to submit data to the database. This is used to apportion over $5 billion of Federal Transit Administration funds to transit agencies in urbanized areas and to support annual reports submitted to Congress summarizing transit service and safety data.
- Since 1979, the Washington State Department of Transportation has produced an annual Summary of Public Transportation which provides a financial, operational and ridership snapshot of parts of the public transportation system in Washington state. Local transit agencies, nonprofits, tribes, social service agencies, private providers and Washington State Ferries provide data for this report focusing on transit service and services for people with special transportation needs, including fixed route, route deviated, demand response, vanpool, ferry, commuter rail and light rail services. Trend data presented in the Summary tracks changes in funding, revenue and ridership over the years.
- The Biennial Transportation Attainment report prepared by WSDOT tracks achievement of six statewide policy goals: preservation, safety, mobility, environmental, stewardship and economic vitality.
- Transit agencies submit annual transit development plans to WSDOT that include information about each respective transit system, its capital plan, operating changes and a six-year funding plan.
- WSDOT's quarterly Gray Notebook provides performance data on Washington state's projects, programs and department management. Its primary focus is on performance of highways, aviation, ferries and freight in achieving state transportation goals, but it also includes data on vanpool and transit performance.
- WSDOT's annual Corridor Capacity Report helps inform WSDOT policy makers, planners and engineers as they examine multimodal capacity opportunities for state highways. It also educates WSDOT, the Legislature, stakeholders, educational and research institutions, the media and the public about highway system conditions and how we can work together to reduce congestion.

» The Washington State Transportation Improvement Board's interactive Performance Management Dashboard provides information on local road, pedestrian and bicycle projects. It is considered a national best practice for monitoring performance outcomes of projects that it funds in accordance with a "balanced scorecard" system that has helped to improve project efficiency and delivery tied to strategic plan goals.
» In June 2015, an act improving transit agency coordination was passed by the state legislature (ESHB 1842). The act creates a transit coordination grant program in WSDOT and requires that WSDOT develop an annual report regarding transit agency coordination in the central Puget Sound region by having local entities report on their various coordination efforts.

AN APPROACH TO SYSTEM PERFORMANCE

The Washington State Joint Legislative Transportation Committee's 2011 study on the state's role in public transportation recommended a consistent set of measures be developed to "enable policy leaders to identify public transportation trends in the broader context of the overall transportation system and goals." Federal law encourages expanded use of performance targets and measures. Results Washington directs state agencies to routinely gather, review and display performance data to make it easier for citizens to see for themselves how well state government and its many partners are delivering services and meeting key performance goals. The Results WSDOT strategic plan includes multiple data-driven, performance-related strategies. To meet these recommendations, we must define the performance we need out of our transportation system, determine whether or not we are meeting that need and work with local partners to recommend actions we will pursue together to fill gaps. Data and analysis plays a key role in this process.

Expanding the use of performance targets and measures will require continued innovation in data gathering, analysis and reporting. Our transportation system is complex, interconnected and serves many different types of people and communities. Existing data focuses on only a few transportation modes and metrics. These metrics often provide a notably incomplete picture of the performance of the system and omit information about unmet demand. In addition, the breadth, depth and approach to gathering data varies throughout the state. This supports local priorities and resources and also presents challenges for data aggregation or comparison.

Traditional performance measures reflect the operation of the transportation system, and not the value communities derive from the services. This is particularly challenging for public transportation services which often provide people access to goods and services that remain outside their accessibility without public transportation. How does one measure the value of a rural service that gets people to their cancer treatments? How does one measure the full economic value of transit-oriented development? In other words, public transportation services often provide positive outcomes important to community development beyond system performance. How should this be demonstrated in our investment decisions?

To be useful, performance targets and measures should be consistent with the roles public transportation plays in serving different needs in different regions and for different markets. For example, in urban areas, public transportation plays a unique role in supporting economic expansion by connecting workers and employers despite increasing density and traffic congestion. This contrasts distinctly with the role public transportation plays to provide people access to critical health, education and social services. These roles serve different purposes and should have different metrics for success.

Simply put, performance measures must be appropriate to the goals of the service to be useful decision-making and management tools.

This plan supports:

- Ongoing efforts to improve the development and use of performance targets and measurements that reflect the ways in which public transportation meets the needs of diverse markets, including those that differentiate between commuter service and services for transit-dependent populations
- Expanded development of data and analysis needed to support integrated, performance-based target setting; measurement and reporting
- The use of performance targets and measures that focus on the needs of communities and people
- Continuous improvement in performance target setting, measurement and reporting, building from a foundation of existing data
- Compliance with performance reporting requirements, including but not limited to federal law, Washington state's Biennial Transportation Attainment Report, RCW 35.58.2796, Results Washington and Results WSDOT

In Chapter 3 of this plan, early actions are presented for each of the five goals included in the Washington State Public Transportation Plan. The proposed early actions show how agencies, organizations, nonprofits and companies will play a key role in an integrated multimodal system. Various teams of organizations will implement these early actions, some of which are related to performance measurement. The teams developing measures related to system performance will engage those who operate and fund public transportation.

CHAPTER 3
GOALS AND ACTION STRATEGIES

The goals and action strategies contained in the Washington State Public Transportation Plan are steps toward a common vision:

Transportation partners in Washington work together to provide a system of diverse, integrated public transportation options. People throughout the state use these options to make transportation choices that enable their families, communities, economy and environment to thrive.

WHAT WILL IT TAKE TO GET FROM HERE TO THERE?

The Washington State Public Transportation Plan's long-range goals and action strategies work in concert to support Washington state's economy, environment and communities. The goals in this plan express five key areas of statewide interest related to public transportation. Each goal is supported by strategies and early actions, which highlight key next steps to be taken by transportation organizations to achieve the goals. Early actions are intended to be completed by the end of 2017. WSDOT's Public Transportation Division will periodically report on the progress toward the early actions.

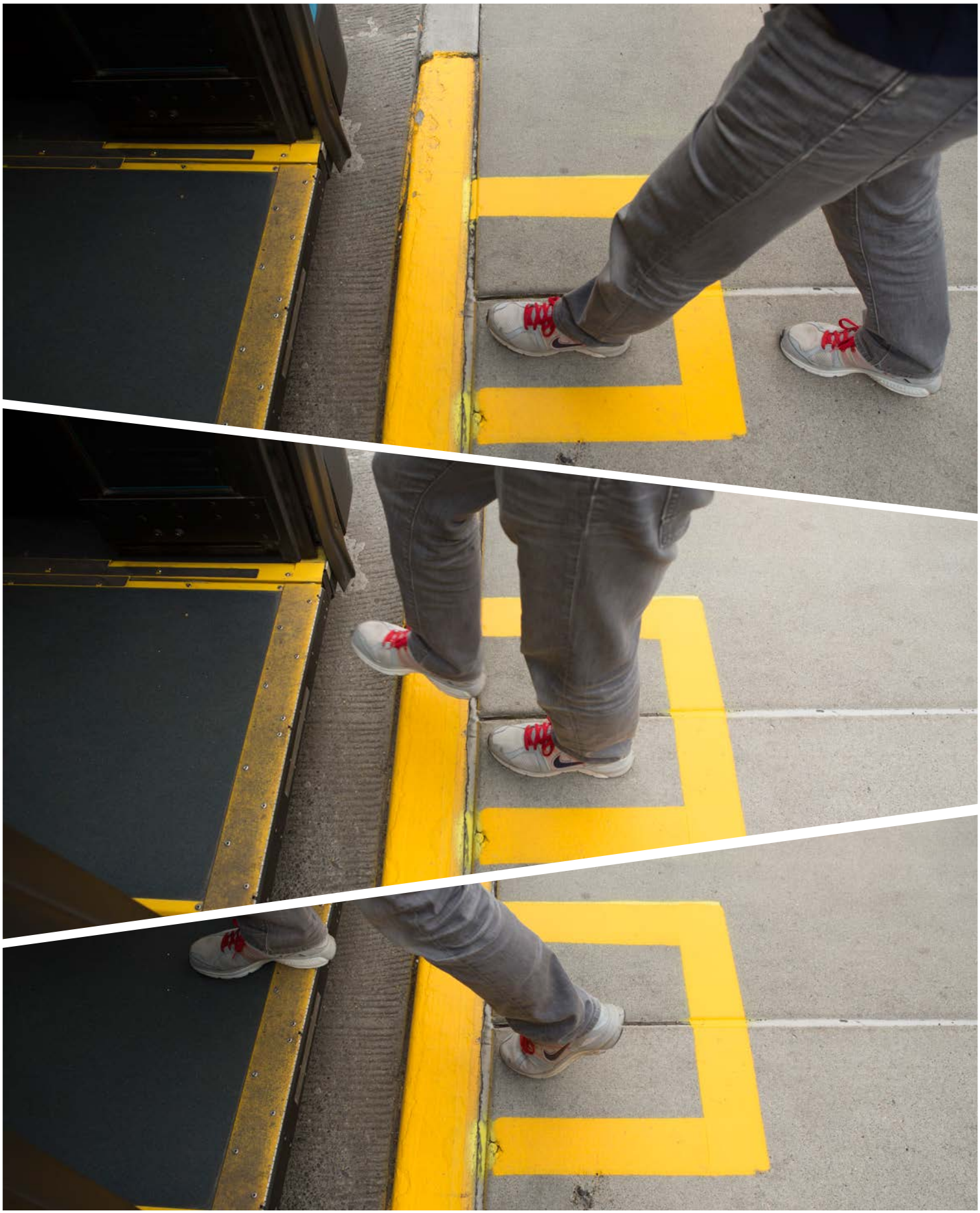
These goals are not mutually exclusive. Early actions typically support more than one goal. They are listed under the primary goal they support.

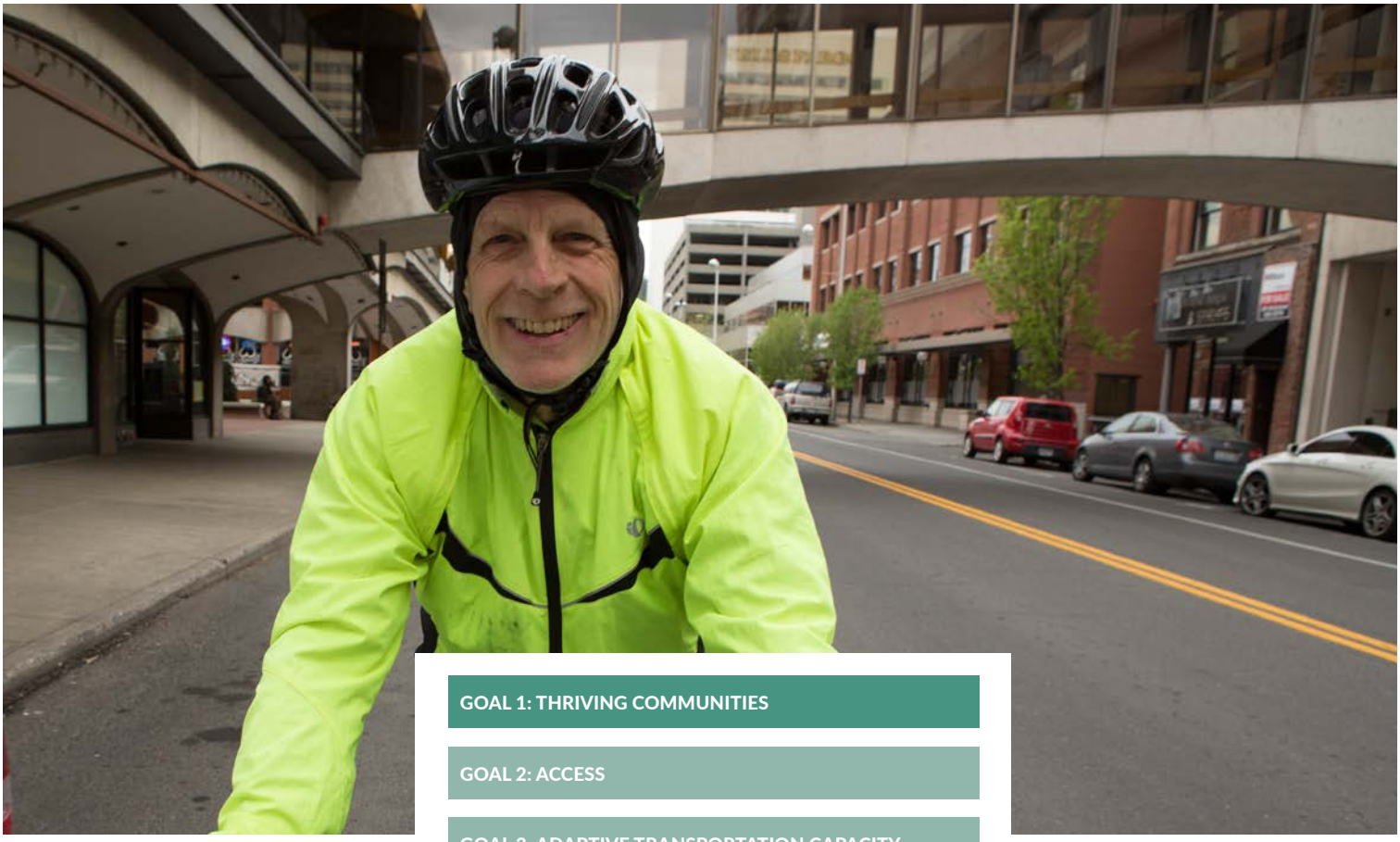
- GOAL 1: THRIVING COMMUNITIES
- GOAL 2: ACCESS
- GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY
- GOAL 4: CUSTOMER EXPERIENCE
- GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP

These goals, strategies and early actions are part of a broader planning framework that includes the overarching Washington Transportation Plan 2035, statewide modal plans (e.g., Bicycle Transportation and Pedestrian Walkways Plan, Ferries Division Long-Range Plan, State Rail Plan, Washington State Freight Mobility Plan, Highway System Plan, Aviation Systems Plan), State ADA Transition Plan, tribal transportation plans, regional and local transportation plans, human services transportation plans, growth management plans and transit plans.

Appendix E provides a crosswalk that shows how the Washington State Public Transportation Plan goals support other state plans. Together, these plans and the ideas they contain provide a blueprint for transportation that delivers improved transportation access, efficiency and effectiveness. To meet the challenges of the 21st century, the Washington State Public Transportation Plan recommends continued and increased collaboration and leadership among transportation partners in addition to action and investment from the public, private and nonprofit sectors at all levels.

Further integration and improvement of our interconnected transportation systems requires steadfast, ongoing collaboration, investments and community engagement.





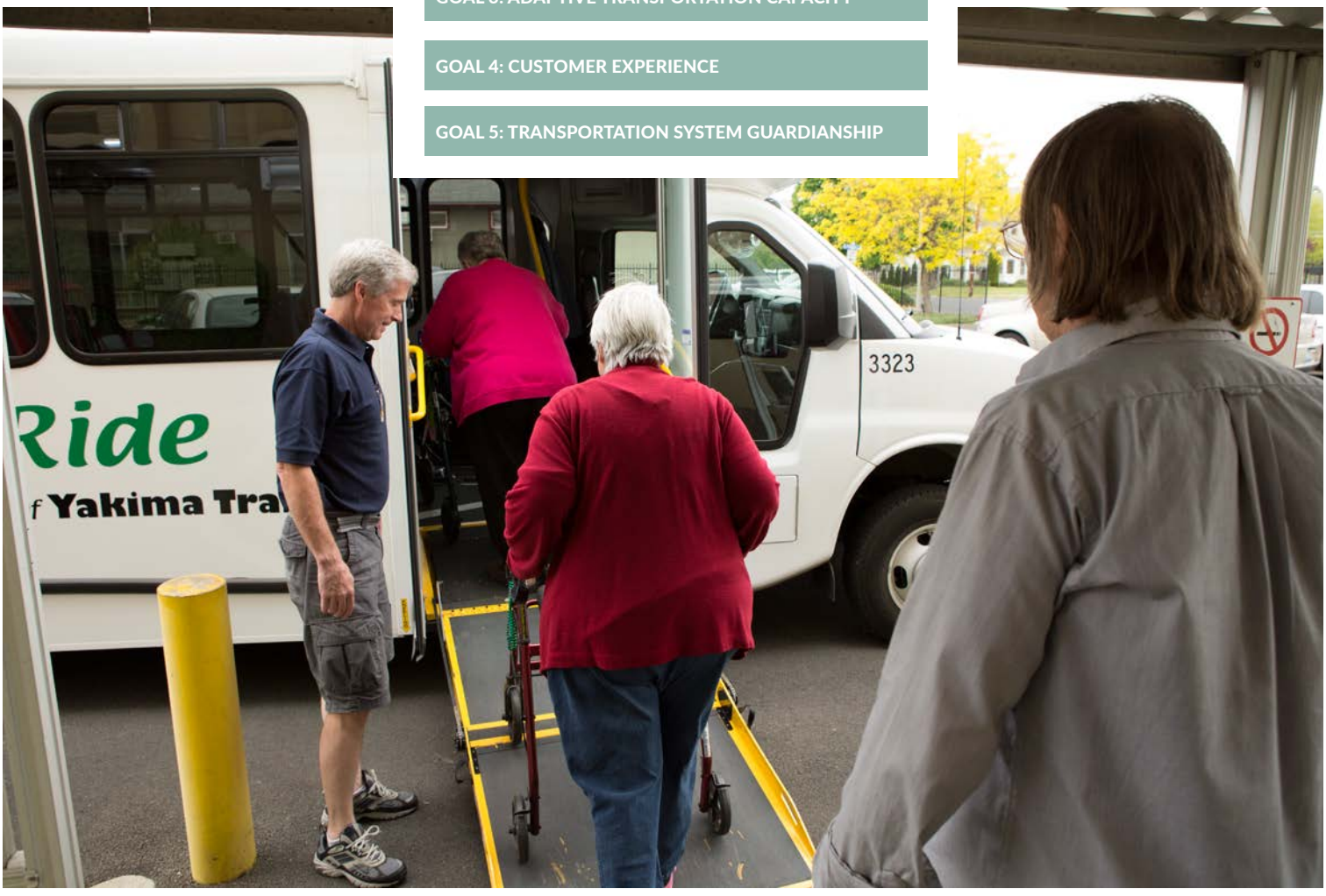
GOAL 1: THRIVING COMMUNITIES

GOAL 2: ACCESS

GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY

GOAL 4: CUSTOMER EXPERIENCE

GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP



GOAL 1 **THRIVING COMMUNITIES**

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

The focus on thriving communities is consistent with the policy goals set forth in the Washington Transportation Plan[58] and federal policies on strengthening families, communities, the economy and the environment.[59] The Washington State Public Transportation Plan emphasis on thriving communities also aligns with the Washington Transportation Commission's Livable Communities Policy, which states, "transportation plans and actions will support and encourage partnering with local communities to achieve our mutual interests in promoting livable communities."[60]

This emphasis will continue to become more necessary as communities strive to meet the needs of our ever-growing population.[61]

THRIVING COMMUNITIES are defined as having the ability to support economic growth, better health, equity, the environment and an improved quality of life.

Implicit in the concept of thriving communities is a recognition that the benefits of public transportation go beyond simply getting people from one place to another. It's important to recognize that people have a broad spectrum of travel needs and that these needs change over time. They need options to not only get to work, but also to access other activities such as going to school, the doctor or shopping. Where transit, carpooling, walking and bicycling are more accessible, people can more easily connect with others, resulting in productivity gains, economic investment, better health and an improved quality of life.

ECONOMIC BENEFITS

Investments in public transportation have a significant multiplier effect in creating jobs, personal wealth and tax revenues. For example, a study conducted by the American Public Transportation Association indicates that "for every dollar communities invest in transit, approximately $4 is generated in economic returns."[62] And a study conducted by Faulk and Hicks found that for every $10 spent per capita on bus operations, employee turnover fell 0.3 percent. Development of bike infrastructure has been shown to create an average of 11.4 jobs per $1 million spent as compared to 7.8 jobs per $1 million spent on road-only projects. Similarly, businesses with sidewalks have seen increases in net operating income of 42 percent. Thriving communities represent a return on investments that provide benefits beyond the initial investment.[63]

In a recent study, WSDOT found that the Complete Streets approach would save an average of $9 million per project (or about 30 percent) when rehabilitating highways that serve small town main streets.[64] The Complete Streets movement supports integrating public transportation into broader community planning efforts. It is based on the premise that streets need to be designed to accommodate multiple transportation modes for improved safety and efficiency.[65] For example, vehicle collisions on Fourth Plain Boulevard in Vancouver dropped 52 percent after using a Complete Streets approach to turn four lanes with limited pedestrian/bicycle access into two through lanes, a center turn lane, two bike lanes and improved sidewalks. The American Public Transportation Association estimates $30 million of increased business sales result from each $10 million in capital investment in transit, along with saving 37 million metric tons of carbon dioxide.[66]

HEALTH AND EQUITY BENEFITS

Public transportation supports health and equity by providing access and mobility for all people. Trends show our state population is growing. People 65 and older make up one of the fastest growing groups. By 2040, this group will be more than one fifth of the state's population.[67] AARP found that people who live in neighborhoods with sidewalks are 47 percent more likely than residents of areas without sidewalks to be active at least 39 minutes per day,[68] which can increase life expectancy and decrease chances of disease.

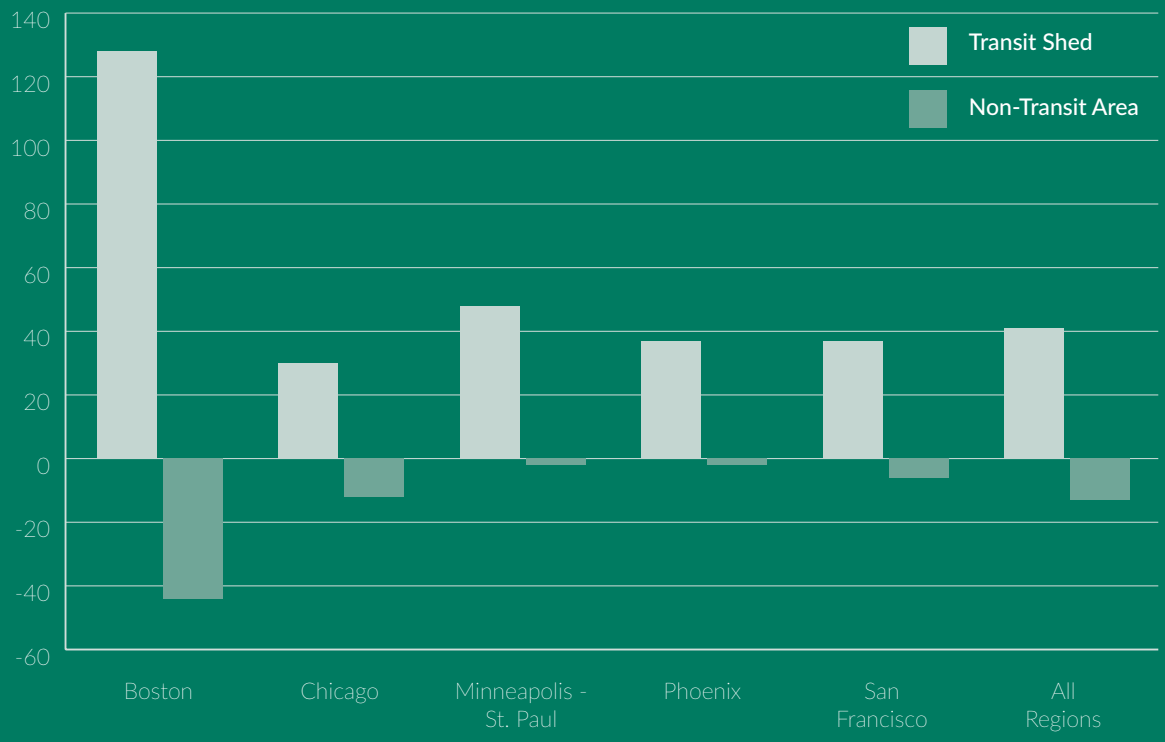
Twenty-eight percent of the state's population is in or near poverty.[69] People in or near poverty are moving to suburban and rural areas where housing is more affordable, are far less likely to own a vehicle and are experiencing longer commutes. A shorter commute time is the single greatest factor in the odds of escaping poverty.

While public transportation supports local economies, health and equity, it also produces significant environmental benefits. These benefits involve removing hundreds of thousands of cars off the road each weekday as well as facilitating higher-density development that decreases the distances people need to travel.

ENVIRONMENTAL BENEFITS

As referenced in Chapter 1, the EPA and Federal Transit Administration noted utilizing public transportation can help reduce greenhouse gas emissions. For every 10,000 solo commuters who leave their cars at home and commute using transit for one year, fuel consumption is reduced by 2.7 million gallons.[70] Local governments, along with private sector partners such as the clean energy sector, are going to play a key role in the strategies to reduce emissions and mitigate and adapt to climate change. Each community is unique in terms of geography, population and climate. Thus, while local governments can learn from each other, they will also need to create approaches that are tailored to the specifics of their situations. Vulnerable communities are often excluded from decision making and have limited resources. These communities need extra support to address climate change and build resiliency.

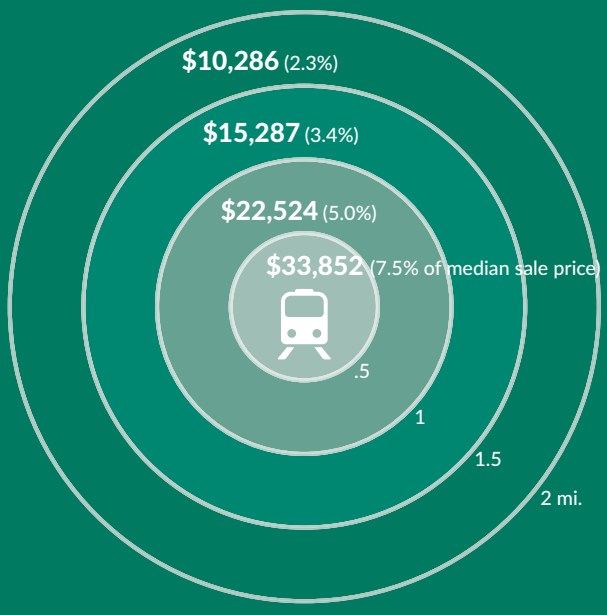
Percent Change in Average Residential Sales Prices Relative to the Region, 2006-11



A study by the Center for Neighborhood Technology showed significant differences in real estate values between areas served and not served by transit for five regions across the country.

Source: The New Real Estate Mantra: Location Near Public Transportation, March 2013. Prepared By The Center For Neighborhood Technology and Commissioned By the American Public Transportation Association in Partnership With National Association Of Realtors

Average value 2009 property increase for homes near rail stations after investments by New Jersey Transit



- Homes near train stations significantly gained in value after Midtown Direct, Montclair Connection and Secaucus Junction - an average of $23,000 per home, with the highest gains closest to the stations
- Median sale price (FY09 dollars): $451,000
  Average trip-time improvement: 12 minutes
  Price increase over 9 years
- A 2010 study of the effect on home prices of previous improvements to NJ Transit rail service found that home values increased by an average of $23,000 (in 2009 dollars). Property values for homes within .25 miles of stations, considered walking distance, increased by $34,000.

Source: The ARC Effect: How better transit 3 boosts home values and local economies; Regional Plan Association July 2010. Written by Juliette Michaelson, Senior Planner, with SeniorFellow Jeff Zupan, Research Associate Andrew Turco, and Associate Planner GIS Frank Hebbert.

INCREASED PROPERTY VALUES

As the graphic on the previous page demonstrates, residents value living where public transportation is accessible. Furthermore, properties located near transit stations have higher values. One estimate noted residential property values performed 42 percent better on average when transit, specifically rail, was easily accessible.[71] A 2011 survey by the National Association of Realtors found that 50 percent of respondents prefer to purchase a home in a smart-growth neighborhood.[72] And a study from AARP shows that homes with above-average levels of walkability[73] command a premium of about $4,000 to $34,000 more than homes with average levels of walkability. In Washington state, a study completed by Seattle's Office of Planning on the 12-mile-long Burke-Gilman trail showed that property near the trail sells for an average of 6 percent more.

Home ownership has been traditionally seen as a positive economic indicator, allowing individuals to increase their net worth and enjoy tax benefits. Ownership also provides a tool for stabilizing housing costs during a period of economic growth. Since the Great Recession, however, home ownership rates have decreased significantly from 70 percent in 2004 to 64.3 percent in 2014. During that same time, the number of renter-occupied units has increased by 25 percent.[74] As the economy has rebounded, housing costs have increased faster in urban than in rural areas in Washington state. The increase in housing costs have the potential to limit lower income individuals from being able to purchase or rent housing in close proximity to public transportation.

For lower income individuals in a neighborhood experiencing gentrification, increasing rents and property taxes have the potential to price out longtime residents to areas with reduced access to jobs and public transportation. Consideration of affordable housing options is critical to any discussion involving public transportation investments; communities thrive when everyone has access to healthy transportation options.

MAKING COMMUNITIES WORK BETTER

Further integrating public transportation into broader community planning efforts can enhance these benefits. For example, the Complete Streets approach supports transportation options and enhances safety. An illustration of this is Fourth Plain Boulevard in Vancouver, Washington. Vehicle collisions dropped 52 percent using this approach by turning four lanes with limited pedestrian/bicycle access into two through lanes, a center turn lane, two bike lanes and improved sidewalks.[75] Transit-oriented development supports affordable housing and job access. An example is high density development near Othello Station in Seattle, which is a walkable community connected by light rail to employment centers like downtown Seattle, SeaTac and the University District. Rural public transportation supports access to jobs, healthcare and other services. An example of this is the state-supported Gold Line intercity bus service, which connects rural communities in eastern Washington to transportation hubs in Spokane.


Pay As You Enter
$2.50


VANPOOL

Planning for community-based outcomes is at the core of what it means to establish thriving communities. The perspectives and resources of multiple agencies and private sector partners need to be integrated and aligned with community plans to bring success to this approach and maximize the benefits of an alignment between parks, businesses, schools, hospitals and other institutions and locales that are essential to thriving communities.

EVALUATING THRIVING COMMUNITIES

Desired Outcomes	Measures Currently Available	Measures to be Developed
• Healthy people • Prosperity • Sustainable environment • Equity	• Tons of greenhouse gases caused by transportation • Jobs created or sustained by transportation projects • % increase in miles of trails	• Thriving Communities Dashboard » Economic, environmental and community benefits of public transportation » Mode split by subarea » Costs of transportation as a portion of household income » Air quality » Number and types of housing units in proximity to public transportation

STRATEGIES

✓ Research, test and share tools and best practices to advance sustainable and equitable transportation planning and investment

✓ Quantify and communicate the economic, environmental, health and community benefits of public transportation to Washington state

✓ Test ways to improve the quality and cost-effectiveness of transportation strategies that support people throughout their lives

✓ Align and coordinate transportation investments to support local comprehensive plans and community priorities, such as improving first- and last-mile pedestrian connections to transit or connections between buses and ferries

EARLY ACTIONS

In the months ahead, teams of organizations will refine the early actions and develop work plans.

1. ***Develop additional strategies for local jurisdictions and partners to reduce drive-alone vehicle trips***
   - Broaden the state's commitment to trip reduction to also reduce non-commute drive-alone vehicle trips
   - Develop and propose a grant program to support local efforts to reduce non-commute drive-alone trips
   - Develop data methodology to support programs focused on reducing drive-alone travel for other types of trips

   PARTNER ORGANIZATIONS: WSDOT, regional transportation planning organizations, metropolitan planning organizations, local governments, transit agencies, tribes, Commute Trip Reduction Board, transportation network companies, employers, business associations, developers, advocacy groups, schools, associations

2. ***Pilot efforts to further integrate access to transit and land use in planning, environmental review and permitting***
   - Support training for land use and transit planners with a focus on transit planning, street and transit operations and transit-oriented development
   - Ensure multimodal transportation is included in practical solutions training involving state, regional and local agencies
   - Collaboratively determine strategies to support complete streets, transit-oriented development and a more robust State Environmental Policy Act
   - Expand availability of maps that identify barriers to first- and last-mile access to transit
   - Collaborate on plans and identify opportunities to apply practical solutions strategies.
   - Identify ways to better align grant programs with practical solutions

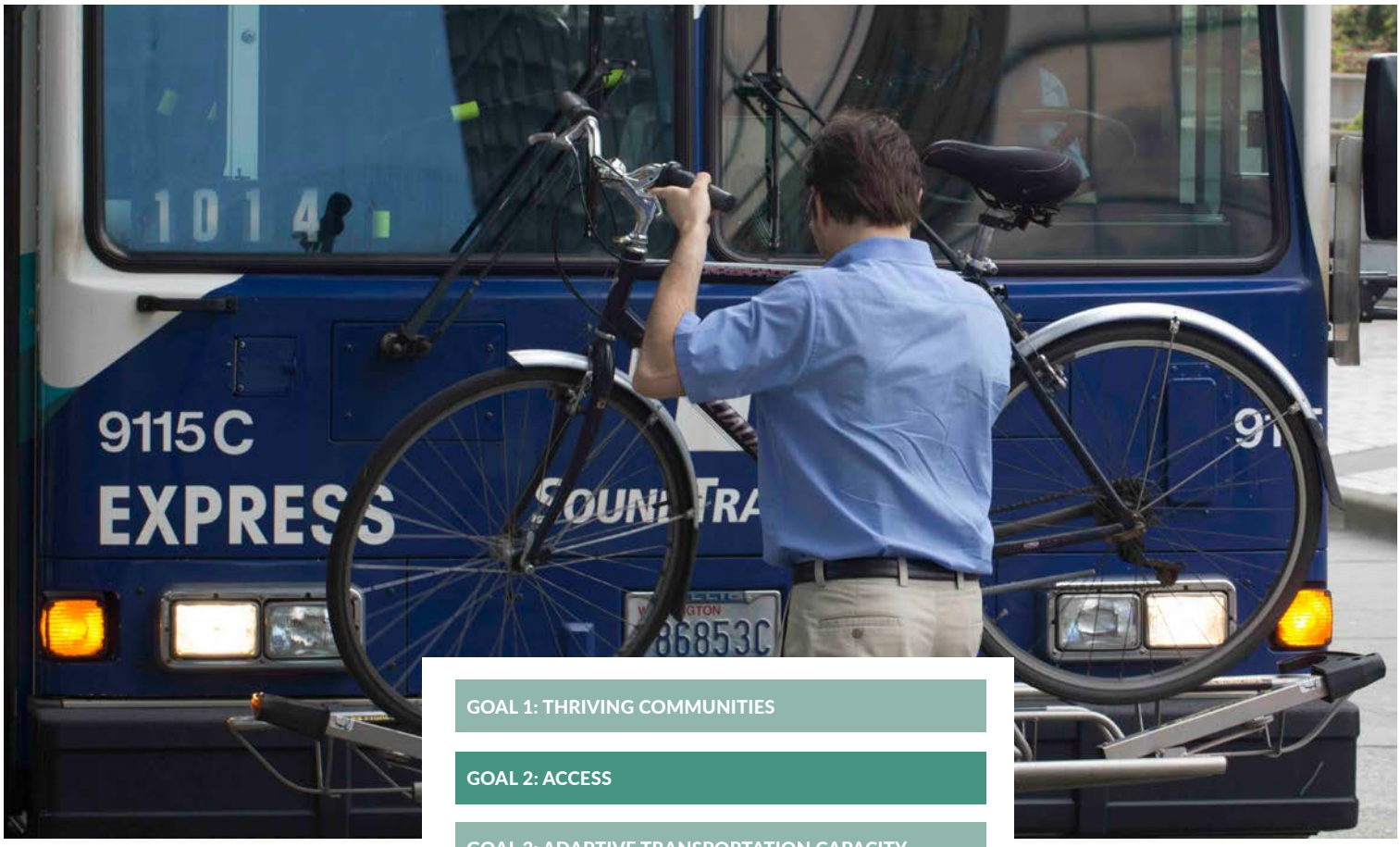
   PARTNER ORGANIZATIONS: State Department of Commerce, WSDOT, Washington State Transportation Center (TRAC), Transportation Improvement Board, regional transportation planning organizations, metropolitan planning organizations, cities and counties, transit agencies, tribes, professional associations, business associations, developers

3. ***Continue to develop practical solution methodologies to create a more integrated multimodal system***
   - Engage public transportation stakeholders to review and provide comment on proposed changes to practical solution methodologies
   - Train and equip staff engaged in public transportation (transits, local jurisdictions, etc.) on how to use the methodologies
   - Identify pilot projects to test new methodologies

   PARTNER ORGANIZATIONS: Federal Highways Administration, Federal Transit Administration, Washington State Transit Association, WSDOT, regional transportation planning organizations, metropolitan planning organizations, local jurisdictions, transit agencies, associations, advocacy groups

4. ***More clearly identify and address human services transportation needs and gaps***
   - Develop, test and provide methodologies to better quantify local human services transportation needs
   - Provide technical assistance to help local coalitions use these data and methodologies as they update their Human Services Transportation Plans

   PARTNER ORGANIZATIONS: WSDOT, Washington State Transit Association, Community Transportation Association of the Northwest, Agency Council on Coordinated Transportation, Medicaid brokerages, local and state departments of health, regional transportation planning organizations, metropolitan planning organizations, local government transportation providers, tribes, nonprofit and private transportation providers, veterans' organizations, users of special transportation services, developers



GOAL 1: THRIVING COMMUNITIES

GOAL 2: ACCESS

GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY

GOAL 4: CUSTOMER EXPERIENCE

GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP

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

Washington's transportation system provides access that meets a significant portion of people's transportation needs. However, key gaps persist and grow. Many people in rural communities, particularly people at or near poverty and the elderly, are left isolated (especially if they don't have access to a privately owned vehicle), and must travel farther to meet some of their basic life needs like health care. Rural communities, including many tribal communities, struggle to maintain their roadway networks and sustain existing transit and special needs transportation services, let alone expand them and make them safer for people with special needs, transit riders, cyclists and pedestrians. This gap will continue to grow as the rural populations age and as jobs and other services continue to centralize in urban areas. In our densest urban areas, like Seattle and Bellevue, rapid growth is overwhelming road, highway and transit networks and hours of congestion are increasing.

Many urban roadways were not designed to carry today's mix of privately owned vehicles, trucks, transit, bicycles and pedestrians. Making changes to urban roadways to make them safer and more accessible, like adding pedestrian safety islands, converting lanes to transit priority and changing parking, present difficult trade-offs and can be expensive. In addition, frequent all-day transit service and special needs transportation services are crucial to older populations, low income workers and others who live and work in urban areas. However, the demand for these services overwhelms the available supply. As housing prices increase in dense urban areas, families with low and middle class incomes continue to move to the suburbs.

Suburban commuters face overcrowded park and rides, HOV lanes, ferries and transit buses. Those who work multiple jobs or non-traditional work hours face limited transit service and carpool and vanpool opportunities. Even a routine disruption to the transportation system, foul weather or an incident that blocks lanes can trigger extreme travel times and disproportionately affect transit dependent populations. These extraordinarily long delays, which occur more frequently in urban areas, affect people's jobs, child care and budgets. Suburban areas must overcome sprawling, car-centric design with limited resources. Solutions like adding or retrofitting sidewalks, providing more frequent, all-day transit service and expanding park and rides, however, are costly.

ACCESS is defined in this plan as the degree to which transportation helps people live productive, healthy lives regardless of age, ability or income.

Transportation access will also be greatly impacted by the shifting demand put on transit, nonprofit and for-profit providers. As public transit agencies changed their service boundaries in response to declining tax revenues due to the Great Recession, the burden to provide transportation shifted to nonprofit and for-profit providers who generally rely on grants to provide service. The administrative capacity at some of the smaller nonprofits stresses their ability to provide service to clients that traditionally have barriers to accessing transportation.

For example, some residents in Clallam and Jefferson counties are part of a volunteer job access transportation program operated by Olympic Community Action Program that provides rides to employment sites in very isolated portions of the western Olympic Peninsula. This service represents a niche transportation market that isn't served by transit, but still provides basic access for some employees of the Kalaloch Lodge. Without this service, the costs of long distance commuting would expend a disproportionate amount of the incomes of those employees. In King County, a policy to allow for multifamily developments to be used as overflow parking lots for transit users is being developed. And other park and ride management strategies are being discussed in both King and Pierce counties to help utilize transit stops that have capacity.

INCREASED DEMAND FOR PUBLIC TRANSPORTATION

Demographic and economic trends point to increased demand for public transportation to support access to jobs, services and community activities. The Tri-County Connector, for example, provides a vital link to residents in Skagit County traveling to work to places like Boeing in Snohomish and King counties. This service allows residents to leave their vehicle at home, reducing impacts on the road and wallet. Students from Western Washington University in Whatcom County also use the Tri-County Connector as a cost-effective alternative to driving themselves. From 2007-2013, ridership has increased 43 percent on the route from Bellingham to Mt. Vernon, and increased 125 percent over the same period on the route from Mt. Vernon to Everett. Similarly, ridership from Oak Harbor in Island County increased 131 percent, demonstrating that access to employment via the Tri-County Connector benefits residents of small urban and rural areas.[76]

By 2040, Washington's population is expected to reach 8.8 million.[77] In addition to needing more buses and service hours, Washington state will be challenged to manage existing roadways and infrastructure to move growing numbers of people and freight more efficiently. Greater access to integrated multimodal transportation solutions can help maximize the carrying capacity of Washington's roadways and infrastructure.

EMERGING TRENDS

Washington's future is likely to see an increase in the number of people who depend entirely on public transportation. In addition to increasing numbers of low-income people in our population, Millennials have lower rates of car ownership and are choosing public

transportation. The trend is also likely to increase in suburban and rural regions as more low-income families are priced out of the urban housing market and move to these areas for more affordable housing. Tribes and communities in remote areas of Washington state must also improve access to services in urbanized areas. An additional factor is that Washington's aging population is projected to account for more than 21 percent of the state's total population by 2040.[78]

Emerging technologies will also continue to impact both public transportation demand and supply, just as they are changing the face of commerce and communications. Future public transportation investment priorities will be influenced by a deeper understanding of these changing markets and greater coordination between service providers and developers of transportation infrastructure.

Land use decisions play a significant role in everyone's access to public transportation. As density increases for people living and working in urban areas, the demand for access to public transportation continues to increase.

There are many examples of partnerships in both rural and urban areas that have resulted in successful collaborations to meet local and regional demand. One example is Washington state's commute trip reduction program, which has united large employers and public transportation providers to develop tools to help commuters find alternatives to driving to work alone. As a result, there have been 30,000 fewer cars on the road daily, 13,000 fewer hours of traffic delay in the Central Puget Sound Region daily and millions of dollars saved in overall system efficiency.[79] In Spokane, the commute trip reduction law has led to a reduction in over 5,400 vehicle trips per day, saving Spokane citizens over $1.1 million in fuel costs each year.[80] Applying the lessons from successful examples of partnership and coordination systemwide, we can make progress toward reliability and integration to improve access for people in Washington state.

EVALUATING ACCESS

Desired Outcomes	Measures Currently Available	Measures to be Developed
• Availability • Affordability • Reliability • Connected system • Integrated planning and services	• Avoided annual hours of delay per traveler • Drive alone rate • Ridership and percentage of trips on time for Washington State Ferries and Washington sponsored Amtrak train service • Transit ridership • On-time transit performance	• Public Transportation Dashboard » Quality First mile/Last mile transit access » Special needs access » Reduced system gaps » Available transportation by subarea » Frequency of local transit » Access to public transportation by race, disability and income » Access to human services and schools » Access to jobs through means other than driving alone

STRATEGIES

✓ Allow for system gaps and deficits to be more quickly identified and addressed; for example, during routine congestion, incidents, emergencies and disaster response

✓ Remove barriers, such as conditions on special needs funding and other policy restrictions, and incentivize collaboration and integration between service providers

✓ Work with a broad range of partners to plan and invest based on systemwide needs, priorities and performance

EARLY ACTIONS

In the months ahead, teams of organizations will refine the early actions and develop work plans.

1. ***Gather and use data that provides a more complete picture of public transportation performance gaps and opportunities***
   - 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
   - Communicate data gaps learned through the WSDOT Corridor Sketch Planning process
   - Gather data on bicycle use through the Bicycle Connection Pilot Program
   - Provide information about tribal transportation services in a way that can be incorporated into transportation maps

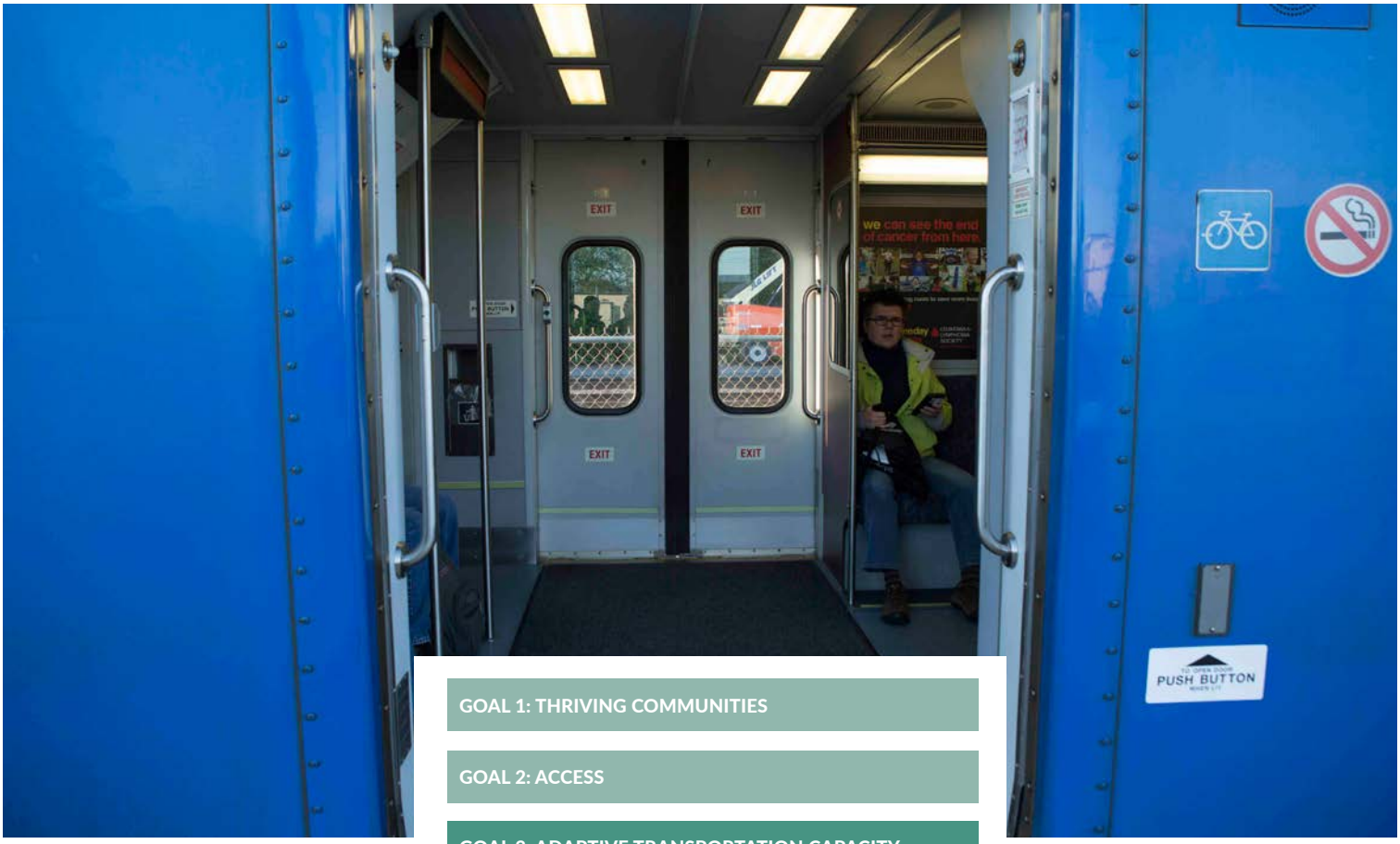
PARTNER ORGANIZATIONS: WSDOT, Washington State Transit Association, Community Transportation Association of the Northwest, Tribal Transportation Planning Organization, Office of Superintendent of Public Instruction, Association for Commuter Transportation, regional transportation planning organizations, metropolitan planning organizations, cities and counties, school districts and modal advocacy groups, advocacy groups, nonprofits, associations

2. ***Develop recommendations to overcome barriers that prevent coordination and efficiency of special needs services***
   - Develop recommendations that will advance complete mobility solutions for people who use federally funded transportation programs; based the recommendations, in part, on the work of the Federal Coordination Council on Access and Mobility
   - Pilot the use of seamless data sharing between two special needs transportation providers

   PARTNER ORGANIZATIONS: Federal Coordinating Council on Access and Mobility, membership of Agency Council on Coordinated Transportation, Community Transportation Association of the Northwest

3. ***Maximize the effectiveness of park and ride lots as part of the integrated multimodal system***
   - Identify and take action on issues related to park and ride management such as overcrowding, access for users with special needs, bicycle/pedestrian access, ease of customer use and safety
   - Support and implement pilot parking management strategies at selected overcrowded park and rides
   - Continue to implement strategies to promote development around transit stations

   PARTNER ORGANIZATIONS: Federal Transit Administration, Federal Highways Administration, WSDOT, Washington State Transit Association, regional transportation planning organizations, metropolitan planning organizations, public and private transportation providers, cities and counties



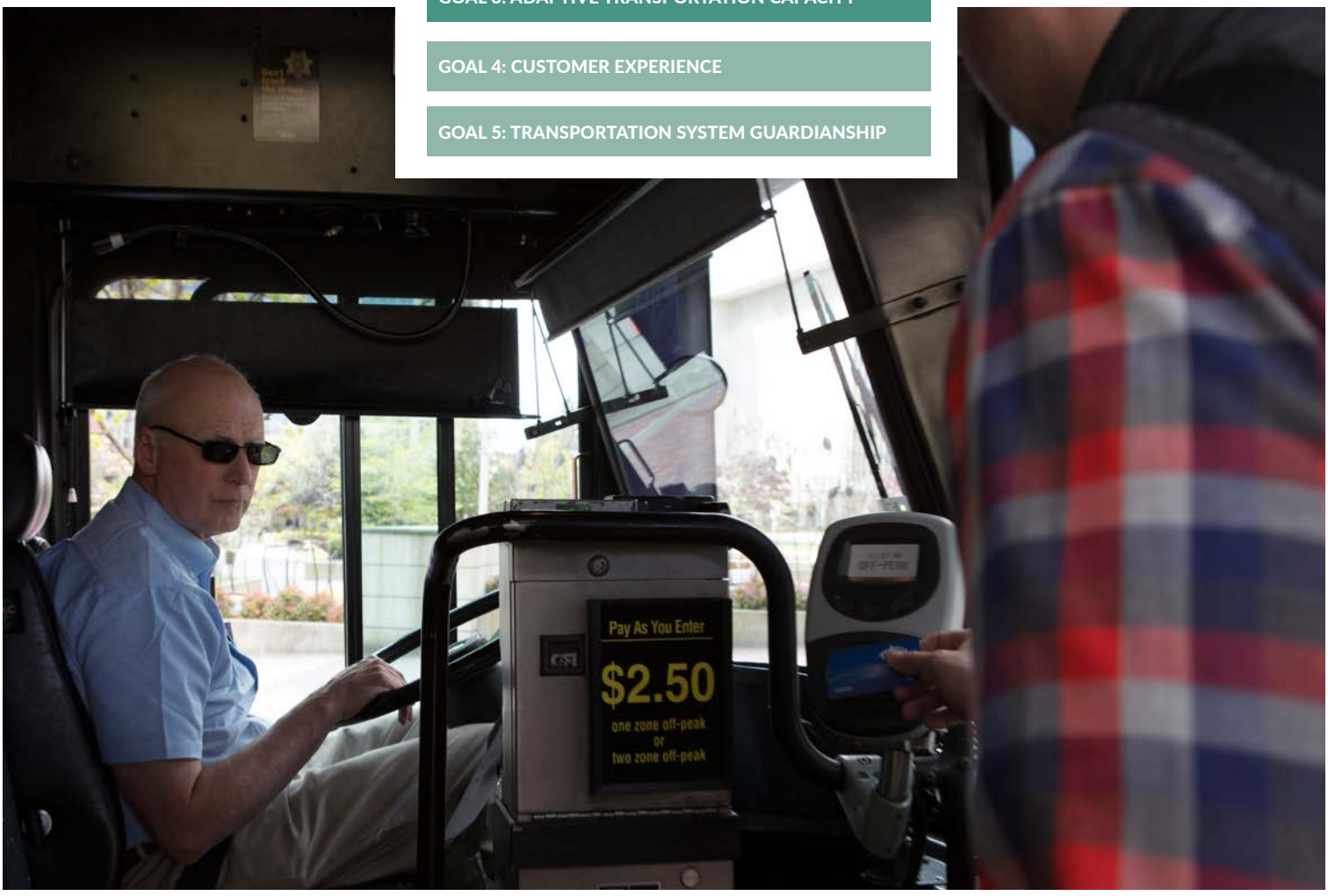
GOAL 1: THRIVING COMMUNITIES

GOAL 2: ACCESS

GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY

GOAL 4: CUSTOMER EXPERIENCE

GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP



GOAL 3 **ADAPTIVE TRANSPORTATION CAPACITY**

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

Throughout Washington state, the demand for public transportation has intensified with population growth, while traditional funding has become increasingly scarce. New technology continues to produce culture shifts throughout our society. New markets emerge and existing markets change, while community visions evolve. Customer preferences, combined with a technology-powered boom in public and private transportation service concepts, are making it possible to use the transportation system in new ways. There are more tools available than ever before to improve the quality and efficiency of public transportation in Washington.

ADAPTIVE TRANSPORTATION CAPACITY is defined as strategies that help transportation become more efficient, adaptable and resilient, often through advances in technology and innovative approaches.

Adaptive transportation capacity strategies leverage the value and benefits of public transportation assets that are already in place to respond to changing market realities. These strategies would change as market or physical conditions change.

From the perspective of the individual, adaptive transportation capacity has expanded many travelers' transportation options and provided the information they need to use those options. For example, online applications increasingly provide real-time information about traffic, transit and other transportation services that help travelers compare convenience, costs and travel times. New technology and business models enable travelers to share vehicles and facilities, from cars to bicycles to parking. Upgraded ride matching systems are supporting the formation of carpools, vanpools and walking groups at schools. Increasing availability of product delivery options gets goods to consumers with fewer miles on the road.

New developments in digital technology such as real-time rideshare, mobility management and fare payment systems are promising options for both urban and rural travelers. For example, King County Metro is testing the use of real-time seat reservations to fill vanpools connecting distant suburbs to job centers. In addition, C-TRAN, Tri-Met and the Portland Streetcar are developing a regional transit pass to simplify fare payment for people who travel over the Columbia River on transit. More efficient dial-a-ride transportation services are realized through real-time tracking of vehicles that send automated five-minute warning notices to reduce vehicle wait time when picking up clients.

W ADAPTIVE CAPACITY WORKS
SOME EXAMPLES

FOR THE INDIVIDUAL

Rapidly-improving traveler information systems that support better real-time travel decisions

Technology-driven car sharing, ride-hailing, vanpool, taxi and bike sharing networks that are expanding options

FOR ORGANIZATIONS

Added transit and vanpools keep people moving during major construction

Providing transit passes, bicycle facilities and carpool priority parking helps employers attract and retain skilled employees

FOR TRANSPORTATION SYSTEMS

Signal coordination and transit signal prioritization improves traffic flow, enhances safety and moves more people

Big data and mobile technology empower transportation innovation

Increased use of electronic fare cards reduces boarding delay

Demographic, cultural, technological and economic changes are happening faster in Washington state than can be accommodated by most public agencies, largely because decision making in public agencies requires more open, deliberate and democratic processes than private businesses. Public agencies and their partners speak to the need for greater nimbleness in adapting to market shifts and emerging opportunities to improve the transportation system. There is also a need to consider policy issues such as privacy and public-private partnerships. So, they must balance the need for nimbleness with careful consideration of how to meet the public's best interest.

For transportation service providers, adaptive capacity offers ways to make the most of limited resources and enhance the customer experience. For example, collaboration among social service agencies and service providers helps create more cost-effective transportation for elderly and disabled clients. Transportation network companies like Lyft and Uber are exploring partnerships with transportation and social service agencies to provide subsidized, on-demand rides to qualified elderly and disabled travelers. Another example is provided by Roaring Fork Transportation Authority in Colorado, which created highway flyer stops linked to feeder trails for people who walk and bicycle.[81]

The evolution of park and rides offers another example of adaptive capacity. In the Puget Sound region, park and ride lots are a key element of our transportation infrastructure, providing about 40,000 parking spaces that help travelers use the bus, train, carpool or vanpool. As the region has grown, the largest park and ride lots with the most frequent transit service are routinely above capacity. In many locations, this leads to overcrowding on early morning buses and trains, encourages hide-and-ride parking in neighborhoods and limits transit ridership growth. Local communities and agencies are working together to solve this problem. Some are improving bicycle, pedestrian and transit access to park and rides. Others, like Northgate Mall in Seattle, add high density development and maintain work day parking for commuters that gets reused as parking for residents and shoppers on nights and weekends. Others are exploring the use of technology to encourage carpooling and vanpooling to park and rides. In some cases, surface lots are replaced by parking structures. But this is a costly solution that is not always welcome in neighborhoods where commerce, activity and density are desired.

For the system as a whole, adaptive capacity strategies can help tap into emerging technologies and business models to more effectively manage system assets. Technology and innovation often reach the public sector much later than consumer or business markets. Decision makers can be understandably hesitant to adopt innovations without proof of performance. But the opportunity costs of failing to adapt quickly (or at all) can have a direct impact on the efficiency and quality of the transportation customer experience.

A Capacity Project Brief of the Strategic High Research Program studies ways that the "capacity effect of traffic operation improvements" is related to overall network performance. It concludes that, "capacity in both freeway and arterial situations…should be treated as a variable related to other factors, not as a constant."[82] Tests conducted for this project

Table 1[83]
Strategies to Expand Capacity Within Existing Roadway Footprint

FREEWAY	ARTERIAL	BOTH
Hov Lanes	Signal Retiming	Narrow Lanes
Ramp Metering	Signal Coordination	Reversible Lanes
Ramp Closures	Adaptive Signals	Variable Lanes
Congestion Pricing	Queue Management	Truck Only Lanes
Pricing by Distance	Raised Medians	Truck Restrictions
High Occupancy Toll and Express Toll Lanes	Access Points	Pre-Trip Information
Weaving Section Improvements	Right/Left Turn Channelization	In-Vehicle Info
Frontage Road Interchange Modifications	Alt Left Turn Treatments	Variable Message Sign/Dynamic Message Sign

demonstrated significant travel time savings from a variety of operational strategies that do not require lane widening or new roadways.

It is likely technology innovations will even further expand the tools available for adaptive capacity. Key to the consideration of adaptive capacity opportunities is careful evaluation of which tools can get the most out of the system and increase system performance. Planners, elected decision makers and the voting public need this data to make informed judgments about the most effective use of public dollars.

EVALUATING ADAPTIVE TRANSPORTATION CAPACITY

Desired Outcomes	Measures Currently Available	Measures to be Developed
• Flexible • Innovative • Efficient	• Toll lane usage • HOV lane usage • Improved flow	• Adaptive Transportation Capacity Dashboard: » Increased capacity without new/ widened lanes » Technology adaptation

STRATEGIES

- ✓ Use technology to improve access for people with special transportation needs and maximize efficiency and effectiveness, e.g., develop systems to help providers better coordinate service delivery
- ✓ Develop and implement integrated, multimodal system improvements that move more people in fewer vehicles and at least cost
- ✓ Foster innovation to respond to emerging market opportunities and other system changes through public private partnerships and agency coordination

EARLY ACTIONS

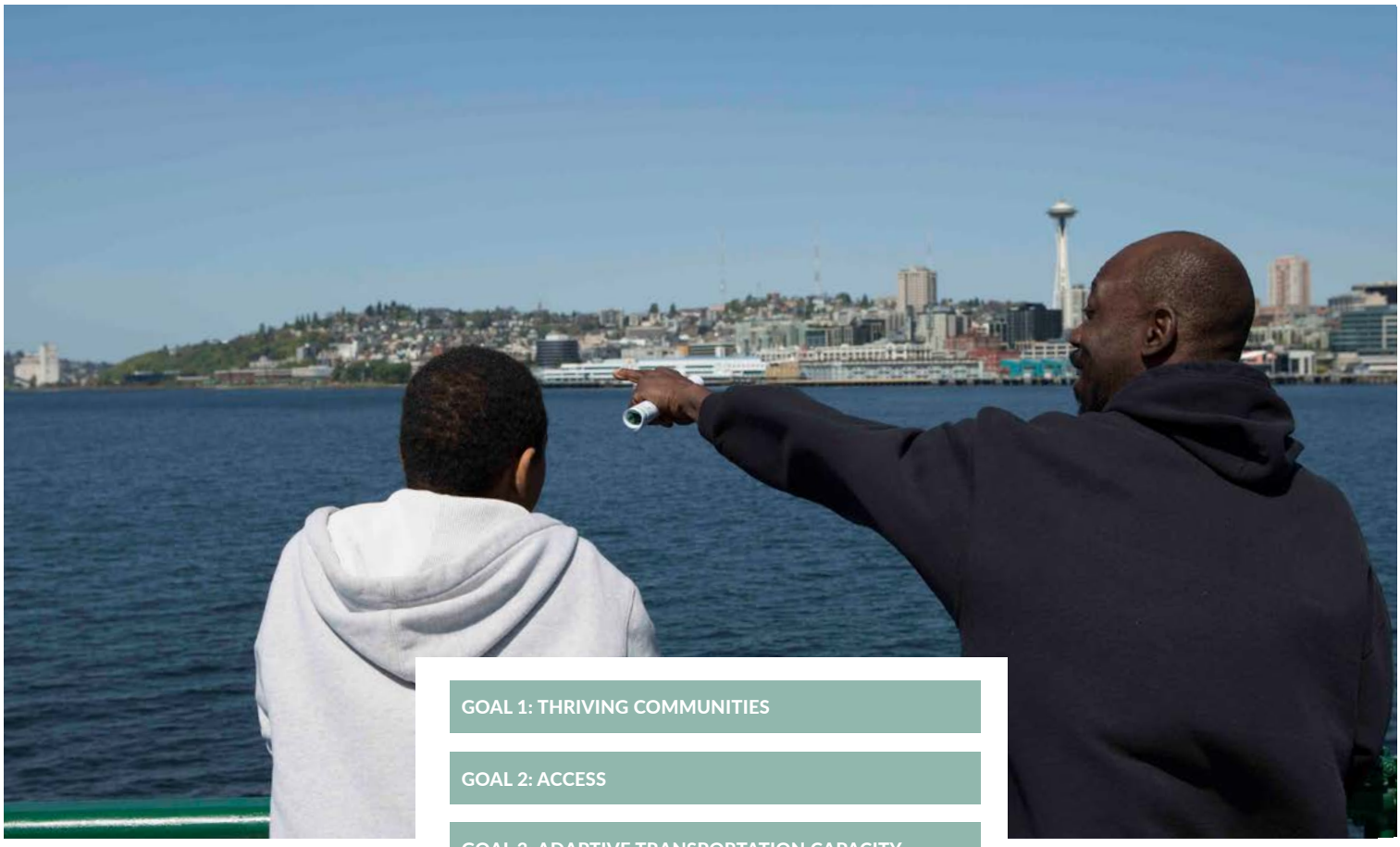
In the months ahead, teams of organizations will refine the early actions and develop work plans.

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

   PARTNER ORGANIZATIONS: United States Access Board, ITS Washington, Community Transportation Association of the Northwest, University of Washington, local jurisdictions, transit agencies, Challenge Seattle, corporate sponsors, Seattle SMART Cities Initiative, nonprofits, associations

2. ***Pilot the use of a multimodal, corridor level mobility index***
   - Improve the quality, consistency and access to data sets
   - Participate in the development of federal, state and local categories for performance measurement
   - Produce and use at least one mobility index

   PARTNER ORGANIZATIONS: WSDOT, Washington State Transportation Center, (TRAC), Community Transportation Association of the Northwest, transit agencies, regional planning organizations, metropolitan planning organizations, Downtown Seattle Transit Coordinating Group, nonprofits, associations.



GOAL 1: THRIVING COMMUNITIES

GOAL 2: ACCESS

GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY

GOAL 4: CUSTOMER EXPERIENCE

GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP

GOAL 4 **CUSTOMER EXPERIENCE**

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

A more integrated, multimodal transportation system can only deliver needed results if the public transportation components meet customers' requirements. The ultimate success of public transportation systems, however, is achieved only to the extent that they meet the needs of their customers, whether they are using trails, ferries, HOV lanes, paratransit or riding a bus.

Viewing public transportation through the customer experience lens requires an understanding that any consumer of transportation makes choices about what modes of transportation to use. When considering forms of transportation, the customer may ask:

- What options are available to me?
- How are these options different, and how will they make my trip better?
- Once I have chosen an option, how do I access, use and pay for it?
- After completing a trip, did the experience meet my expectation, and will I choose it again?
- Do I really need to make this trip?

Each public transportation trip begins with the customer's access to information, transitions to the physical environment of the trip, and ends with the customer's judgment on the quality of experience. Numerous studies on factors that influence higher use of public transportation indicate:

- Public transportation options should be available, accessible and take people where they wish to go regardless of their physical abilities or languages spoken[84]
- Customers should be able to easily learn about their transportation options
- Trips on public transportation should be both physically safe and perceived as safe, (i.e. free from harassment and other danger[85])
- Public transportation options should be fast, reliable and convenient[86]
- Services should be affordable to customers of all income levels and less expensive than driving alone
- Services should provide a comfortable trip in a welcoming, community-oriented atmosphere[87]

CUSTOMER EXPERIENCE is defined as the degree to which public transportation meets people's needs and expectations.

Implicit is the need for a close relationship between transportation providers and their customers—seeking ongoing feedback and engaged in continuous improvement. Local transportation service providers are in the best position to interact with their customers and provide them with a quality experience. The state, however, is uniquely positioned to convene regional and local transportation providers to collectively identify gaps, learn from successes and failures, and develop metrics to make sure the system is working as a whole for Washington residents.

Technology solutions can be used to improve public transportation and provide public transportation providers with cost-effective opportunities to improve the customer experience and manage demand. Examples include the U.S. Department of Transportation's model deployment of vehicle-to-vehicle and vehicle-to-infrastructure safety systems;[88] new mobile applications that track, plan and pay for trips on transit; and new ways to finance transportation system investments.

Although most public transportation providers in Washington are local or private agencies, the state provides leadership on some significant services such as Washington State Ferries, HOV facilities, demand management, commute trip reduction and intercity passenger rail. Many of these services have a strong customer connection, and there continue to be opportunities to seek customer input and improve the customer experience.

While larger public transportation service providers expend considerable resources on customer services and research, smaller agencies have far more limited capacity. Collaboration between Washington state transportation providers offers ways to share innovation and expand implementation. Emerging technologies and other innovative tools can increase efficiencies and enhance the customer experience. Increasing awareness around the relative costs and benefits of various transportation options will help to inform both consumers and decision-makers.

Safety is a fundamental expectation of every transportation customer and part of every transportation provider's core business. Transportation providers at all levels exhibit a longstanding and ongoing commitment to safety, adapting to changes in physical environment, technology, communities and human behaviors. One example of this ongoing commitment to safety comes in the form of an expanded state role to enhance rail transit safety and security. Developed and supported by the Federal Transit Administration, State of Washington and local transit agencies, the Safety and Security Oversight program provides additional oversight and collaboration with a focus on preventing incidents.

EVALUATING CUSTOMER EXPERIENCE

Desired Outcomes	Measures Currently Available	Measures to be Developed
• Ease of use • Safety • Customer satisfaction • Value	• Mode split for select communities • HOV lane travel time advantage, peak hours, by corridor • HOV lane reliability, peak hours, by corridor • Fatalities and injuries by some transportation mode • Ferry system passenger satisfaction • Customer satisfaction for select providers • Train travel time • Bus travel time	• Customer Experience Dashboard » Safety » Satisfaction » Usage by mode and market

STRATEGIES

✓ Deploy best practices in safety and security, taking into account issues of equity

✓ Foster additional collaboration among Washington state transportation providers to identify, implement and sustain solutions that improve the public transportation experience

✓ Increase consideration and use of multimodal options by piloting systems and programs to help the public better understand, consider and use multimodal options; support widespread adoption of proven approaches

✓ Develop tools and processes to promote timely adoption of innovations that improve the customer experience

EARLY ACTIONS

In the months ahead, teams of organizations will refine the early actions and develop work plans.

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

   PARTNER ORGANIZATIONS: Washington State Traffic Safety Commission, WSDOT, Washington State Transit Association, Washington State Transit Insurance Pool, local government, transit agencies

2. ***Provide tools and techniques to be used by transportation providers to enhance customer experience***
   - Conduct workshops focused on best practices
   - Identify ways to implement customer experience improvements developed in the innovation lab
   - 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
   - Identify ways for public transportation data to be more accessible to application developers

   PARTNER ORGANIZATIONS: American Public Transit Association, Washington State Transit Association, WSDOT, Tribal Technical Assistance Program, Community Transportation Association of the Northwest, Rural Transportation Assistance Program, private providers, shared vehicle services, Challenge Seattle

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

   PARTNER ORGANIZATIONS: WSDOT, University of Washington, Community Transportation Association of the Northwest, ORCA programs, City of Seattle, Commute Seattle, paratransit service providers, transportation network companies, bikeshare

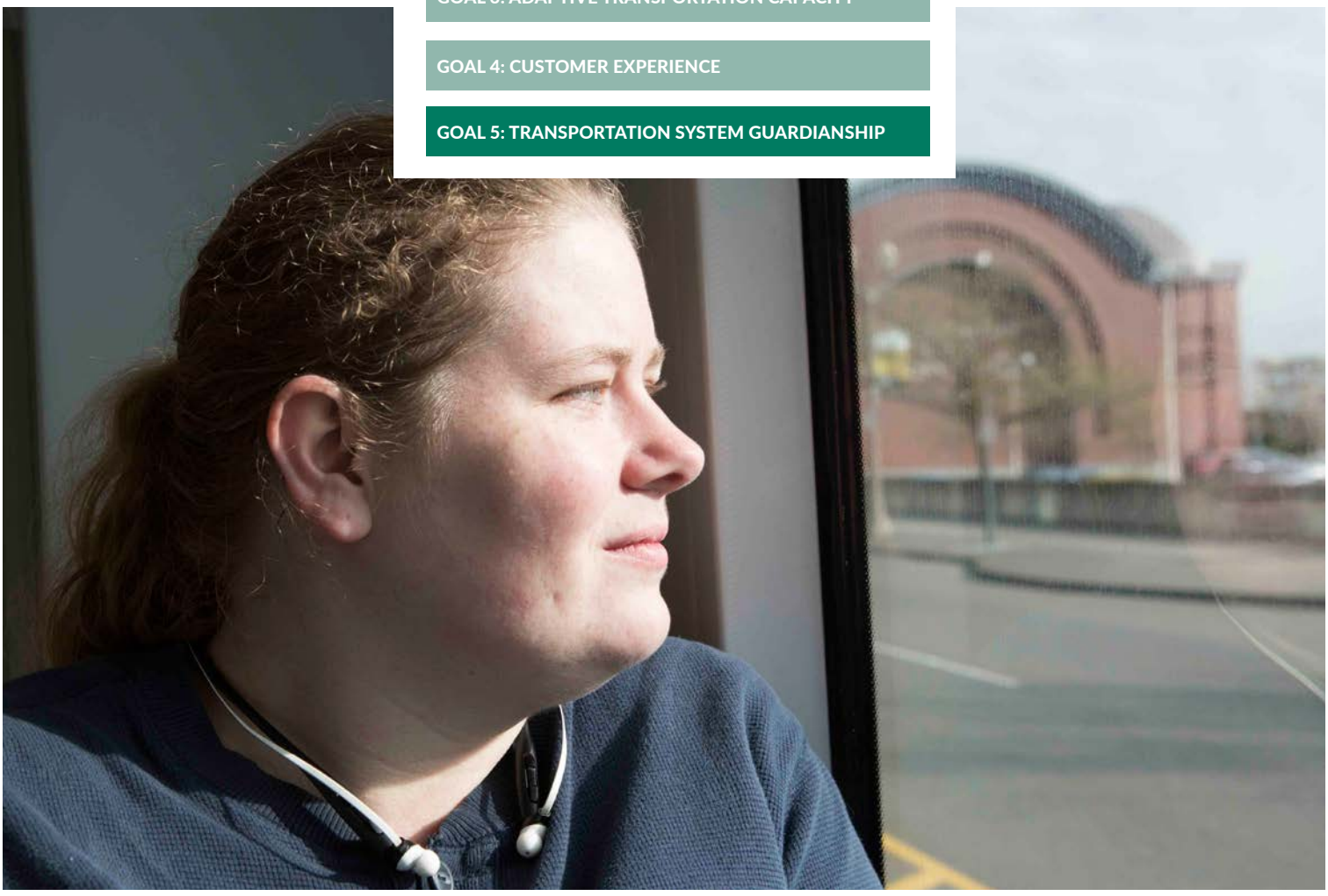
GOAL 1: THRIVING COMMUNITIES

GOAL 2: ACCESS

GOAL 3: ADAPTIVE TRANSPORTATION CAPACITY

GOAL 4: CUSTOMER EXPERIENCE

GOAL 5: TRANSPORTATION SYSTEM GUARDIANSHIP



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

We all must be guardians of Washington state's transportation system. It is the economic lifeblood of Washington state and its urban, suburban, rural and tribal communities—moving people and goods by various modes across many jurisdictions. Guardianship of the transportation system is a commitment to continuously improve the quality, effectiveness and efficiency of the transportation system. Guardianship of the system entails:

- 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 state residents, communities, visitors and businesses

Washington state's primary and traditional transportation responsibility has been state stewardship of state owned and managed infrastructure. As the state is challenged to find cost-effective ways to increase the carrying capacity of its transportation system, public transportation has become a more essential component of Washington's toolkit. Maximizing the value of Washington's transportation system assets requires an approach to the planning and delivery of transportation that incorporates a range of solutions that may require new ways of integrating, managing and funding transportation investments.

TRANSPORTATION SYSTEM GUARDIANSHIP is defined as preserving and delivering public transportation as a key part of an integrated, multimodal transportation system.

Washington's public transportation networks provide 235 million transit trips a year, combined with 450 daily ferry sailings, 300 miles of HOV lanes, intercity bus service, tribal transit, walking, bicycling and nonprofit community transportation. This enables people to get where they need to go—whether to a job, a doctor's appointment, to shopping or to recreation.[89]

Initiatives and programs such as the state's Commute Trip Reduction Program, Vanpool Investment Program (largest public program in the nation with 8.4 million trips), the Special Needs Grant Program, high occupancy vehicle and managed lane system, and park and ride lot system all contribute to providing a complete transportation system for people to access jobs, goods, services and activities. Together, these programs create additional system

capacity and reduce overall need for more lanes, maintenance and operation costs for the system.[90] There are further opportunities for public transportation providers to work in partnership with highway, roadway and land use planners to identify the least-cost, highest-impact improvements to keep an integrated, multimodal system as the focus and goal of every agency partner. Coordinating on these opportunities allows local communities to benefit from and take advantage of multimodal transportation options, which should result in a more effective and efficient statewide system for Washington's residents.

As a critical component of Washington's overall transportation system, Washington's public transportation networks also require guardianship. Even as the state and its public transportation partners continue to search for additional funding resources, it is incumbent on all stewards of Washington's public transportation networks to continue to take care of the existing resources and investments that have been made, and will continue to be made, in our system. Being good stewards of the state's public transportation networks requires accountability for all its components, regardless of mode, frequency of use or geographical areas served. It also requires consideration for how all modes and services can work together to create a better system. Furthermore, hard data is required to demonstrate accountability to the public and inform future decision-making about transportation investments.

Public transportation supports our entire state economy. Not only does public transportation connect residents to their jobs, schools and other destinations, it also reduces congestion on our major roads. For example, King County Metro noted in its 2014 Public Transportation report that transit takes 175,000 cars off the road each weekday, adding up to more than 123 million trips in 2013.[91]

Investment in public transportation also leads to job creation in terms of capital investment and operating the public transportation systems, according to the American Public Transportation Association (APTA). Specifically, the APTA noted: "The combined effect (of enhancing the transportation system and spending on purchases of vehicles, materials and construction) indicates that the impact on U.S. annual GDP can exceed $52 billion in year 20 of the investment. That is over 3.7 times the annual investment in that year."[92]

Multimodal strategies can be used in innovative ways to maximize the overall value of public transportation investments. For example, bike-and pedestrian-related improvements in the first- and last-mile segments of trips can help create a complete and connected transportation system that increases mobility, safety, quality of life and system efficiency at a relativity low cost. The University of Washington noted that bicycle and pedestrian investments deliver long-term efficiency with relatively affordable and highly stable operation and maintenance costs.[93]

Likewise, as Washington's special needs population continues to grow, with close to 40 percent meeting the criteria by 2040, and as the cost consumes more of the transit agency budgets, there may be an opportunity to better direct and leverage federal funding to serve populations with special needs. In rural areas, compounding factors of land use, poverty and age are barriers to accessing transportation to meet basic life needs. There may be a role for increased state investment in providing special needs transportation. While the state can and

CURRENTLY, THERE IS NOT ENOUGH FUNDING AVAILABLE TO EITHER MEET TRANSPORTATION NEEDS GENERATED BY MORE PEOPLE AND JOBS, OR TO FIX OUR AGING INFRASTRUCTURE

does play a role in coordinating and/or providing inter-jurisdictional transportation services, such as Travel Washington, there is also an opportunity to increase investment for these services and contribute to overall mobility.

Although public transportation services and systems provide statewide benefits, direct transit agency funding in Washington state is largely local, accounting for 81 percent of direct transit agency funding. Federal agencies provide 17 percent and the state provides 2 percent. Local direct transit funding comes from sales tax revenue and is subject to economic fluctuations. During the recent recession, many jurisdictions saw significant drops in sales tax revenue coupled with significant increases in ridership demand. Additionally, all transit agencies are limited in the amount of local revenue they can raise because of the legislatively authorized maximum tax rate of 0.9 percent, and several are at their maximum. Community Transit, Jefferson Transit, Island Transit, Sound Transit and King County Metro have all reached their maximum and others, such as Kitsap Transit and Intercity Transit, are near the maximum limit for local sales tax for public transportation.[94]

Maintenance and preservation of transit systems requires money. Under the current scenario, however, funding and revenue projections are not sustainable to meet the needs resulting from projected growth in population and jobs. For example, the Puget Sound Regional Council (PSRC) estimates transit ridership will need to double by 2040 to accommodate population and job growth in the Puget Sound region. There is not funding in place today to support this increased demand. The same is true in other parts of the state where local communities want transportation options and have hit the maximum local funding limit, such as King County Metro and Jefferson Transit[95]. In some communities, the demand for transportation options has resulted in the creation of new transit authorities. For example, in November 2013, Okanogan County residents approved transit options for

the Okanogan County Public Transportation Benefit Area.[96] Aging fleets for tribal, nonprofit and for-profit organizations represent another issue for continued support of special needs transportation providers that depend on limited state grant funds to maintain their vehicles.

The state's interest in delivering viable public transportation networks to its citizens will be increasingly pivotal to achieving future state goals, providing the capacity, mobility and access necessary for the effective movement of people and goods essential to a high quality of life for all Washington state residents.[97] Washington state's interest and role as a partner in the guardianship of public transportation can take place in a variety of ways, from adopting a partner role in coordinating and integrating the planning of transportation to being an information resource, convener and facilitator, data aggregator, evaluator of emerging technologies, policy maker, or as a funder.

EVALUATING TRANSPORTATION GUARDIANSHIP

Desired Outcomes	Measures Currently Available	Measures to be Developed
• Sustainable services and infrastructure • Reduce lifecycle cost • Cost effective • Improved access • Public understanding	• % of highway pavement in fair or better condition • % of state bridges rated structurally deficient • % of state ferry terminals in fair or better condition • Capital project delivery performance	• Public perception of condition and needs of local and statewide transportation systems • Improved system conditions

STRATEGIES

✓ Manage, preserve, maintain and operate the transportation network as a complete multimodal system

✓ Develop a dashboard that monitors Washington's transportation system around multimodal performance indicators that build toward a more integrated, connected multimodal system

✓ Test pilot service concepts to increase vehicle occupancy and use of public transportation, including transit, active transportation, ride-hailing, telework and more

EARLY ACTIONS

In the months ahead, teams of organizations will refine the early actions and develop work plans.

1. ***Develop a plan and begin implementation to increase stakeholder and public understanding of the value of public transportation***
   - Inventory current efforts
   - Identify key gaps and understandings
   - Develop goals, strategies and work plans

PARTNER ORGANIZATIONS: Washington State Transportation Commission, WSDOT, Public Transportation Advisory Committee, Washington State Transit Association, Tribal Transportation Planning Organization, Community Transportation Association of the Northwest, regional transportation planning organizations, metropolitan planning organizations, bicycle and pedestrian organizations

2. ***Advance opportunities for integrated, multimodal investments***
   - Identify and report key risks that threaten public transportation infrastructure and performance
   - Identify and report key opportunities for public transportation that enhance mobility and solve transportation problems
   - Begin development of supplementary measures to improve understanding of public transportation performance in the context of a complete, integrated transportation system

   PARTNER ORGANIZATIONS: Washington State Transportation Commission, WSDOT, Public Transportation Advisory Committee, Washington State Transit Association, Tribal Transportation Planning Organization, Community Transportation Association of the Northwest, regional transportation planning organizations, metropolitan planning organizations, bicycle and pedestrian organizations

3. ***Identify ways to help jurisdictions and public transportation providers better prepare for emergencies and disasters***
   - Ensure that resource sharing and interagency emergency coordination memorandums of understanding and agreements between local, regional and state transportation agencies are complete and up-to-date and that key personnel are aware of their existence and potential uses
   - Assess data about people with special transportation needs, identify gaps and opportunities and recommend improvements
   - Further incorporate and refine transportation for people with special transportation needs into emergency and disaster plans

   PARTNER ORGANIZATIONS: Federal Emergency Management Agency, Washington Emergency Public Information Network, Washington State Hospital Association, Washington State Ambulance Association, Washington State Emergency Management Division, State Emergency Operations Center, WSDOT, Washington State Patrol and other first responders, Community Transportation Association of the Northwest, transit agencies, local jurisdictions, local and tribal Emergency Managers

CONCLUSION

Washington state is growing and changing. It has a larger, more diverse population, especially in urban areas, and our roads and highways are becoming more congested. Technology is having an unprecedented influence on how we work, interact and transact. There are increasing numbers of people who are public transportation dependent, and that number will grow with the aging of the Baby Boomer population.

Washington's public transportation serves many, and we need a 21st-century public transportation system that can continue to keep people moving and communities thriving.

The Washington State Public Transportation Plan lays out five goals to achieve the vision for the public transportation system. These are:

1. Thriving communities
2. Access
3. Adaptive transportation capacity
4. Customer experience
5. Transportation system guardianship

Each of these goals, in alignment and coordination with each other, will move public transportation and those reliant on its services forward.

But this plan is only a framework, a guide and a document, and is only as strong as the partnerships necessary to carry it forward.

Immediately after this plan is adopted, WSDOT will prepare a work plan and budget to begin its implementation. Periodically, WSDOT will update that work program in conjunction with its public transportation partners.

Success depends on people taking action: leadership, bold moves, community investments and embracing opportunities for change. We will all need to mobilize our resources, challenge ourselves and others, test our strategies, measure our progress, celebrate our successes and learn from our mistakes.

Over the long run, we hope to see our collective work and stewardship result in a sustainable, adaptive and responsive multi-modal transportation system. A strong public transportation system is critical to the needs of each and every person, community, business and service in Washington. Their strong partnerships will define how Washington moves in the 21st century.


43 U DISTRICT
7112


Priority seating for senior citizens and persons with disabilities

1 "Population Growth in Relation to the State's Counties." WSDOT Data Library. WSDOT, 2015. Web. 01 June 2015. <http://ofm.wa.gov>.

2 "Measuring the Attainment of State Transportation Policy Goals." WSDOT Performance Reporting. WSDOT, 2015.

3 "WTP2035." Washington Transportation Plan 2035. Washington State Transportation Commission, 1 Jan. 2015. Web. 01 June 2015. <http://wtp2035.com/>.

4 "Results WSDOT – Our Strategic Plan." WSDOT. WSDOT, 1 Jan. 2015. Web. 01 June 2015. <www.wsdot.wa.gov/about/secretary/strategic-plan/>.

5 "Results Washington." Results Washington. Washington State, 1 Jan. 2014. Web. 01 June 2015. <http://www.results.wa.gov/>.

6 "Transport in the Digital Age: Disruptive Tends for Smart Mobility." (2012): n. pag. 1 Mar. 2015. Web. 1 June 2015. <http://www2.deloitte.com/content/dam/Deloitte/uk/Documents/bps/deloitte-uk-transport-digital-age.pdf>.

7 "The Great Recession." http://stateofworkingamerica.org/great-recession/

8 "Data Are Slowly Changing the Way Cities Operate." The Economist. The Economist Newspaper, 01 Nov. 2014. Web. 01 June 2015. <http://www.economist.com/news/britain/21629533-data-are-slowly-changing-way-cities-operate-city-slicker?fsrc=scn%2Ftw%2Fte%2Fpe%2Fcityslicker>.

9 King County Metro Transit's finances: an overview.
(page 5 if you want to read it).

10 "2013 Summary of Public Transportation." WSDOT, 1 Dec. 2014. Web. 1 June 2015.

11 "Funding for Local Government Infrastructure." Puget Sound Regional Council (2009): n. pag. 1 Sept. 2009. Web. 1 June 2015.

12 "Walkability Raises Housing Values, Study Finds." Designing Healthy Communities. DHC, 3 Feb. 2012. Web. 01 June 2015.
13 "Population Growth." WSDOT Data Library. WSDOT, 2015. Web. 01 June 2015. <http://ofm.wa.gov>
14 http://www.seattletimes.com/seattle-news/more-people-moving-to-washington-population-tops-7-million/>.
15 "United States Census Bureau." Washington QuickFacts. US Census Bureau, 22 Apr. 2015. Web. 01 June 2015. 16 2014 Center City Commuter Mode Split Survey. http://commuteseattle.com/wp-content/uploads/2015/02/14-5390-Commuter-Mode-Split-Survey-Report-2-23.pdf
17 http://www.fhwa.dot.gov/planning/processes/rural/related_topics/.
18 http://www.fhwa.dot.gov/planning/publications/rural_areas_planning/page03.cfm#IIBcotrts
19 "United States Census Bureau." Washington QuickFacts. US Census Bureau, 22 Apr. 2015. Web. 01 June 2015.

20 "Impact of Demographic Change on Local Government." MRSC, 22 Jan. 2015. Web. 01 June 2015. <http://www.rco.wa.gov/documents/ORTF/WashingtonPopulationTrends.pdf>.

21 https://www.census.gov/quickfacts/table/RHI825214/53,00

22 Maciag, Mike. "A State-by-State Look at Where Each Generation Lives." Governing.com, 31 July 2014. Web. 01 June 2015. <http://www.governing.com/topics/urban/gov-generational-population-data-maps-by-state.html>.

23 Hylas, Sam. "Language Diversity in America: How Seattle Stacks Up - The Seattle Globalist." The Seattle Globalist, 27 May 2014. Web. 01 June 2015. <http://seattleglobalist.com/2014/05/27/language-diversity-in-america-how-seattle-stacks-up/25311>.

24 "RCW 81.66.010(3)." Revised Code of Washington. Washington State Legislature, 2009. Web. 18 June 2015. <http://apps.leg.wa.gov/rcw/default.aspx?cite=81.66.010>.

25 http://www.ofm.wa.gov/pop/asr/default.asp

26 Fry, Richard. "This Year, Millennials Will Overtake Baby Boomers." FactTank. Pew Research Center, 16 Jan. 2015. Web. 01 June 2015. <http://www.pewresearch.org/fact-tank/2015/01/16/this-year-millennials-will-overtake-baby-boomers/>.

27 Maciag, Mike. "A State-by-State Look at Where Each Generation Lives." Governing.com, 31 July 2014. Web. 01 June 2015. <http://www.governing.com/topics/urban/gov-generational-population-data-maps-by-state.html>.

28 "Who's on Board 2014: Mobility Attitudes Survey." Transit Center.org. Web. 1 June 2015. <http://transitcenter.org/wp-content/uploads/2014/08/WhosOnBoard2014-ForWeb.pdf>.

29 "Socioeconomic Position in Washington." Washington State Department of Health (n.d.): n. pag. 25 Mar. 2014. Web. 4 June 2015.

30 Ibid. Pg. 6

31 **Hyperlink not available, but was located at the following location at time of PTP publication** <http://aspe.hhs.gov/poverty/15poverty.cfm>

32 "The Role of Public Transportation." The Washington State Transportation Plan (2004): n. pag. WSDOT, 19 Oct. 2004. Web. 1 June 2015.

33 - Link not available.

34 Felt, Chandler. "South King County's Changing Demographics." City of SeaTac, 24 Jan. 2012. Web. 1 June 2015.

35 "Release: Urban Sprawl Costs US Economy More than $1 Trillion per Year." The New Climate Economy, 19 Mar. 2015. Web. 01 June 2015. <http://newclimateeconomy.net/content/release-urban-sprawl-costs-us-economy-more-1-trillion-year>.

36 The Impacts of Neighborhoods on Intergenerational Mobility:Childhood Exposure Effects and County-Level Estimates. Raj Chetty and Nathaniel Hendren, Harvard University. April 2015.

37 "Transportation." Smart Growth America. Web. 01 June 2015. <http://www.smartgrowthamerica.org/issues/transportation>.

38 "Communities Grow with Transit." Grows Communities. APTA. Web. 01 June 2015.

39 The 2015 Corridor Capacity Report.

40 http://metro.kingcounty.gov/planning/pdf/KCMTStratPlan_2013_Update_LR.pdf

41 "Transit Savings Report." Public Transportation.org. APTA, n.d. Web. 01 June 2015.

42 "Rural Communities: Expanding Horizons." APTA. Web. 1 June 2015.

43 Durbin, Kathie. "State's Climate Change Efforts Fall Short." The Columbian. N.p., 20 Feb. 2011. Web. 01 June 2015. <http://www.columbian.com/news/2011/feb/20/states-climate-change-efforts-fall-short/>.

44 Gillis, Justin. "Climate Panel Cites Near Certainty on Warming". August 19, 2013. The New York Times. http://www.nytimes.com/2013/08/20/science/earth/extremely-likely-that-human-activity-is-driving-climate-change-panel-finds.html?ref=temperaturerising

45 "Public Transportation's Role in Responding to Climate Change." Federal Transit Administration. U.S. Department of Transportation, 1 Jan. 2010. Web. 1 June 2015.

46 American Public Transportation Association, 'Public Transportation: Benefits for the 21st Century', http://www.apta.com/resources/reportsandpublications/Documents/twenty_first_century.pdf

47 "Data Are Slowly Changing the Way Cities Operate." The Economist. The Economist Newspaper, 01 Nov. 2014. Web. 04 June 2015. <http://www.economist.com/news/britain/21629533-data-are-slowly-changing-way-cities-operate-city-slicker?fsrc=scn%2Ftw%2Fte%2Fpe%2Fcityslicker>.

48 Durbin, Kathie. "State's Climate Change Efforts Fall Short." The Columbian. N.p., 20 Feb. 2011. Web. 01 June 2015. <http://www.columbian.com/news/2011/feb/20/states-climate-change-efforts-fall-short/>.

49 WSDOT Northwest Region Traffic

50 WSDOT 2014 Corridor Capacity Report

51 WSDOT 2014 Corridor Capacity Report

52 WSDOT 2014 Corridor Capacity Report

53 WSDOT Northwest Region Traffic

54 WSDOT Northwest Region Traffic

55 Community Transit, WSDOT 2014 Corridor Capacity Report

56 Community Transit

57 WSDOT, Population Growth in Relation to State's Counties, http://ofm.wa.gov

58 "Livable Communities Policy." Washington State Department of Transportation. Web. 24 Apr. 2015.

59 "The Innovative DOT: A Handbook of Policy and Practice." Smart Growth America (n.d.): n. pag. 1 Jan. 2012. Web. 4 June 2015.

60 "Livable Communities Policy." Washington State Department of Transportation. Web. 24 Apr. 2015.

61 "Population Growth." WSDOT - Population Growth. Washington State Department of Transportation. Web. 24 Apr. 2015. <http://ofm.wa.gov>.

62 "Public Transportation Benefits." American Public Transportation Association. American Public Transportation Association. Web. 24 Apr. 2015.

63 https://www.aarp.org/livable-communities/info-2014/livability-factsheet-economic-development.html

64 "Costs of Complete Streets." National Complete Streets Coalition. Smart Growth America. Web. 24 Apr. 2015.

65 "National Complete Streets Coalition: FAQ." Smart Growth America. Smart Growth America. Web. 24 Apr. 2015.

66 "Public Transportation Benefits." American Public Transportation Association. American Public Transportation Association. Web. 24 Apr. 2015.

67 "Washington: The State and Its People." Health of Washington State Report. 24 Sept. 2012. Web. 4 June 2015.

68 https://www.aarp.org/livable-communities/info-2014/livability-factsheet-economic-development.html

69 "Socioeconomic Position in Washington." Washington State Department of Health (n.d.): n. pag. 25 Mar. 2014. Web. 4 June 2015.

70 American Public Transportation Association, 'Public Transportation: Benefits for the 21st Century', http://www.apta.com/resources/reportsandpublications/Documents/twenty_first_century.pdf

71 "Communities Grow with Transit." Grows Communities. APTA, Web. 01 June 2015.

72 "What Americans Are Looking for When Deciding Where to Live." The 2011 Community Preference Survey: 1 Mar. 2011. Web. 4 June 2015.

73 **https://www.aarp.org/livable-communities/info-2014/livability-factsheet-economic-development.html**

74 **https://data.census.gov/cedsci/**

75 "Costs of Complete Streets." National Complete Streets Coalition. Smart Growth America. Web. 24 Apr. 2015.

76 **https://wcog.org/wp-content/uploads/Backgrounder.pdf**

77 "The 2011 Community Preference Survey." Realtor.org. National Association of Realtors, 1 Mar. 2011. Web. 24 Apr. 2015.

78 "Washington: The State and Its People." Health of Washington State Report. 24 Sept. 2012. Web. 4 June 2015.

79 "About the Commute Trip Reduction (CTR) Law." King County Metro. King County, 15 Jan. 2014. Web. 24 Apr. 2015. <http://www.kingcounty.gov/transportation/CommuteSolutions/About.aspx>.

80 "Commute Alternatives." SRTMC: Commute Alternatives. Spokane Regional Transportation Management Center (SRTMC), 1 Jan. 2008. Web. 24 Apr. 2015.

81 "Intermountain Transportation Planning Region: Regional Coordinated Transit and Human Services Plan." Colorado Transportation Matters. Colorado Department of Transportation. Web. 24 Apr. 2015.

82 "Operations Guide to Improving Highway Capacity." Transportation Research Board, 1 Aug. 2012. Web. 24 Apr. 2015. <http://onlinepubs.trb.org/onlinepubs/shrp2/SHRP2PBC05-2012-08.pdf>.

83 "Operations Guide to Improving Highway Capacity." Transportation Research Board, 1 Aug. 2012. Web. 24 Apr. 2015. <http://onlinepubs.trb.org/onlinepubs/shrp2/SHRP2PBC05-2012-08.pdf>.

84 "A Guide to Travel Training." Ride Wise. Ride Connection, 1 Dec. 2009. Web. 24 Apr. 2015.

85 "Why Travel Via Public Transportation." Traveling Via Public Transportation In North America. APTA. Web. 24 Apr. 2015. <http://www.pubtrantravel.com/whyuse.html#safety>.

86 Taylor, Brian, and Camille Fink. "The Factors Influencing Transit Ridership: A Review and Analysis of the Ridership Literature." UCLA Department of Urban Planning. University of California - Los Angeles. Web. 24 Apr.

87 "Section 8. Creating Good Places for Interaction." Chapter 26. Changing the Physical and Social Environment. Community Tool Box. Web. 24 Apr. 2015. <http://ctb.ku.edu/en/table-of-contents/implement/phsyical-social-environment/places-for-interaction/main>.

88 **Hyperlink no longer active.** http://www.nhtsa.gov/About+NHTSA/Press+Releases/2012/DOT+Launches+Largest-Ever+Road+Test+of+Connected+Vehicle+Crash+Avoidance+Technology

89 "2014 BIENNIAL TRANSPORTATION ATTAINMENT REPORT." Office of Financial Management, 1 Nov. 2014. Web. 24 Apr. 2015. <http://www.ofm.wa.gov/budget/documents/2014TransportationAttainmentReport.pdf>.

90 "2014 BIENNIAL TRANSPORTATION ATTAINMENT REPORT." Office of Financial Management, 1 Nov. 2014. Web. 24 Apr. 2015. <http://www.ofm.wa.gov/budget/documents/2014TransportationAttainmentReport.pdf>.

91 "Metro Transit Infographic." King County Metro. King County, 13 Oct. 2014. Web. 24 Apr. 2015. <http://www.kingcounty.gov/elected/executive/constantine/priorities/transportation/infographic.aspx>.

92 "Economic Impact of Public Transportation Investment." American Public Transportation Association, 1 May 2014. Web. 24 Apr. 2015. <http://www.apta.com/resources/reportsandpublications/Documents/Economic-Impact-Public-Transportation-Investment-APTA.pdf>.

93 "Burke-Gilman Multimodal Connector." Economic Competitiveness. University of Washington. Web. 24 Apr. 2015.

94 "2013 Summary of Public Transportation." WSDOT, 1 Dec. 2014. Web. 1 June 2015. <http://www.wsdot.wa.gov/Publications/Manuals/fulltext/m0000/TransitSummary/PTSummary2013.pdf>.

95 "2013 Summary of Public Transportation." Washington State Department of Transportation. Web. 24 Apr. 2015.

96 "2013 Summary of Public Transportation." Washington State Department of Transportation. Web. 24 Apr. 2015.

97 "WTP2035." Washington Transportation Plan 2035. Washington State Transportation Commission, 1 Jan. 2015. Web. 01 June 2015. <http://**wtp2035.com/**>

APPENDIX A. ACRONYMS

RCW: Revised Code of Washington
WSDOT: Washington State Department of Transportation
ADA: Americans with Disabilities Act
WTP: Washington Transportation Plan 2035
HOV: High Occupancy Vehicle
SR (SR520): State Route
USDOT: United States Department of Transportation
PSRC: Puget Sound Regional Council
WSPTP: Washington State Public Transportation Plan
APTA: American Public Transportation Association
SOV: Single Occupancy Vehicle
VMT: Vehicle Miles of Travel

APPENDIX B. GLOSSARY OF TERMS

Commute Trip Reduction program: A Washington law that addresses air pollution and fuel consumption and is required in cities with traffic congestion. Local governments must establish programs and projects to reduce the number of trips taken in single-occupancy vehicles and the total number of vehicle miles traveled per capita.

Commuter Rail: Passenger rail transportation service that provides service from the suburbs, or surrounding area of a city, to the city center. The Sounder, operated by Sound Transit, is the commuter rail service in the Seattle area.

Complete Streets: A street design that includes infrastructure and features that enable comfortable and safe access for all users, including pedestrians, bicyclists, transit users and motorists. Some common features includes bicycle lanes, paved shoulders and crosswalks.

Comprehensive Plan: The Growth Management Act requires local agencies to develop and adopt long-range plans that guide all development activity. Local Comprehensive Plans must be consistent with the long-range Regional Transportation Plan, which must be consistent with the local plans. This overlapping consistency requirement ensures ongoing coordination between local and regional agencies.

Congestion Pricing: A toll or variable price that is dependent on the amount of congestion on the roadway. As congestion increases, the price for using the roadway increases to prevent excessive congestion. This allows traffic to run more efficiently and spread travel across the transportation network at different hours of the day.

Connecting Washington: A 2012 transportation finding analysis that reviewed the condition of Washington's transportation system.

Human Services Transportation Plan: A plan identifying the transportation needs of the elderly, individuals with disabilities and low-income residents. This plan is required to receive certain Federal funding and is used to improve transportation access using all possible resources. The goal of Human Services Planning is providing social equity and improving the overall quality of life for these individuals.

Express Toll Lanes: In Washington, Express Toll Lanes give drivers the option to use high occupancy vehicle (HOV) lanes by paying a toll.

Federal Transit Administration: The arm of the USDOT with responsibility for all forms of public transportation using federal capital or operating funds, including urban bus and light rail systems. Intercity bus and intercity passenger rail are administered by other arms of the USDOT.

Federal Highway Administration: The Federal Highway Administration (FHWA) provides stewardship over the construction, maintenance and preservation of the Nation's highways, bridges and tunnels. FHWA also conducts research and provides technical assistance to state and local agencies in an effort to improve safety, mobility, livability and to encourage innovation.

Greenhouse Gas Emissions: In the transportation sector, primarily carbon dioxide. These gases contribute to climate change and air pollution.

Intelligent Transportation Systems: A wide range of advanced technologies that improve the safety and operating efficiency of existing transportation facilities or services. Common examples include central dispatch of road emergency assistance, freeway traffic maps shown on TV or online to warn motorists of accidents, and signs that map "real-time" location of transit vehicles.

First-Mile/Last-Mile: Term used in describing the importance of connections between a form of transportation (e.g., city bus or freight-carrying truck) and its ultimate destination. The terms "first and last mile," regardless of the actual distance involved, refer to the connection, or lack thereof, between the line-haul portion of the trip and the actual origin and final destination of the passenger or the freight cargo.

Light Rail Transit: A form of public transportation that operates on rails, within a dedicated right-of-way. LRT operates at higher speeds and capacity than streetcars, but compared to heavy rail it is slower with less capacity. Service areas can extend from downtown to the outlying suburbs with many stops. In Seattle, Central Link, operated by Sound Transit, is the city's LRT system.

Longitudinal Study: A longitudinal survey is a correlational research study that involves repeated observations of the same variables over long periods of time—often many decades. It is a type of observational study. Longitudinal studies are often used in psychology to study developmental trends across the life span, and in sociology to study life events throughout lifetimes or generations.

Metropolitan Planning Organization: Agency designated by the Governor to administer the federally required transportation planning in a metropolitan area over 50,000 in population. Duties include updating a 20-year regional transportation plan (RTP), a transportation improvement program and a unified planning work program. State law requires MPOs to be the Regional Transportation Planning Organization lead agency where their boundaries overlap.

Multimodal: The transportation of goods or people on a single trip, but performed with at least two different means of transport.

Office of Financial Management: A governmental department providing vital information, fiscal services and policy support for Washington State. These services are used by the governor, legislature and state agencies.

Paratransit: A non-fixed-route transit system, similar to Demand Responsive Transit. Service is available anywhere within defined geographic boundaries (usually within a county) and provides door-to-door transportation. Users must call ahead to schedule a trip and it is exclusive to individuals with disabilities. Transit agencies must provide this service to comply with the Americans with Disabilities Act.

Park and Ride Lots: Designated parking lots adjacent to rail stations, carpool, vanpool or other transit services transfer locations. This allows commuters to drive to a station or transit stop, transfer to transit and complete the remainder of their journey via transit.

Public-Private Partnerships (P3): Contractual agreements between a private sector company and a public agency that allows for greater participation from the private sector for financing and the delivery of transportation projects.

Public Transportation: Any form of transportation, accessible and available to the public, which does not involve a single person in a motorized vehicle. "Public" in this sense refers to the access to the service, not to the ownership of the system providing the service.

Regional Transportation Planning Organization: This is a state-designated agency created to ensure that regional transportation planning is consistent with countywide planning policies and growth strategies for the region. Duties include updating a 20-year regional transportation plan and a transportation improvement program.

Special needs: Particular requirements resulting from learning difficulties, physical disability or emotional and behavioral difficulties. Per the Americans with Disabilities Act, transit agencies must provide this service. Paratransit is available for riders with special needs.

Sustainable: Using a resource in a way so that it is not depleted or permanently damaged.

Telework: Instead of working at the principal place of employment, an employee works at home or from another office near the employee's home at least once every two weeks. This results in fewer commute trips.

Title VI: This law was enacted as part of the Civil Rights Act of 1964. It prevents discrimination on the basis of race, color and national origin in programs and activities receiving federal financial assistance. If an agency is found in violation of Title VI, that agency may lose its federal funding.

Transit-Oriented Development: A type of mixed-use development that is located within walking distance to a quality, frequent transit service. Included are residential units, retail, offices and other uses that promotes a walkable and accessible area.

Transportation Improvement Board: A Washington transportation agency, independent of WSDOT, that distributes and manages grants for high-priority transportation projects throughout the state.

Traveler Information Systems: One component of Intelligent Transportation Systems. A wide range of information services, public and private, that convey useful information including transportation network condition and performance, weather, schedules and availability to auto and truck drivers, transit riders and other modal system users, both in advance of a trip, as well as after the trip is underway.

Vehicle Miles Traveled: A measurement representing the total number of miles traveled by all vehicles within a region or roadway for a certain length of time.

Washington State Department of Transportation: Washington's state department responsible for planning, building, maintaining and operating the state highway system. Other responsibilities includes the state ferry system and partnering with other agencies to improve the state's entire multimodal transportation system.

Washington State Ferries: The largest passenger and automobile ferry network in the United States, it provides service to various areas on Puget Sound and the San Juan Islands; a division of WSDOT.

Washington State Transportation Commission: This is a public forum for transportation policy development and develops Washington's 20-year Transportation Policy Plan. WSTC also sets the tolls for state highways and bridges as well as the fares for the Washington State Ferries.

APPENDIX C. WSPTP ADVISORY GROUP

PROJECT TEAM

Brian Lagerberg, WSDOT
Evan Olsen, WSDOT
Gayla Reese Walsh, WSDOT
Keith Cotton, WSDOT
Stan Suchan, WSDOT
Sharilyn Howell, WSDOT
Stephanie Postier, WSDOT
Robin Hartsell, WSDOT
Cathy Silins, WSDOT
Rita Brogan, PRR, Inc.
Sarah Shannon, PRR, Inc.
Rachel Lee, PRR, Inc.
Yasmín Baron, PRR, Inc.

ADVISORY GROUP MEMBERS

Geri Beardsley, Washington State Transit Association
Roland Behee, Community Transit
Justin Bergener, Medstar Cabulance, Inc.
Renee Biles, People for People
Dennis Bloom, Intercity Transit
Michael Cardwell, AICP, Quinault Indian Nation | Tribal Transportation Planning Organization
Gil Cerise, Puget Sound Regional Council
Barb Chamberlain, Washington Bikes
Kevin Futrell, City of Yakima
Celeste Gilman, University of Washington
Matt Hansen, King County Metro
Dezerae Hayes, Muckleshoot Indian Tribe
Mark Hollandsworth, HopeSource
Colleen Kuhn, Human Services Council
Brent Meldrum, Coastal Transport
E. Susan Meyer, Spokane Transit Authority

Lynn Moody, Hopelink
Carolyn Newsome, Intercity Transit
Karl Otterstrom, Spokane Transit Authority
Paul Parker, Washington State Transportation Commission
Karen Parkhust, Thurston Regional Planning Council
Melanie Smith, Sound Transit
Bruce Tabb, City of Ellensburg
Andrea Tull, Sound Transit
Elaine Wells, Ride Connection
Michelle Zeidman, UW

WSDOT

Tom Hanson, WSDOT
Karena Houser, WSDOT
Kathy Johnston, WSDOT
Brigid Dean, WSDOT
Charles Prestrud, WSDOT
Ray Deardorf, WSDOT
Dylan Counts, WSDOT
Don Chartock, WSDOT
Robin Rettew, WSDOT
Richard Warren, WSDOT
Rob Fellows, WSDOT
Mark Leth, WSDOT
Mark Bandy, WSDOT
Kathy Murray, WSDOT
Azim Sheikh-Taheri, WSDOT
Jef Lucero, WSDOT
Harmony Weinberg, WSDOT

APPENDIX D. ADDITIONAL DOCUMENTATION

A number of additional documents were created during development of the WSPTP to present the results of investigation into various topics, as well as to document the public outreach process. These and other related items are available on the WSPTP website, www.WATransPlan.com:

PUBLIC OUTREACH AND STAKEHOLDER ENGAGEMENT

- Summary of Stakeholder Roundtable Meetings
- Summary of Public Comments on Draft WSPTP
- Public Outreach grid
- Summary of Media Outreach Activities
- Public Comment Database

WSPTP DRAFT AND FINAL DOCUMENTS

- WSPTP Public Review Draft, September 8, 2015

Washington State Public Transportation Plan
Appendix

APPENDIX E. CROSSWALK

HOW DOES THE DRAFT WASHINGTON STATE PUBLIC TRANSPORTATION PLAN ALIGN WITH OVERARCHING POLICIES AND PLANS?

Draft Washington State Public Transportation Plan	Policy Goals / RCW 47.04.280						Results Washington					Results WSDOT						Washington State Strategic Highway Safety Plan				
	Economic Vitality	Preservation	Safety	Mobility	Environment	Stewardship	World Class Education	Prosperous Economy	Sustainable Energy and a Clean Environment	Healthy and Safe Communities	Efficient, Effective and Accountable Government	Strategic Investments	Modal Integration	Environmental Stewardship	Organizational Strength	Community Engagement	Smart Technology	Education	Enforcement	Engineering	Emergency Medical Services	Leadership/Policy
THRIVING COMMUNITIES Cultivate thriving communities by supporting health, equity, prosperous economies, energy conservation and a sustainable environment through transportation	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X					X
ACCESS Provide and sustain a transportation system that allows people of all ages, ability, and geographic locations to access jobs, goods, services and community activities	X	X		X		X	X	X	X	X	X	X	X		X	X					X	X
ADAPTIVE TRANSPORTATION CAPACITY Strengthen the transportation system's capacity to adapt to emerging markets, market disruptions, technology and business models	X			X		X		X	X		X	X	X		X	X	X					X
CUSTOMER EXPERIENCE Enhance people's transportation experience by providing public transportation that is safe, seamless, pleasant, convenient, reliable, relevant and understandable			X	X		X	X	X		X	X	X	X			X	X	X				X
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		X			X	X		X	X	X	X	X	X						X	X		X

WSDOT | June 2016 | www.wsdot.wa.gov

APPENDIX F. DEFINITIONS OF PUBLIC TRANSPORTATION

FROM THE OXFORD DICTIONARY:

Buses, trains, subways and other forms of transportation that charge set fares, run on fixed routes and are available to the public.

FROM AMERICAN PUBLIC TRANSPORTATION ASSOCIATION:

Public Transportation (also called transit, public transit or mass transit) is transportation by a conveyance that provides regular and continuing general or special transportation to the public, but not including school buses, charter or sightseeing service.

2014 USDOT NATIONAL TRANSIT DATABASE GLOSSARY

As defined in the Federal Transit Act, "transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter or intercity bus transportation or intercity passenger rail transportation provided by the entity described in chapter 243 (or a successor to such entity)." Notes: (1) Passenger rail transportation refers to Amtrak. (2) This definition does not affect the eligibility of intercity bus service under the Section 5311 Other than Urbanized Area (Rural) Formula Program. (3) The intercity bus and intercity rail (Amtrak) portion of Intermodal terminals is however an eligible capital cost.

US FEDERAL HIGHWAY ADMINISTRATION PLANNING GLOSSARY

Transportation by bus, rail or other conveyance, either publicly or privately owned, which provides to the public general or special service on a regular and continuing basis. Also known as "mass transportation", "mass transit" and "transit."

AS DEFINED IN THE WASHINGTON STATE PUBLIC TRANSPORTATION PLAN:

Any form of transportation, accessible and available to the public, which does not involve a single person in a motorized vehicle. "Public" in this sense refers to the access to the service, not to the ownership of the system providing the service.

FROM THE WSDOT PUBLIC TRANSPORTATION SUMMARY:

Transportation service that is available to any person upon payment of the fare – if charged – and which cannot be reserved for the private or exclusive use of one individual or group. "Public" in this sense refers to the access to the service, not to the ownership of the system providing the service.

FROM REVISED CODE OF WASHINGTON 82.70.010

"Public agency" means any country, city or other local government agency or any state government agency, board or commission.

"Public transportation" means the same as "public transportation service" as defined in Revised Code of Washington 36.57A.010 and includes passenger services of the Washington state ferries.

FROM REVISED CODE OF WASHINGTON 36.57A.010

"Public transportation service" means the transportation of packages, passengers and their incidental baggage by means other than by chartered bus, sight-seeing bus, together with the necessary passenger terminals and parking facilities or other properties necessary for passenger and vehicular access to and from such people moving systems: PROVIDED, that nothing shall prohibit an authority from leasing its buses to private certified carriers or prohibit the authority from providing school bus service. "Public transportation service" includes passenger-only ferry service for those public transportation benefit areas eligible to provide passenger-only ferry service under Revised Code of Washington 36.57A.200.

FROM REVISED CODE OF WASHINGTON 35.58.020

"Metropolitan public transportation" or "metropolitan transportation" for the purposes of this chapter means the transportation of packages, passengers and their incidental baggage by means other than by chartered bus, sightseeing bus or any other motor vehicle not on an individual fare-paying basis, together with the necessary passenger terminals and parking facilities or other properties necessary for passenger and vehicular access to and from such people-moving systems: PROVIDED, that nothing in this chapter shall be construed to prohibit a metropolitan municipal corporation from leasing its buses to private certified carriers; to prohibit a metropolitan municipal corporation from providing school bus service for the transportation of pupils; or to prohibit a metropolitan municipal corporation from chartering an electric streetcar on rails which it operates entirely within a city.

FROM REVISED CODE OF WASHINGTON 47.047.082

Sec. 5. Revised Code of Washington 47.04.082 and 1967 c 108 s 1 are each amended to read as follows: As used in ((this act the term)) chapter 108, Laws of 1967, "urban public transportation system" ((shall)) means a system for the public transportation of persons or property by buses, streetcars, trains, electric trolley coaches, other public transit vehicles or any combination thereof operating in or through predominantly urban areas and owned and operated by the state, any public agency, any city or county or any municipal corporation of the state, including all structures, facilities, vehicles and other property rights and interest forming a part of such a system.

FROM REVISED CODE OF WASHINGTON 36.57.010

"Public transportation function" means the transportation of passengers and their incidental baggage by means other than by chartered bus, sightseeing bus, together with the necessary passenger terminals and parking facilities or other properties necessary for passenger and vehicular access to and from such people-moving systems, and may include contracting for the provision of ambulance services for the transportation of the sick and injured: PROVIDED, That such contracting for ambulance services shall not include the exercise of eminent domain powers: PROVIDED, FURTHER, That nothing shall prohibit an authority from leasing its buses to private certified carriers or prohibit the county from providing school bus service.

FROM WSDOT CONSOLIDATED GRANT APPLICATION DOCUMENT:

Mass transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, sightseeing transportation, or intercity bus transportation or intercity passenger rail transportation provided by Amtrak. Coordinated human service transportation, which primarily serves elderly persons and persons with disabilities, but which is not restricted from carrying other members of the public, is considered available to the general public if it is marked as public transit service.

FROM PUGET SOUND REGIONAL COUNCIL:

Regular transportation service by bus, rail, paratransit, van, airplane or ship, offered by a public sector operator.