



Washington Transportation Plan 2035

Public Review Draft



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Introduction

About WTP 2035

The Washington Transportation Plan 2035 (WTP 2035) is an update to the 2010 plan, WTP 2030. Like WTP 2030, the WTP 2035 update was led by the Washington State Transportation Commission (WSTC) in collaboration with the Washington State Department of Transportation (WSDOT) and the State's Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Organizations (RTPOs). The WTP 2035 provides a state policy framework intended to provide policy guidance and recommendations across all transportation modes and regions in the State. The WTP 2035 includes the following sections:

- Section 1 provides an overview of WTP 2035 and briefly highlights the recent trends in Washington transportation that are driving the need for updated strategies and actions.
- Section 2 outlines the vision and goals for WTP 2035, the priorities for transportation investment, the new and existing strategies for fulfilling the designated transportation goals, and highlights the importance of improving connections between land use and transportation policy.
- Section 3 provides more detail on recent trends in transportation, including a description of system use, and the need for maintenance, preservation, and expansion of various components of the multimodal system.
- Section 4 describes the challenges and opportunities for funding needed transportation investments in Washington State, including trends in federal, state, and local transportation revenues, potential future funding scenarios, and options for addressing future funding needs.

WTP 2035 was developed with engagement and input from a diverse stakeholder Advisory Group and other partners around Washington. Throughout the planning process leading up to the publication of this review draft, the Commission listened and integrated into the draft Plan the issues, accomplishments, and needs of WSDOT and other state agencies, RTPOs, MPOs, counties, cities, tribal governments, transit agencies, ports, businesses, and economic development agencies. The Commission held four listening sessions hosted by Washington's MPOs and RTPOs and made several additional presentations to groups around the State. A Steering Committee representing the WSTC, WSDOT, and Washington's RTPOs and MPOs conducted additional communication with stakeholders and member jurisdictions, and met frequently with the Commission's project staff to guide development of the Plan.

WTP 2035 is organized to help inform future policy discussions and decisions by state leaders. The new and revised statewide transportation policies proposed in this Plan will require state or local action to implement.

Overview of the Previous Plan, WTP 2030

Adopted in 2010, WTP 2030 provided updated policy information for the Washington’s decision makers. It did not constitute an update to the federally-compliant 2007-2026 Washington Transportation Plan, last updated in 2006. WTP 2030 was organized around six statutorily defined goal areas for transportation: Economic Vitality, Preservation, Safety, Mobility, Environment, and Stewardship.¹ Additionally, WTP 2030 presented recommendations in the context of the most important ideas, or “Foundational Themes,” and the major factors influencing the Plan’s recommended strategies, or “Strategic Drivers.”

WTP 2030’s Foundational Themes included:

- Washington Faces a Structural Transportation Funding Problem and Additional Revenue is Essential;
- The State’s Transportation System Needs to Work as an Integrated Network, Effectively Connecting across Modes and Jurisdictions; and
- Preservation and Maintenance of the Existing Transportation System is the Most Critical Need.

WTP 2030’s Strategic Drivers included:

- Transportation Policy Should Support and Reinforce Other State Policy Objectives;
- The Relationship between Land Use and Transportation Is Key;
- There are Significant Differences across Regions and One Size Does Not Fit All;

¹ RCW 47.04.280.

- It Is Critical to Educate, Inform, and Reach Out to the Public; and
- Continue the Evolution to Performance-based Programs.

All of these Foundational Themes and Strategic Drivers retain their importance. Since the adoption of WTP 2030, the State has made progress towards fulfilling several of the recommendations. Progress has been made improving passenger rail, aviation, and ferry systems. The State has seen increased regional collaboration and investment towards safety goals as well as growth in actions that support enhanced mobility. Progress made towards environmental goals includes reducing stormwater impacts, promoting active transportation, and increasing charging infrastructure for electric vehicles. Washington has embraced new technology to increase efficiency and has expanded its high-occupancy vehicle (HOV) lane programs.

Nonetheless, discussions with stakeholders, service providers and policy analysts around Washington clearly indicate that significant challenges remain to achieving the goals outlined in WTP 2030. The WTP 2035 highlights the persistent obstacles to goal achievement and proposes steps to be taken at the state and local level to address these challenges.

Transportation Trends Influencing WTP 2035

While Washington's transportation system is not dramatically different in 2014 than in 2010, there are some notable changes in usage as well as some areas of stagnation. Some developments deserve particular attention in WTP 2035:

- Spending on essential operations, maintenance, and preservation of the system continues to lag behind estimates of need. This is most apparent in roadway maintenance and public transportation service.
- Usage of most all components of the transportation system is increasing as the State recovers from a long recession. Passenger volumes are up on highways and public transportation, and freight tonnage is up on highway, rail, barge, and air modes. Anecdotally, transit operators note (and passengers concur) they are unable to provide enough peak period service in high-demand corridors to avoid severe crowding.
- Several very significant capital expansion and replacement projects are underway, promising to maintain or improve future mobility on the system, but also consuming a large percentage of available funding and financing capacity. Generally, there is insufficient discretionary funding available to address both known and unanticipated future transportation needs, as too large a percentage of authorized funding streams are committed to specific projects/programs and to debt service.



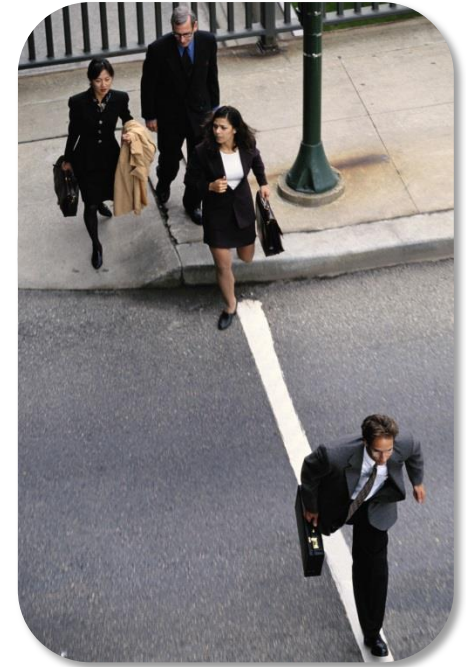
Additional aspects of current conditions and recent trends are summarized here, organized according to WTP 2035 policy goals:

Economic Vitality

- Annual growth of employment in the Washington's freight-dependent industries was back in positive territory in 2011 and 2012 after three successive years of decline. 2012 gross business income for freight-dependent industries totaled \$450 billion.
- Exports, an important part of the state economy, are up over 50% in dollar value since 2010.
- Freight shipments by rail are expected to double between 2010 and 2035, raising the issues of future rail system reliability and safety.
- Communities are considering relatively modest investments in walkable urban settings and attractive street environments that have the potential to generate financial returns in terms of commercial rent, consumer spending, and home values.

Preservation

- Physical roadway condition deteriorated somewhat overall in Washington, with the percentage of state-managed roads with pavement quality rated "good or very good" falling from 83% to 76% over the period 2008-2012. County arterials saw a similar drop, from 94% to 89% rated "fair or better."
- Bridge conditions were more constant over the same period; both state- and county-maintained bridges were essentially unchanged over the period 2008-2012, at 87% and 84% in good condition, respectively.



Safety

- Total traffic-related fatalities and serious injuries continued the decline demonstrated since 2005. However, from 2012 to 2013, there were notable increases in fatalities involving young drivers, speeding, running off the road, and older drivers.
- Significant growth in bicycling and walking in some areas of Washington for commuting, shopping, and other utility trips is raising concern about the potential for increased conflict between auto drivers, cyclists and pedestrians.

Mobility

- During the period 2007 through 2012, there has been a subtle but continuing decrease in *per capita* travel by motor vehicles (vehicle miles of travel or VMT), suggesting that the amount of auto travel by each individual is on the decline.
- Over the same time period, total travel by all motor vehicles (total annual VMT) on all public roads has been essentially flat, suggesting that population growth is offsetting the per capita decline.
- Available data indicate that most of the net increase in Washington's public transportation ridership (from 2009 to 2012) has come via investment in light rail transit (LRT) and streetcars, in those areas that have such modes. Light rail transit trips grew rapidly in the period 2009-2012 due to new service implementation and extensions. Commuter rail ridership was up 12% over the same period while conventional urban bus ridership was essentially flat, due in part to service reductions enacted out of financial necessity. More recent data indicate that bus transit ridership is increasing in select areas since 2012, and it is likely that urban bus systems will continue to require significant capital reinvestment and operating subsidy to meet growing demand and remain competitive with other modes.



Environment

- The transportation sector continues to be Washington's largest consumer of energy, accounting for 44% of total annual energy usage. It is also the least energy-efficient sector, generating 55% of Washington's waste energy (2009).
- Transportation is also the largest sector producer of greenhouse gas emissions (GHG) at 41% of total state GHG emissions.

Stewardship

- Motor fuel taxes still account for about 53% of projected state transportation revenues from 2011 to 2027, with license, permit, and driver-related fees making up another 28%. All remaining sources account for less than 20% of funding for the state system.²
- Localities are now picking up a larger share of the transportation tab through property taxes and other local sources. Local funding for public transportation, including fares, increased by 23% over the period 2008-2012, while combined federal and state revenues for transit fell 6%. Local sources now account for 85% of public transportation funding.

² Transportation Revenue Forecast Council, June 2014 and June 2010 forecasts for 2011-2027.

Emerging Themes for WTP 2035

Several themes emerged from the planning and stakeholder outreach process which should guide policy-makers in implementation of WTP 2035 recommended actions.

Economic Vitality

- Support economic vitality through more efficient freight and passenger mobility.
- Work to maintain and expand flight offerings from smaller commercial airports.

Preservation

- Establish a higher priority for maintenance and preservation of transportation system components.
- Develop sustainable funding sources that allow a more cost-effective, proactive approach to system maintenance, preservation and eventual rehabilitation or replacement of critical infrastructure including transit vehicles and ferries.

Safety

- Improve safety and security for all transportation modes and users, on the complete system including state, local and tribal infrastructure.
- Enhance transportation security through identifying and maintaining redundant cross-state routes.



Mobility

- Anticipate and work to address changing travel patterns and preferences to accommodate Washington's changing demographic picture.
- Prepare for impacts and benefits of constantly evolving technology through more rapid adoption of innovative technologies, review and revision of system plans every few years, direct support for applied research, and development of cost-effective proposals to address future transportation needs.
- Reduce obstacles to multimodal travel and increase the number of realistic travel choices for any given trip.

Environment

- Reduce the transportation system's impacts on Washington's natural environment and decrease associated carbon-based greenhouse gas (GHG) emissions.
- Improve the energy efficiency of the entire transportation sector.

Stewardship

- Integrate land use policy and transportation planning, including clear linkages between WTP 2035 and the goals of Washington's Growth Management Act.
- Extend mobility and accessibility to all user groups, and distribute funding costs more equitably.

The following section provides recommended strategies and actions for addressing these themes and priorities for Washington.



WTP 2035 Strategic Policy Plan

Vision Statement

WTP 2035 Draft Vision Statement

By 2035, Washington's transportation system safely connects people and communities, fostering commerce, operating seamlessly across boundaries, and providing travel options to achieve an environmentally and financially sustainable system.

The WTP 2035 Draft Vision Statement adds emphasis on safety and travel options to the existing WTP Vision Statement. The Draft Vision Statement:

- Embraces environmental and financial sustainability, recognizing the need for cost-effectiveness and accountability for expenditures;
- Reflects the continued emphasis on economic vitality and the need for better system integration for freight and passenger travel;
- Emphasizes the growing importance of transportation safety; and
- The desire across Washington for greater travel options to improve personal mobility.

The essential themes of the proposed WTP 2035 Vision reflect the priorities for transportation policy implementation and investment that emerged from recent planning research, policy development, and stakeholder outreach, described previously.

WTP Policy Goals

The Washington Transportation Plan update of 2010, *WTP 2030*, was organized around the six statutory transportation policy goals in RCW 47.04.280. The State Legislature added *Economic Vitality* to the previously existing goals in 2010, reflecting the growing recognition of the role of transportation in supporting economic activity, and the importance of continued investment in transportation infrastructure in preserving and improving Washington's economic vitality and competitiveness in an increasingly global market. These six policy goals are:

Economic Vitality. To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy

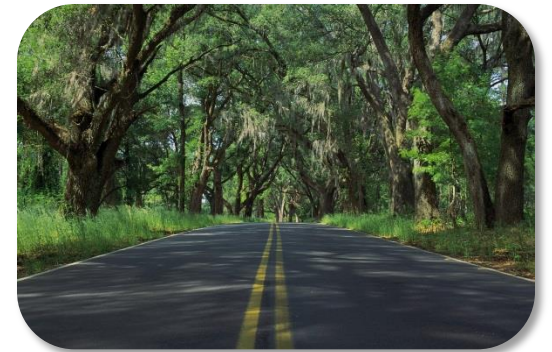
Preservation. To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services

Safety. To provide for and improve the safety performance and security of transportation customers and the transportation system

Mobility. To improve the predictable movement of goods and people throughout Washington State

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



While the six policy goals are shared statewide, the implementation strategies and actions to make the goals a reality may vary across Washington. There is some degree of overlap between the transportation policy goals, and many strategies may be appropriate to achieve more than one policy goal.

Priorities for Transportation Policy and Investment

A synthesis of selected statewide, regional, and local transportation planning and policy documents, together with a series of regional discussion sessions with transportation stakeholders, reveal consistency with WTP 2030 priorities as well as some new priorities and changes in relative emphasis. Transportation policy should coincide with Results Washington, the initiative to build a more responsive and data-driven state government. **At the statewide level**, priorities include preservation and maintenance, sustainable funding, safety, and protecting the Washington's transportation system against the effects of climate change.

- **Preservation and Maintenance.** Recent state documents such as the 2012 task force report Connecting Washington observe that both regular maintenance and long-term preservation of highways, bridges, and other infrastructure, including public transportation vehicles and ferries, remain top priorities, yet are underfunded. Preserving existing infrastructure can produce economic benefits.
- **Safety.** While Washington has made significant progress in recent years to improve transportation system safety, the Strategic Highway Safety Plan "Target Zero" 2013 Update calls for more coordination and collaboration with partners to continue progress towards the State's aspirational goal of zero deaths on the State's transportation system. Emerging concerns include ensuring that the transportation system meets the needs of the growing number of pedestrians, bicyclists, and motorcyclists sharing the roadway.
- **Freight Mobility.** Supporting the broader goal of economic growth through strategic investment in freight transportation infrastructure is at the core of WSDOT's Freight Mobility Plan. However, highway capacity for goods movement is essentially stagnant, and freight shipments by rail are expected to double between 2010 and 2035, raising the issues of future system reliability and safety. The understandable desire to maximize freight mobility must be balanced with other goals of environment and safety.

- **Energy and Environment.** Transportation should strive to be neither a burden to the natural environment nor a barrier to its restoration. Energy conservation, reducing emissions, and protecting the State’s transportation system against the effects of climate change are all considerations of growing importance at the state level. The Washington State Energy Policy underscores the need to reduce transportation’s contribution to greenhouse gas emissions not solely through travel demand management strategies but also by improving energy efficiency for all key passenger and freight transportation modes. The Governor’s recent executive order³ calls for a wide array of strategies and actions to increase efficiency and reduce both energy costs and GHG emissions from transportation, including market pricing mechanisms.



At the regional level, similar priority is given to system preservation and maintenance, freight mobility, and economic development. Improved transportation choices also stand out clearly as high priorities for regional and local stakeholders.

- **Local Road and Bridge Preservation and Maintenance.** Due to declining revenues relative to need, counties and cities are increasingly challenged with the cost of simply maintaining and preserving their existing infrastructure. Sustainable funding sources are needed, such as a dedicated source established at the state level and directed to local preservation needs.
- **Public Transportation.** The 2013 WSDOT State Summary of Public Transportation suggests that most of the net increase in public transportation ridership from 2009 to 2012 has resulted from investment in light rail transit (LRT) and streetcars. Traditional urban bus transit systems will continue to require significant capital reinvestment and operating subsidy to remain competitive. More aggressive operational and transportation pricing strategies may be necessary components of a comprehensive urban

³ Executive Order 14-04, Washington Carbon Pollution Reduction and Clean Energy Action.

transportation program. Improving public transportation connections between regions of Washington, as well as providing better mobility to special-needs populations, are challenges of statewide significance and must also be addressed at the state level.

- **Other Regional Priorities.** There are many differences between Washington's regions, with resulting variation in priorities. In the Puget Sound region there is an emphasis on expanded public transportation and tolling of roads and bridges to accommodate growing demand, generate needed revenue, and encourage more economically and environmentally efficient travel behavior, including walking and biking. Rural areas cite the critical importance of programs that provide connectivity to the rest of the State, such as all-weather roads, rural transit, and commercial passenger air service. Ferry service is of course a lifeline to several sub-regions of the larger Puget Sound basin. Agricultural product transportation and tourism are disproportionately important to the local economy in some areas.

Tribal priorities. The 2012 Washington Tribal-State Transportation Conference identified a number of priorities for tribal-state cooperation to achieve better outcomes. Several of the priorities have to do with improved coordination of funding and grant programs. Transportation safety and public transportation are two specific areas where additional funding would help address needs and improve economic development opportunities. Improved access to employment, health care and other social services are top tribal priorities for transportation.

Business priorities. Business and industry groups such as the Association of Washington Business and state and regional Chambers of Commerce seek improved efficiency in expenditure of existing funding and greater accountability for results through performance measurement approaches. There is a preference for prioritizing investments in system preservation/maintenance and goods movement infrastructure. Greater reliance on direct user charges, such as tolling, and local option taxes that strengthen the relationship between the source and benefits of transportation expenditures, is preferred over broad statewide tax increases.

Strategies to Support Transportation Priorities

WTP 2030 outlined a number of strategies and actions to help meet the six statutorily defined policy goal areas. Since the adoption of WTP 2030, progress has been made towards a number of the actions, but the WTP 2030 actions remain relevant today. Several important themes have emerged through the planning and stakeholder outreach process which warrant the inclusion of new recommended actions to help the State of Washington meet transportation goals and objectives. This section presents the proposed new strategies and actions related to the emerging priorities and the progress made towards actions in the WTP 2030.



Economic Vitality

The Economic Vitality goal area seeks “To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.”

Since the adoption of WTP 2030, there have been improvements in passenger rail service and investments in next generation aviation technologies.

Emerging Themes in Economic Vitality

- Support economic vitality through more efficient freight and passenger mobility.
- Work to maintain and expand flight offerings from smaller commercial airports.

Table 1. Economic Vitality

Strategy	Recommended Action	Notes
<p>Improve Washington’s Economic Competitiveness</p>	<p>New for WTP 2035: Invest in strategies to mitigate the negative impacts of congestion on the economy, the environment, and human health, including system preservation, travel demand management, and transportation system management and operations.</p>	<p>Also supports: Mobility, Environment</p>
	<p>Prioritize improvements for major corridors, such as I-5 and I-90, the major north-south and east-west connections between Washington and the rest of the U.S.</p>	
	<p>Keep moving forward with incremental high-speed passenger rail improvements to the Northwest Corridor, from Eugene, Oregon to Vancouver, British Columbia.</p>	<p>Progress made: Passenger rail service improvements</p>
	<p>Invest in and support policies to increase use of the Columbia-Snake River barge system.</p>	
	<p>Streamline the state’s public-private partnership law to allow for a wider range of financing opportunities and establish public-private partnerships for projects, such as ferry terminal improvements, partnerships to maximize the use of park and ride lots by public and private entities, and freight collection and distribution facilities for agriculture and other goods.</p>	
	<p>Partner with the military to prioritize transportation investments that support military related economic activities.</p>	
	<p>Design, plan and fund transportation infrastructure that supports tourism, such as non-motorized trail networks, scenic byways, intermodal connections for travelers, and enhanced traveler communication systems.</p>	
	<p>Support strategies and investments to better link people and commerce, such as transit-oriented development, bicycle and pedestrian networks, park and ride lots, and broadband access.</p>	
	<p>Connect regional economies by improving north-south and east-west round trip passenger train service between major metropolitan areas.</p>	
	<p>Support the location of transportation facilities, such as transit only lanes, where transit operation in the corridor is critical to maintaining and improving mobility, particularly in urban centers.</p>	
<p>Maintain and improve connectivity of island and peninsular regions to Washington State Ferries.</p>		

Strategy	Recommended Action	Notes
Support the Coordinated, Connected, and Efficient Movement of Freight and Goods	New for WTP 2035: Promote strategies that address the “last mile” of freight connectivity, including prioritizing key connections to ports, freight terminals and airports. Explore new ways to minimize the impact of goods movement on local communities.	
	New for WTP 2035: Encourage collaboration between local jurisdictions and rail operators to address safety and connectivity issues associated with at-grade rail crossings.	Also supports: Safety
	New for WTP 2035: Support rural jurisdictions in local actions to accommodate agricultural mobility, such as implementing all-weather county road networks with connections to highways, rail and ports, and ensuring access from agricultural storage facilities to long-haul routes via county roads.	Also supports: Stewardship
	Facilitate coordination to preserve freight capacity across jurisdictional boundaries in critical corridors.	
	Improve designated freight corridors by making connections with ports (such as completing SR 509 to connect with I-5 near Sea-Tac and SR 167 to connect with the Port of Tacoma) and assist in the development of freight modal centers (such as airports and intermodal facilities) to maintain Washington’s competitive advantage for trade.	
	Establish an all-weather transportation system, prioritizing investments that minimize closures affecting agriculture, freight dependent industries, and tourism. Each region should define a core of all-weather state and local roads that meet designated state standards for weight and safety; this investment, based on regionally defined priorities, should be eligible for additional state funding to match local funding.	
	Implement incentives for freight carriers to travel on ferries during off-peak hours.	
Invest in the State’s Aviation System	New for WTP 2035: Consider focusing more state resources toward strategic aviation system improvements, to leverage the value of the aerospace industry and commercial travel to the State’s economy.	
	New for WTP 2035: Collaborate with the Washington State Tourism board, the Department of Commerce, and local airports to explore opportunities to maintain or expand flight offerings from smaller commercial service airports to “hub” airports.	
	Direct aviation taxes and fees to fund investments in airport infrastructure.	
	Treat aviation capacity as a resource and preserve, protect, and enhance such capacity through strategies focusing on airport operations, technology, safety, and land use.	

Strategy	Recommended Action	Notes
Invest in the State's Aviation System (continued)	Address additional growth needs with a special focus on the unique characteristics of four identified regional aviation Special Emphasis Areas: Puget Sound, Southwest Washington, Spokane, and Tri-Cities.	
	Invest in NextGen aviation technologies to meet future aviation needs and reduce greenhouse gas emissions.	Progress made: Began implementation of NextGen technologies
Ensure the Ability to Build and Expand Essential Public Facilities	Encourage identification in local, regional, and state land use and transportation plans of key transportation corridors for the movement of people and goods, and connection of communities through multiple transportation modes.	
	Expand the definition of essential public facilities to include highways of statewide significance, including at least the megaprojects identified by the Legislature.	
	Local transportation plans should specifically protect difficult-to-site facilities, such as airports and rail corridors, from encroachment by incompatible land uses. These plans should also provide for the future expansion of such facilities. Participate in preserving and improving both the freight and passenger rail transportation system where there are sufficient public benefits to the State, its businesses, and communities, based on a systematic assessment and comparison of benefits and costs across users and modes.	



Preservation

The Preservation goal area seeks “To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services”

Since the adoption of WTP 2030, the Washington State Ferry system has made significant progress in updating the ferry fleet. WSDOT has replaced the Keller Ferry. American Recovery and Reinvestment Act funds (ARRA) are preserving, maintaining and improving rail investments in the I-5 corridor.

Emerging Themes in Preservation

- Establish a higher priority for maintenance and preservation of transportation system components.
- Develop sustainable funding sources that allow a more cost-effective, proactive approach to system maintenance, preservation and eventual rehabilitation or replacement of critical infrastructure including transit vehicles and ferries.

Issues related to the funding of Washington’s transportation system, including suggestions for new funding sources, are discussed at length in Section 4 below.

Table 2. Preservation

Strategy	Recommended Action	Notes
Focus on Preserving the Existing State and Local Transportation Network	Prioritize and dedicate an adequate stream of new transportation revenue to preserve and maintain the existing system.	
	When adding new capacity, assess which mode will be most efficient.	
	Establish a long-term system reinvestment strategy that includes criteria to replace or remove infrastructure from service at the end of its life.	
	Use technology and research to reduce costs and improve and extend the life of infrastructure.	
New for WTP 2035: Develop Sustainable Funding Strategies	New for WTP 2035: Emphasize the importance of roadway system preservation, along with expansion, for continued economic growth and vitality.	Also supports: Stewardship
	New for WTP 2035: Develop a statewide strategy for funding transportation that articulates the economic and social benefits of the transportation system, more clearly defines the role of the State in funding non-highway modes, and provides funding options that are flexible and equitable, balancing user-pay with ability-to-pay approaches.	
	New for WTP 2035: Explore new, sustainable funding opportunities that keep pace with growth and inflation and are not affected by decreases in motor fuel consumption. Options may include further expansion of toll roads and express toll lanes, congestion pricing, employer-funded transportation, road usage charges, public-private partnerships, and value-capture strategies.	Also supports: Stewardship
	New for WTP 2035: Utilize performance-based transportation planning and management, with clearly defined goals, to ensure accountability for investment of revenues. Commission should evaluate status of WTP 2035 implementation, noting the degree to which state and regional plans, policies, and programming documents support WTP Policy Goals and Strategies.	Also supports: Stewardship

Strategy	Recommended Action	Notes
	New for WTP 2035: Apply practical design concepts and operational and system management strategies to ensure that transportation improvements are cost-effective and appropriate for the situation.	Also supports: Economic Vitality
Explore New Funding Strategies for Public Transportation	Provide transit agencies with adequate revenue authority to preserve current rolling stock and infrastructure and maintain access to service, particularly where service is critical to managing demand on the state-owned highway system.	
	Work with local agencies to identify public transportation corridors of statewide significance. Designation would influence prioritization of the speed and reliability of transit service on designated corridors.	
	Explore value capture approaches to pay for public transportation corridor construction projects.	
Invest in Preservation of Ferry Vessels and Terminal Infrastructure	Establish a funding source for capital preservation investment in the state and local ferry systems to effectively maintain existing levels of service quality.	Progress made: Ferry capital surcharge generates new revenue for vessel replacement
	Invest in vessels needed to meet service level objectives.	
	Support policies and fare structures that pay for the majority of operating and maintenance costs.	
	Move forward with replacement of the Keller Ferry and implement a fare to help fund its operations.	Progress made: Replaced the Keller Ferry



Safety

The Safety goal area seeks “To provide for and improve the safety performance and security of transportation customers and the transportation system”

Since the adoption of WTP 2030, there has been increased investment in facilities to enhance user safety and progress with the implementation of strategies to improve safety.

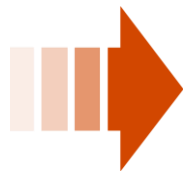
Emerging Themes in Safety

- Improve safety and security for all transportation modes and users, on the complete system including state, local and tribal infrastructure.
- Enhance transportation security through identifying and maintaining redundant cross-state routes.

Table 3. Safety

Strategy	Recommended Action	Notes
Foster Implementation of Comprehensive Safety Strategies Across All Jurisdictions and Transportation Modes	New for WTP 2035: Implement the road safety strategies recommended in Target Zero to address high-priority areas, including: young drivers, impaired driving, distracted driving, speeding, intersections, and running off the road.	
	Encourage agencies to consider the 4 E’s of traffic safety (education, enforcement, engineering, and emergency medical services) when planning and implementing transportation safety projects.	Progress made: Implementing comprehensive safety strategies across all jurisdictions and transportation modes
	Encourage other transportation modes to adopt a data driven approach to prioritize and target areas that pose the greatest risks to safety.	
	Ensure public safety by periodically reviewing posted speed limits where areas have experienced changes in density, traffic volumes, or where safety concerns have been identified.	
	Invest in sidewalks and other facilities to provide a safe transportation experience for pedestrians.	Progress made: Some investment
	Invest in improved facilities for bicyclists, which may include separated bike lanes.	Progress made: Some investment
Continue to Plan and Engineer Projects for Safety	Accelerate efforts to reduce serious injuries and fatal crashes on the highest risk roads, including rural roads, by implementing low cost safety improvements that often combine engineering, enforcement, and public education.	
	Increase use of technology for all travel modes to reduce fatalities and serious injuries.	Progress made: Some progress

Strategy	Recommended Action	Notes
	Use a risk-based assessment approach to continue to build and retrofit transportation facilities and services to withstand severe seismic events, flooding and other disasters.	
	Increase enforcement for running red lights, through use of cameras and other technology.	Progress made: Some increased enforcement
	Continue to work with state agencies to explore ways to reduce airspace impacts due to wildlife and structural obstructions to critical airspace near airports.	
Encourage Inter-Agency Collaboration and Cooperation on Emergency Preparedness and Response	New for WTP 2035: Work with the Department of Military’s Emergency Management Division (EMD) to identify additional risks to critical transportation infrastructure and mitigation strategies not specified in EMD’s Enhanced Hazard Mitigation Plan. Support the EMD and regional transportation agencies in implementing recommendations for transportation recovery after a major earthquake or other catastrophic event.	Also supports: Economic Vitality, Environment
	New for WTP 2035: Identify networks of redundant or alternate routes to maintain mobility in corridors critical for commerce and emergency services.	
	Accelerate efforts for interagency and cross-jurisdictional disaster responses, such as communications systems that work with each other and agreed-to strategies and routes for evacuation of injured persons, and provision of emergency shelter, food, and medical supplies.	
	Continue to develop plans to facilitate the movement of goods and supplies in the event of a disaster that affects transportation infrastructure.	
	Enhance Regional Catastrophic Preparedness Planning by further defining and communicating regional approaches to coordination.	
	Recognize and support transit’s role in emergency response efforts, such as evacuating large numbers of people or transporting those with special needs.	



Mobility

The Mobility goal area seeks “To improve the predictable movement of goods and people throughout Washington State”

Since the adoption of WTP 2030, there has been important progress towards the expansion of facilities to improve mobility and towards collaboration in addressing concerns over regional mobility.

Emerging Themes in Mobility

- Anticipate and work to address the implications for changing travel patterns and preferences to accommodate Washington’s changing demographic picture.
- Prepare for impacts and benefits of constantly evolving technology through more rapidly adopting innovative technologies, reviewing and revising system plans every few years, and supporting applied research that leads to development of cost-effective methods to address future transportation needs.
- Reduce obstacles to multimodal travel and increase the number of realistic travel choices for any given trip.

Table 4. Mobility

Strategy	Recommended Action	Notes
Support Mobility Options to Help Communities Meet the Public’s Travel Need	Couple land use policy, siting decisions, demand management, and transportation needs to leverage the value of existing infrastructure investments and future transportation investments, such as: (1) Create incentives to concentrate jobs and housing close to transit hubs; (2) Make corridor improvements holistically, including local multimodal street connectivity improvements that support bicycle, pedestrian, car, and truck travel to and from the corridor; (3) Site selected government facilities, such as schools or social services offices, to be accessible by travel modes that meet the needs of the users.	
	Invest in and maximize the use and effectiveness of HOV lanes, HOT lanes, and transit lanes, to improve reliability of travel times. Coordinate with local and regional transit providers to understand operational needs.	Progress made: Expanding HOV and HOT lanes
Support Mobility Options to Help Communities Meet the Public’s Travel Need	Support alternatives to driving or driving alone, through promotion and sponsorship of efficient commuter travel options, including convenient bus service and incentives to carpool or vanpool or work from home and telecommute.	
	Develop and fund a strategy to maintain and improve connections from producers to distributors for freight and goods movement, regardless of the jurisdiction in which the improvement is needed.	
	Identify and improve gaps in inter-modal connectivity for freight movement (e.g. ship to rail or truck and air to truck).	Progress made: Some improvement

Strategy	Recommended Action	Notes
Improve Connectivity to Facilitate Travel Across Modes and Communities	New for WTP 2035: Plan for and accommodate the emergence of efficient, effective new modes of transportation by encouraging collaboration between planning staff across modes and jurisdictions and promoting greater flexibility in the use of funds.	Also supports: Stewardship
	New for WTP 2035: Define the role of the state in facilitating improved connections between cities, counties and regions for both freight and passenger modes.	
	New for WTP 2035: Provide travel options for all users, by prioritizing “complete streets” projects and optimizing pedestrian and bicyclist connections to transit.	Also supports: Environment
	Encourage partnerships among the state, counties, cities, and transit to develop and implement strategies to manage and improve mobility within a corridor, such as the Urban Partnership Agreement between USDOT, WSDOT, King County, and the Puget Sound Regional Council.	Progress made: Some progress
	The state, counties, and cities should collaborate on congestion relief where their facilities intersect.	
	Help local governments to solve congestion issues by focusing on ease of multimodal connections, such as connecting service areas and synchronizing schedules among different providers.	
	Continue to add capacity strategically for all modes, including public transportation, by completing the system improvements underway today, managing system demand, and operating the system efficiently.	
	Create additional separated grade crossings between trains and vehicles, where appropriate, to relieve congestion and improve access.	Progress made: Construction of additional separated grade crossings between trains and vehicles
New for WTP 2035: Encourage Adoption of Innovative Technology	New for WTP 2035: Anticipate, monitor, and plan for changes in technology that affect how people and goods are transported, such as telework, autonomous vehicles, car-sharing, bike-sharing and mobile device applications that impact travel behavior and choices.	
New for WTP 2035: Accommodate Changing	New for WTP 2035: Evaluate whether travel demand projection methodologies need modification to more accurately reflect the factors that are causing current shifts to alternative modes and include the implications of such shifts in scenario planning or other regional planning exercises.	Also supports: Stewardship

Strategy	Recommended Action	Notes
Demographics & Preferences	New for WTP 2035: Ensure that project prioritization process for the transportation improvement program includes objective project evaluation metrics that incorporate the costs and benefits of non-motorized travel. Plan and design bicycle and pedestrian facilities to accommodate future growth in these modes, address safety needs, and avoid future capacity constraints.	Also supports: Safety, Environment
Strategically Prepare to Meet the Needs of an Aging Population	New for WTP 2035: Develop Coordinated Human Services Transportation Plans to address mobility needs of the elderly population.	
	Accommodate the needs of an aging population through universal design principles for all modes. For highways this includes larger font on signage, roadway markings, and lighting and design solutions. For transit and rail this includes easy-to-read schedules and terminal information and facilities designed with the elderly in mind.	
Support Transportation for Special Needs Populations	Require regional coordination to efficiently and economically increase the productivity of elderly travel options.	
	Increase the use of small, on-demand transit vehicles, which may be more cost effective than large buses in many areas of the state.	
	Consider the needs of rural areas that currently lack transit, ride sharing, or vanpool options, by enhancing coordination opportunities with human service transportation, and possibly with school transportation providers.	Progress made: Some progress
	Require regional coordination to efficiently and economically increase the productivity of travel options for people with disabilities.	
	Require transit agencies to provide educational opportunities to move people from paratransit services to public bus routes, where possible.	Progress made: Some progress on voluntary basis



Environment

The Environment goal area seeks “To enhance Washington’s quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment”

Since the adoption of WTP 2030, progress has been made towards reducing stormwater runoff and promoting non-motorized transportation and electric vehicles.

Emerging Themes in Environment

- Reduce transportation system’s impacts on Washington’s natural environment and decrease associated carbon-based greenhouse gas emissions.
- Improve the energy efficiency of the entire transportation sector.

Table 5. Environment

Strategy	Recommended Action	Notes
Transportation Investments Should Support Healthy Communities	Promote “Complete Streets” and Safe Routes to Schools policies and implementation for arterials and collectors within urban growth areas, while being mindful of impacts on freight movement.	Progress made: Promoting “Complete Streets” and Safe Routes to Schools policies
	Continue to develop and promote Commute Trip Reduction programs to reduce traffic congestion, air pollution, and petroleum consumption.	
	Consider transportation demand management policies as a core element of state and regional transportation planning.	
	Promote bicycling and walking as viable transportation options and as a means to improve public health and maintain environmental quality by identifying and addressing multi-modal system gaps, such as sidewalk or trail connections.	

Strategy	Recommended Action	Notes
Manage the Transportation System to Foster Environmental Sustainability	<p>New for WTP 2035: Minimize passenger and freight transportation impacts on fish and other wildlife habitats, including addressing fish passage barriers such as culverts, minimizing storm water runoff, and providing wildlife crossings.</p>	
	<p>New for WTP 2035: Support work to identify areas at high risk of catastrophic environmental damage due to spills or releases from freight shipments, as indicated in Executive Directive 14-06.</p>	
	<p>Develop a funding source to help the state, counties, and cities manage stormwater runoff from streets, roads, and bridges, including collection and treatment from existing transportation facilities.</p>	
	<p>Reduce stormwater impacts on state waterways consistent with the Clean Water Act.</p>	<p>Progress made: Reducing runoff and stormwater impacts</p>
	<p>Implement a program statewide that allows purchase of credits in a mitigation bank or payment of mitigation fees to ensure the most efficient and effective mitigation of transportation project impacts on aquatic resources and habitat.</p>	
Accelerate Clean Transportation Options	<p>New for WTP 2035: Evaluate a full spectrum of policies to reduce transportation GHG emissions through vehicle and fuel technology, system management and operations, land use, transportation options, and pricing strategies. Identify both near- and long-term actions appropriate for implementation at both state and regional levels.</p>	
	<p>Make significant progress toward meeting statewide greenhouse gas reduction goals by developing and coordinating a mix of innovative transportation strategies, with a focus on alternative energy sources and technologies, while managing congestion through transportation demand management, land use policy and pricing, and providing transportation choices.</p>	
	<p>Lead the nation in providing smart charging infrastructure for plug-in vehicles and create incentives for the purchase and conversion of plug-in vehicles.</p>	<p>Progress made: Solid progress in providing smart charging infrastructure for plug-in vehicles</p>

Strategy	Recommended Action	Notes
Accelerate Clean Transportation Options (continued)	Partner with federal agencies, private sector and university researchers, and utility companies to develop energy efficient transportation systems that use advanced communication software and manufacturing techniques developed in our state.	Progress made: Some progress



Stewardship

The Stewardship goal area seeks “To continuously improve the quality, effectiveness, and efficiency of the transportation system”

Since the adoption of WTP 2030, there has been meaningful expansion in the use of technology to improve transportation systems, through advances in passenger and freight mobility, safety, and other important areas. Stewardship also addresses the effectiveness and efficiency of delivering transportation projects and programs, and considers how public agencies and the private sector work together to deliver better outcomes.

Emerging Themes in Stewardship

- Integrate land use policy and transportation planning, including clear linkages between WTP 2035 and the goals of Washington’s Growth Management Act.
- Extend mobility and accessibility to all user groups, and distribute funding costs more equitably.

Table 6. Stewardship

Strategy	Recommended Action	Notes
Continue to Implement Performance Measures to Ensure Accountability	Work with the Joint Transportation Committee, the Office of Financial Management, WSDOT, the County Road Administration Board, the Transportation Improvement Board, and other transportation partners to develop an implementable set of performance objectives for all state-funded transportation investments.	
	Establish outcome expectations for new state and local transportation investments as part of a new transportation investment plan.	
	Encourage local jurisdictions to develop and improve performance measures for their facilities and transportation system services.	
Leverage Available Technologies to Maximize Efficiency in the Transportation System	Continue to develop and implement ITS improvements, such as signal coordination, integrated traveler information, and customized scheduling and trip planner information.	Progress made: Continued development and implementation
	Maintain and expand HOV and HOT lanes in major highway corridors, and optimize their speed and reliability performance.	Progress made: Maintaining and expanding HOV and HOT lanes
	Encourage transportation agencies to make data available to software application developers to develop and improve real time travel and scheduling information.	Progress made: Some progress
	Complete implementation of Washington State Ferries' reservation system and implement variable pricing to help manage demand, spread peak vehicle traffic, improve asset utilization, and reduce wait times.	Progress made: Some progress
Support Tolling as a User-Based Funding Mechanism	Use tolling, where appropriate, as a way to fund projects.	Progress made: SR 520 tolling began in December 2011
	Maintain tolling on roadways and bridges after project completion to fund preservation, maintenance and traffic management.	
	Expand HOT lanes to major highway corridors, where appropriate, to make more efficient use of highway capacity.	Progress made: Some expansion

Strategy	Recommended Action	Notes
	Use pricing as a tool to manage the use of scarce transportation resources and to provide funding for increased travel choices.	Progress made: SR 520 tolls increase during the peak to manage traffic flow
Review Regulations That Require the Same Standard and Performance Level for All Transportation Improvements	Review and offer recommendations for acceptable levels of preservation and maintenance for city streets and county roads; use available and recognized performance measures to assess network performance and new investment needs.	
	Explore options for applying differential design criteria based on community and roadway characteristics and accommodation of all users within the right of way.	
Strengthen the Integration between Land Use and Transportation Decision-making	New for WTP 2035: Promote transportation investments that align with state land use policies such as the Growth Management Act, including supporting local efforts to reduce sprawl, encourage development in urban areas, and provide more multimodal transportation options.	Also supports: Environment
	New for WTP 2035: Include representatives from the public health field in transportation planning to ensure direct and indirect health impacts are considered in transportation investment prioritization. Provide greater connectivity to health services, more consideration of Human Service Plans, and the encouragement of increased physical activity in transportation planning.	
	Improve integration of transportation and land use planning, such as supporting infill and redevelopment in transit-supported corridors, with the goal of reducing vehicle miles traveled and GHG.	Progress made: Sound Transit has adopted goals and guidance for Transit-oriented development.
	Strengthen the authority of RTPOs to certify the transportation and land use elements of comprehensive plans and development regulations. The Legislature should evaluate and reconsider the concurrency requirement to clarify the roles and responsibilities of the state and local governments and expand it to include highways of statewide significance.	

Strategy	Recommended Action	Notes
	Require use of multi-modal concurrency approaches, where possible, to promote density and reduce the development costs of infrastructure to the public.	
	Limit access to state highways to improve traffic flow and safety. Strategies to accomplish this may include closing and consolidating multiple access points in urbanized areas, and requiring access through frontage roads in urbanizing and rural areas.	
New for WTP 2035: Support Inclusive, Equitable Planning	New for WTP 2035: Engage lower income, immigrant, youth, and transit-dependent populations in the transportation planning process to better understand their unique needs and constraints.	Also supports: Mobility
	New for WTP 2035: Support state and regional economic development goals in identified opportunity zones, industry sectors, and innovative partnership zones.	Also supports: Economic Vitality
	New for WTP 2035: Ensure that statewide transportation planning adequately addresses the needs of local jurisdictions, by coordinating with regional and local plans.	
	New for WTP 2035: Identify most vulnerable populations in rural areas not well served by public transportation and work with transit and human services providers to improve access to essential health and social services.	Also supports: Mobility
Address Tribal Transportation Needs	New for WTP 2035: Build on the success of those regional transportation planning agencies that engage and form partnerships with tribal governments, and encourage all RTPOs to partner with tribal governments to increase access, mobility, and safety on tribal lands.	Also supports: Mobility
	An accurate inventory of Indian Reservation Roads is essential for tribal road funding. In the near-term, the Commission recommends that the state and federal governments assist tribes with this inventory. In the long-term, Congress could evaluate the current approach by the BIA and Federal Lands Highways to tribal transportation funding and consider whether this task should be reassigned within the USDOT.	
	Funding processes for transportation improvements on or connected to tribal lands are too numerous and complex. Simplification of federal and state funding for tribal transportation needs must be a priority.	

Connecting Transportation and Land Use

Land use and transportation have a critical two-way relationship. Infrastructure is an important determinant of land use choices, and development decisions can be influenced by the type, availability and siting of transportation systems. Conversely, transportation demand is shaped by characteristics of land use, such as the intensity and configuration of development, as well as location relative to housing, jobs, and amenities such as shopping, health services, and schools.

WTP 2035 acknowledges this relationship and recommends further strengthening linkages between desired outcomes in both land use development and the transportation system. A continued focus on integrating land use and transportation policies, planning and decisions over time will help bring about more proximate location of jobs, housing, and essential services, reducing the need for some automobile trips, and making public transportation and non-motorized modes more attractive choices for many shorter trips. This would not only improve accessibility for many residents, but also squeeze the maximum benefit from the existing system of streets and other utility networks.

Benefits of Improved Coordination

There are many potential benefits of improved transportation and land use coordination that accrue not only to those using the transportation system but to Washington's residents at large.

- **Improved Access to Necessary Services and Goods.** A key component of building transit markets and promoting alternatives to driving alone is a consistent emphasis on pedestrian and non-motorized mobility and access. When accompanied by land use policies that support transit-oriented development, compact, mixed-use communities, transit use, and increased walking and bicycling, these options can improve access to jobs, essential services such as health care and education, and social and recreational amenities.
- **Healthier Communities.** Transportation choices can play an important role in supporting healthier communities and populations. The way a community is designed and its proximity to services and amenities has an impact on which transportation choices are viable. Public health objectives are supported by land use policies that promote the viability of public transportation, walking, and bicycling, through increased physical activity and reduced mobile emissions.

- **Healthier Natural Environment.** Integrated transportation and land use planning can help Washington meet environmental goals by reducing impacts of the transportation system such as storm water runoff, greenhouse gas emissions, and excessive energy consumption. More concentration of future growth into existing urbanized areas reduces the acreage converted from open space to developed uses.
- **Economic Development.** Integrated planning should generate economic development opportunities for Washington land owners and businesses. In the proper context, more compact development with proximate, complementary land uses will contribute to economic growth in a region. In addition to local governments and transit providers, WSDOT also plays a role in enabling more efficient land use and development, particularly in many communities where state highways serve as the main street or intersect major arterials.
- **Transit-oriented Development.** One proven, effective mechanism for an urban area to reap the benefits of integrated transportation and land use policy and planning is Transit-oriented development. Transit-oriented development provides a mix of housing, employment, retail, and other amenities integrated into a walkable community served by public transportation. Done successfully, it can reduce household reliance on driving, which may lower both local and regional congestion, increase access to jobs and other economic opportunities, and reduce transportation and other infrastructure costs.



Integrating Transportation and Land Use Decision-making: Washington's Growth Management Act

For the last 25 years, Washington has aspired to integrate its land use decisions with transportation planning. A key factor driving passage of the Growth Management Act (GMA) in 1990 was recognition, by the legislature, that sprawling development increased infrastructure costs exponentially: capital costs for roads, water, and sewer and operating costs for transit, police, and fire all were growing at an unsustainable rate.



Through the GMA's concurrency provision, county and city plans are required to link land use, transportation planning and capital investments. The legislature also established regional transportation planning organizations to develop regional transportation strategies and review county and city plans to ensure consistency and coordination among jurisdictions. In subsequent years, statewide transportation planning and GMA were linked to complete a top-down and bottom-up structure for integrated decision-making.

Although evidence indicates that the GMA has led some of Washington's communities to use land and other resources in a more sustainable way, the statutory exemption from concurrency for highways of statewide significance substantially weakens the connection between local land use planning and state investment in transportation.

Under GMA,⁴ local jurisdictions must adopt and enforce ordinances that prohibit development approval if the development would cause the level of service on a local (i.e., non-state owned) transportation facility to decline below the standards adopted in the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made alongside the development.⁵ With over half of the roadway miles on the state system designated as highways of statewide significance, local developments are approved in spite of their negative impact on state highways.

⁴ Applies to those jurisdictions that are required to plan, or choose to plan, under RCW 36.70A.040.

⁵ In this case, "concurrent with the development" requires that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

Past studies of the effectiveness of concurrency have confirmed several apparent flaws:

- Cities and counties have consistently set level of service standards that lead to increased congestion;
- Some local governments and developers exploit the failure to extend concurrency to the state highway system and effectively shift the congestion problems there;
- WSDOT has not aggressively used the tools at its disposal (e.g., access management, the State Environmental Policy Act, and GMA consistency), to limit development that exceeds system capacity; and
- Few jurisdictions have taken a multimodal approach to concurrency, which is available to them under the GMA, and thus fail to access the benefits that transit, pedestrian and bicycle mobility can bring to achieving concurrency.

The Transportation Commission has previously made several recommendations⁶ that would improve the efficacy of the GMA and the concurrency provision specifically:

- The concurrency requirement should be extended to state highways.
- In urban centers and/or transit-oriented developments, concurrency should be multimodal, including walking, biking, and transit access. (Counties and cities can apply multimodal values to concurrency but are not required to do so; few have.)
- Concurrency standards for efficient freight movement should be established where the situation is appropriate.



⁶ In its 2008 and 2009 Annual Reports, as well as the WTP 2030, published in 2010.

- Public facilities, such as schools and social services offices, should be sited to be accessible, e.g., on existing public transportation lines.

In addition to reemphasizing these previous recommendations, other revisions that would strengthen the transportation and land use connection include:

- Clarify the respective roles, responsibilities, and relationships of the state and local governments where new development generates demand for transportation infrastructure.
- Find additional methods to facilitate transit-oriented development in urban settings.

Perhaps the biggest impediment to successful implementation of the concurrency requirement, however, is that neither the state nor local governments have invested adequate revenue in the transportation system, an issue of statewide significance that is addressed throughout WTP 2035.

Travel Trends and System Needs

Travel Trends and System Needs

This section summarizes key socioeconomic and demographic changes since 2010, and the resulting changes in transportation system utilization. Limited information about system performance and condition is included as well. It addresses changes such as lower vehicle ownership and shifting modal preferences. A rough estimate of needs has been assembled from numerous existing sources to identify order-of-magnitude funding requirements for system expansion, maintenance, and preservation. Additional information is being incorporated on an ongoing basis as it becomes available, providing further insights to specific modal system needs and local vs. state funding needs. A separate report on current transportation system conditions has been prepared to support analysis of future needs, and to guide development of updated strategies and actions (Technical Memorandum #2, Existing Conditions and Trends, May 2014.)

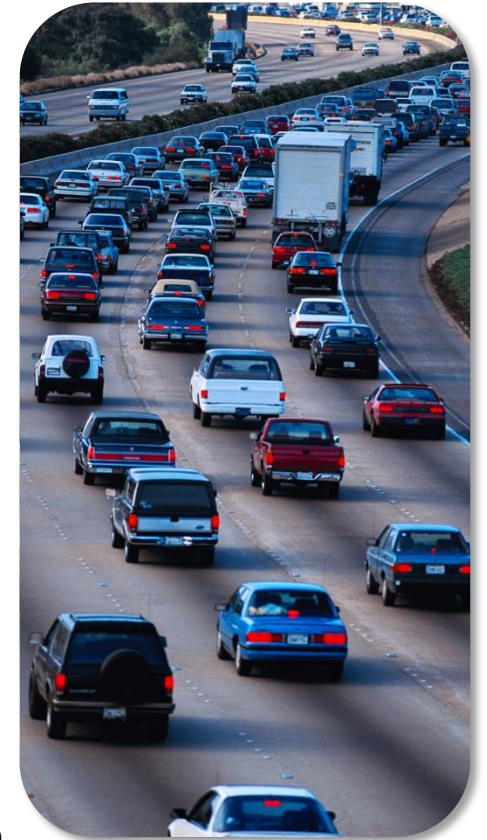
Trends in System Use

In terms of condition and performance, Washington's transportation system is not dramatically different in 2014 than it was in 2010, but there are some notable changes in the travel options available to Washingtonians, and the way they are choosing to use the transportation system. These trends will have critical implications for the scale and distribution of funding needs across Washington in the years to come.

Generally speaking, usage of most all components of the overall transportation system is increasing as the State recovers from a long recession; some very significant capital expansion and replacement projects are underway; and funding for essential operations, maintenance and preservation of the system continues to lag behind most estimates of need. The following are a few recent trends that may impact how we plan for and fund transportation in Washington.

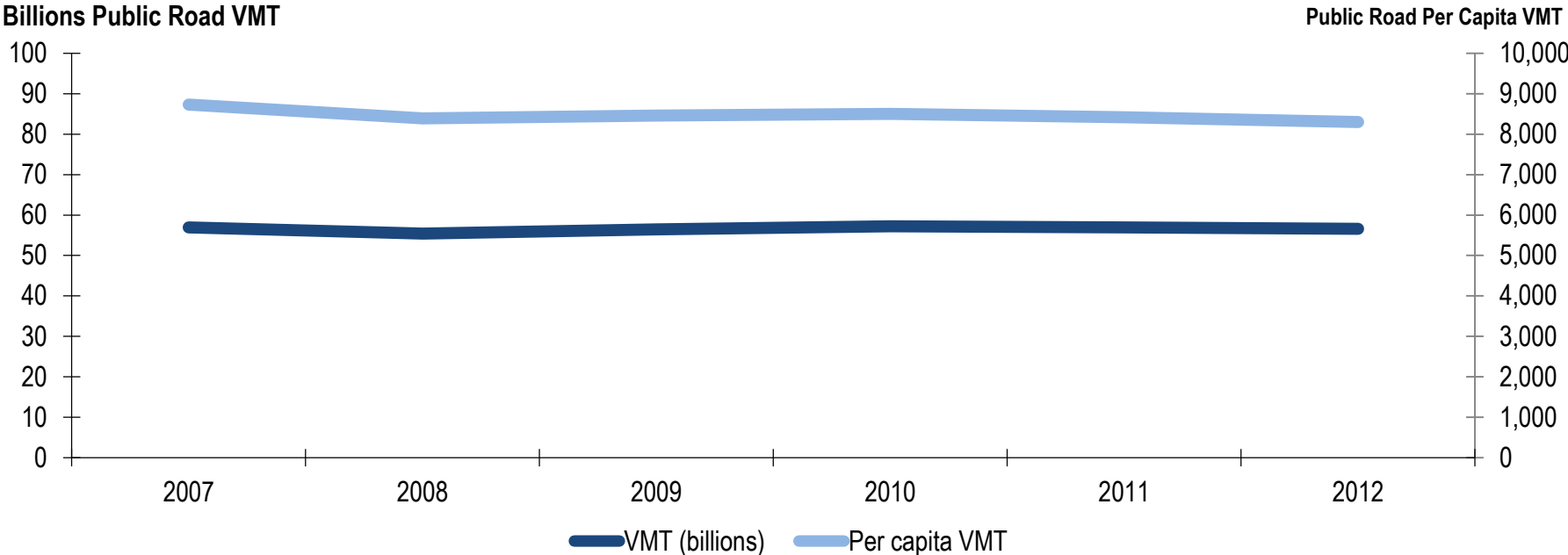
Slowing Growth in Vehicle Travel Demand

At the time of the WTP 2030 update in 2009-2010, Washington was climbing out of an extended economic recession. In transportation, the recession translated into a period of reduced personal and commercial travel, reduced roadway congestion in most areas, and reduced revenue from motor fuel taxes because of declining fuel consumption. By 2010, travel by motor vehicles on all public roads, as measured in vehicle miles of travel (VMT), had returned to prerecession levels, though this figure has declined slightly since then (see Figure 1).⁷ Thanks to the economic recovery, total statewide motor fuel consumption is on the rise again, and is now projected to increase slightly from now until 2027 (see Figure 5, below). There has been a slight decrease in VMT per capita and projected decrease in motor vehicle fuel consumption per capita, suggesting that the amount of travel, and motor fuel consumption, by each individual will continue to decline, but that population growth will offset these declines.



⁷ 2013 Washington Corridor Capacity Report.

Figure 1. Annual Statewide VMT and VMT Per Capita
Calendar Years 2007 to 2012

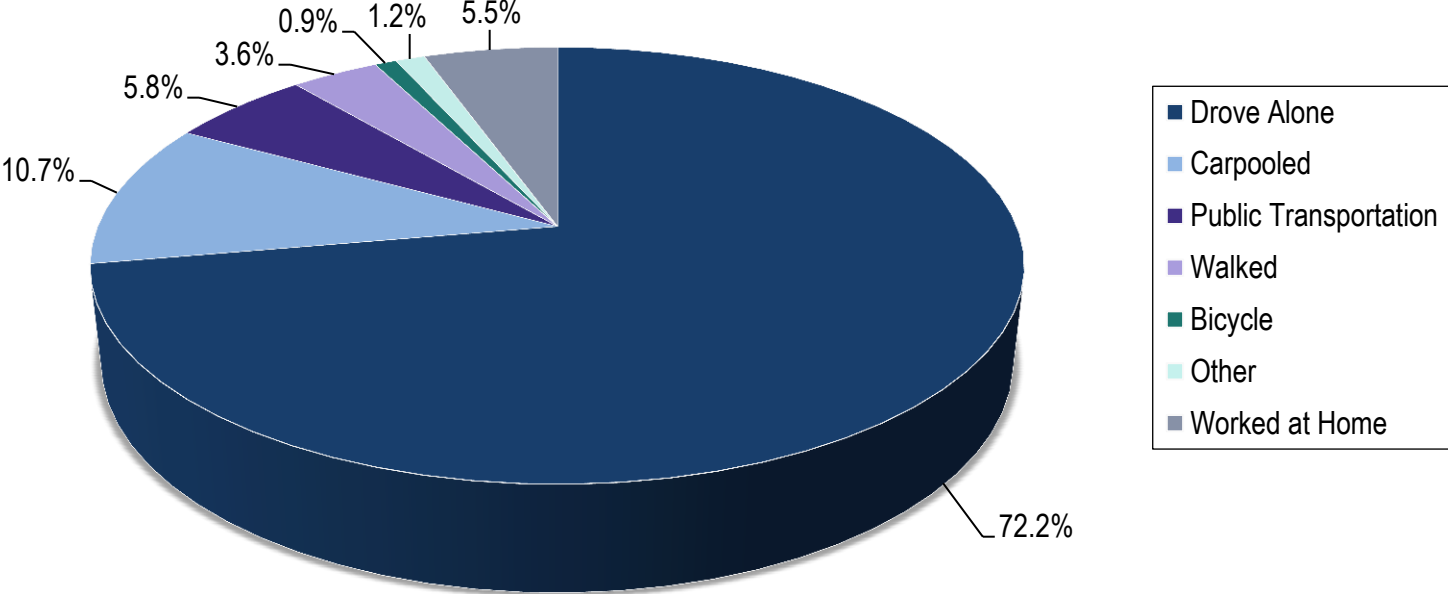


Source: 2013 WSDOT Corridor Capacity Report.

Growing Interest in Alternatives to Single-Occupant Vehicle Travel

According to the 2012 American Community Survey, although travel by non-auto modes is up sharply in some areas, auto trips still represent about 83% of commute trips across Washington, down only about 1 percentage point from 2008 (see Figure 2). Public transportation and nonmotorized travel make up another 12% of commute trips statewide, although this percentage is of course higher in urban areas where most bus and rail transit service is concentrated and where land use and street designs make biking and walking safe and accessible choices.

Figure 2. Washington Commute Choice 2012



Source: 2012 U.S. Census American Community Survey.

Public Transportation

Due to growing demand, expanded public transportation service is a growing priority in many of Washington’s highest population regions. Rail ridership grew significantly from 2010 to 2013; light-rail transit trips grew rapidly in the period 2009-2012 due to new service implementation and extensions. Commuter rail was up about 12% in the same period. Sound Transit Express Regional Bus, Sounder Commuter Rail, and Central Link light-rail boardings all increased each year during the four-year period ending in 2013. Traditional urban bus transit, which carries about 87% of all public transportation trips, saw little or no growth in ridership in many parts of the State between 2009 and 2012, due in part to recessionary service reductions. Ridership for King County Metro Buses grew

modestly at 5% from 2010 to 2012 and remained the highest in Washington. Boardings on Ben Franklin Transit (Benton and Franklin Counties), Community Transit (Snohomish County), and Pierce Transit fell from 2010 to 2013.

Active Transportation

While nonmotorized commuting is limited statewide, it is a growing priority in urbanized metropolitan areas. According to the 2012 American Community Survey, 12.5% of Seattle commuters walked or bicycled to work, up from 9.3% in 2000.⁸ In Tacoma, this number was 4.5%, up from 3.8%. Vancouver also experienced an increase in bike and pedestrian mode share, up to 2.9% in 2012 from 2.3% in 2000.

Changing Preferences

Shifting preferences appear to be at least somewhat behind the rise in demand for active transportation and public transportation options. Figure 3 depicts the composition of Washington's licensed drivers by age group in four years 1997, 2002, 2007, and 2012.⁹ While the number of total licensed drivers rose in each of these years, the driving population has aged significantly over the period, reflecting an aging baby boomer generation and a decreasing frequency of driver's licensing for people under 40 years of age. The number of drivers under the age of 20 rose slightly from 2007 to 2012 but remains lower than 1997 and 2002 figures.

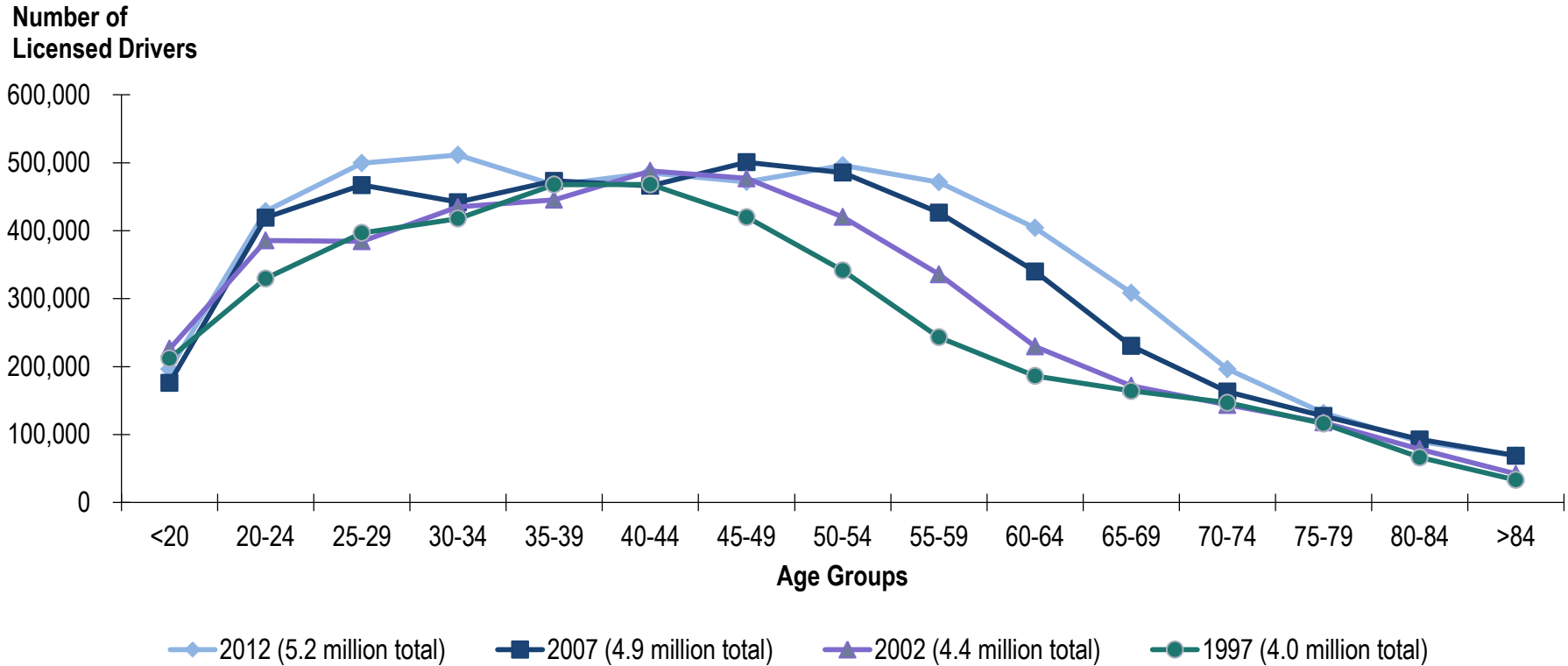


These changing trends in personal travel choices are evident, but their net impact on system demands or durability over time remains unclear. Regardless, personal travel trends will vary by region in the State. In addition to state transportation policy goals, long range investment plans will need to reflect the different regions, traveler groups and other factors that cause variation in travel frequency, mode choice, etc.

⁸ United States Census, 2000.

⁹ FHWA Office of Highway Policy Information, Highway Statistics Series (2012, 2007, 2002, and 1997).

Figure 3. Washington Licensed Drivers by Age Group
1997, 2002, 2007, and 2012



Source: FHWA Office of Highway Policy Information, Highway Statistics Series (2012, 2007, 2002, and 1997).

Accommodating Goods Movement Remains Critical to the State Economy

The Washington State economy is closely linked to the movement of all kinds of freight, including natural resources, agricultural products, and manufactured goods. Annual growth of employment in Washington’s freight-dependent industries was back in positive territory in 2011. This total grew by 2.6% in 2012, with 1.23 million jobs total. In 2012, gross business income for freight-dependent

industries was \$450 billion.¹⁰ Exports, an important part of the state economy, are up over 50% since 2010 (see Table 7). Notably as of 2013, Washington generates more than 50% of the total U.S. exports of civilian aircraft, engines, and parts.

Table 7. Washington State Aggregated Exports Abroad,
by Value and Share of U.S. Total, 2010 to 2013 (Values in Millions of 2013 Dollars)

Export	2010	2011	2012	2013
Total Washington Exports	\$53,345	\$64,774	\$75,619	\$81,939
% Share of U.S. Total	4.2%	4.4%	4.9%	5.2%

Source: United States Census, Foreign Trade, State by 6-Digit Harmonized Commodity Description and Coding System (HS) Code.

Overall System Safety Performance Has Improved, but Young Driver Fatalities Rose in 2013

Overall, traffic-related fatalities and serious injuries declined since 2005, reflecting most likely a combination of positive impacts from aggressive and multi-faceted highway safety programs, and reduced VMT. That said, fatalities increased slightly from 2012 to 2013. From 2012 to 2013, there were increases of 18 or more fatalities in each of the following priority areas: young drivers (age 16-25), speeding, running off the road, and older drivers (age 75+).

Target Zero, the Washington State Strategic Highway Safety Plan, aims to reduce traffic-related fatalities and serious injuries to zero by 2030. In the past Target Zero emphasized three factors that are involved with the majority of fatalities and serious injuries: impaired driving, run-off-the-road collisions, and speeding. The 2013 Update to Target Zero added three new areas of focus: young drivers, distracted driving, and intersection-related incidents.

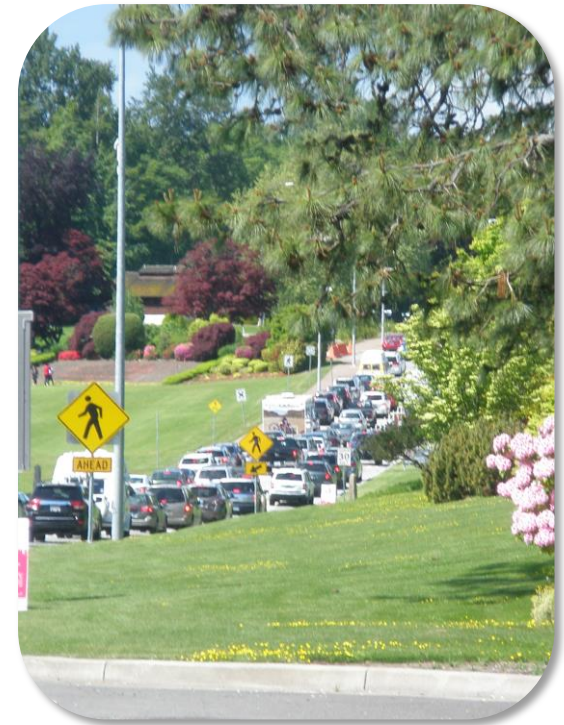
Washington needs to address the traffic fatality rate for Native Americans, which is almost four times that of the general population. Also, given recent and anticipated future increases in bicycling, walking, and motorcycling for trips of all purposes, Washington needs to

¹⁰ Draft Washington State Freight Mobility Plan (2014).

more fully integrate safety considerations into the long-range planning process to help deliver infrastructure improvements that support the safety and mobility for users of these modes.¹¹

While Transportation Demands Increase, Revenues Have Remained Stagnant

Maintaining the overall quality, effectiveness, and efficiency of the existing transportation system requires significant and ongoing funding of transportation operations, maintenance, and preservation efforts. As noted in WTP 2030, preservation and maintenance needs outstrip available local, state and federal funding sources, most of which continue to decline. Motor fuel taxes account for about 53% of direct state transportation revenues, down from 60% in 2010.¹² License, permit, and driver-related fees make up another 28%. Tolling revenues have increased and now account for roughly 7% of state project financing, up from approximately 3% in 2010. In the long term, motor fuel consumption in Washington is expected to increase only slightly, with a resulting decline in the real purchasing power of fuel tax receipts unless the tax rate itself is increased. At the county and city level, local sources, including a variety of city and county taxes as well as transit fares, make up the majority of funding for non-state system expenditures; the local contribution to public transportation capital and operating expenses has increased from 2008 to 2012 as federal and state contributions have declined both in absolute and percent terms. As discussed further below, all trends point towards the need for a long-term source of revenue to support adequate maintenance and preservation of all transportation modes, regardless of jurisdictional responsibility.



¹¹ Target Zero tracks bicycle and pedestrian fatalities and serious injuries resulting from collisions with motor vehicles but does not capture incidents in which motor vehicles are not involved.

¹² Direct revenues exclude bond sales, federal funds, and interest earnings.

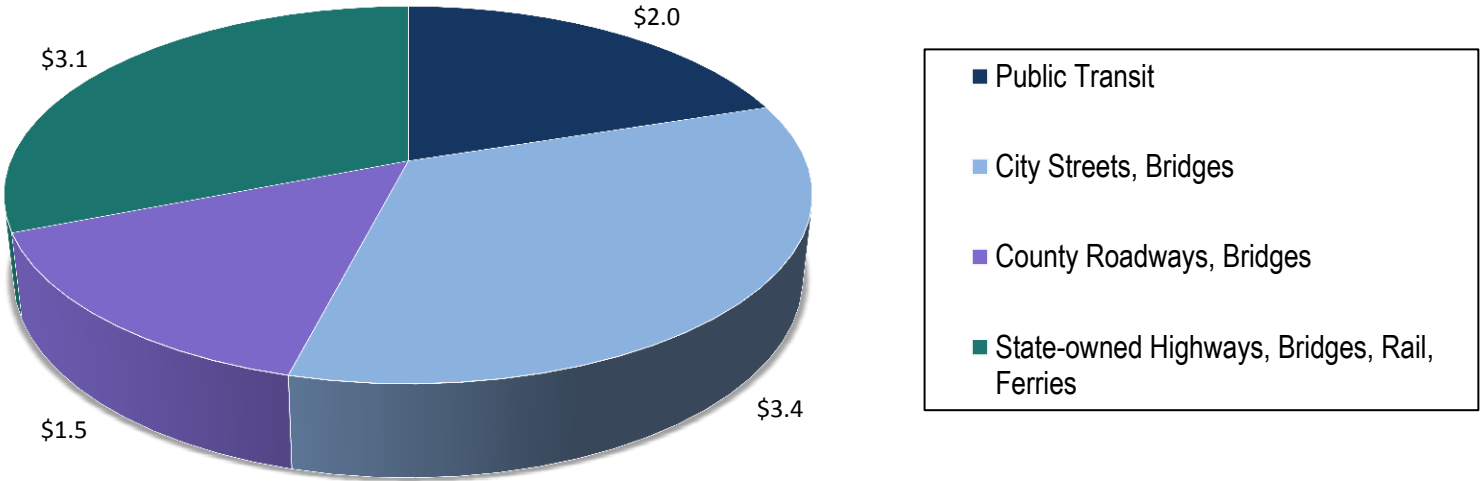
System Maintenance and Preservation Needs

While Washington has not secured substantial new revenue streams, its transportation infrastructure continues to age. Preserving our existing infrastructure is critical to ensuring reliable, safe travel on the transportation system, supporting individuals dependent on certain modes of travel, and bolstering the economic vitality of Washington farms and businesses that rely on efficient and dependable goods movement through the state and beyond. This section reviews the estimated unfunded transportation preservation needs, by mode.

Systemwide

Connecting Washington, a 2012 transportation funding analysis, reviewed transportation system conditions and reported approximately \$10 billion in unfunded maintenance and operation needs across jurisdictions (state, county, city) over a ten-year period (see Figure 4).

Figure 4. 10-Year Maintenance and Operations Needs, All Modes and Jurisdictions
Billions of 2012 Dollars



Source: 2012 Final Report of Connecting Washington Task Force. Includes state-, county- and city-owned infrastructure.

Roadway System

State Roadways

WSDOT roadways, including interstates and other vital arterials, represent less than 10% of the system's centerline miles, but over one-half of its daily vehicle miles traveled.¹³ According to the 2012 *Connecting Washington* report, Washington needs an additional \$3.1 billion to maintain the state-owned highways and bridges over the next 10 years. This funding would allow WSDOT to keep 90% of its roadways in good or fair condition, and would include funding to maintain ferry services at current levels.

The WSDOT 2013 Unfunded System Investments report specified \$9.1 billion in unfunded Maintenance, Operations, Preservation, and Safety needs across Washington's regions. The unfunded projects' timeframes vary.

County Roads

County roads account for approximately one-half of Washington's network. *Connecting Washington* reports that counties need \$1.5 billion over the next 10 years in order to maintain and operate their respective roadway systems. If secured, this figure would enable counties to keep 90% of their roadways in fair or good condition. It would also fund repairs of structurally deficient and functionally obsolete bridges. Aside from maintaining road and bridge conditions, the \$1.5 billion would help counties address storm water and fish passage requirements.



¹³WSDOT 2012 Annual Mileage Information.

City Streets

City streets contain just under one-quarter of Washington’s centerline miles and support slightly more than a quarter of its VMT. Preserving city bridges and maintaining 80% of city arterials in fair or good condition would require an estimated \$3.4 billion across a 10-year timespan.

Public Transportation

Rail and Bus

Public transportation networks offer an alternative to the roadway system, particularly in Washington’s densely populated regions. The public transportation system comprises bus services, commuter rail, light-rail, demand response services, vanpooling, and route deviated services. About 87% of land-based passenger trips occurred on bus services; the most traveled public transportation mode from 2009 to 2012.¹⁴ Connecting Washington estimated that public transportation agencies will require \$2 billion over the next 10 years to restore 2008 levels of service and maintain those systems going forward.

The state government plays only a minor role in supporting these public transportation systems, which are primarily operated by regional and local entities. Stakeholders in transit-dependent regions have advocated for a stronger state role in public transportation funding, noting that regional public transportation systems reduce usage and congestion on the state highway system. Examples of regional public transportation needs include:

- **Puget Sound region.** In the Puget Sound region, a higher proportion of commuters use public transportation than in other parts of the State. According to the Puget Sound Regional Council’s (PSRC) Transportation 2040 plan, \$10.2 billion is needed to keep Sound Transit in a state of good repair over the 2010 to 2040 timeframe. For other local transit systems, PSRC predicts that \$27.3 billion are needed to keep these networks in a state of good repair¹⁵.

¹⁴ 2013 WSDOT Summary of Public Transportation.

¹⁵ Transportation 2040 does not explicitly specify how much projected revenue will be used for either system preservation or expansion.

- **Spokane region.** In Horizon 2040, the Spokane Regional Transportation Council highlights an increasing need for public transportation – a 73-percent uptick in trips by 2040 – citing an aging and growing population and lack of sufficient local funds. Without additional funding, STA will be unable to sustain operations at current levels by the year 2016.
- **Southwest Washington.** The Clark County Public Transportation Benefit Authority (C-TRAN) offers public transportation to residents of Vancouver, Washington, and surrounding municipalities. Preservation and maintenance costs over a 24-year period are expected to total \$2.24 billion.¹⁶

Ferries

In 2013, Washington State Ferries (WSF) transported over 22.5 million riders in and around the Puget Sound.¹⁷ Riders include vehicles (10.08 million) and passengers (12.45 million). The ferry system comprises 22 vessels and 20 ports ranging from Tacoma, Washington to Sidney, British Columbia.¹⁸ Aside from WSF, there are several county-operated ferries, a WSDOT-operated ferry on Lake Roosevelt, one tribally-operated ferry, and several private ferry operations in Washington.



The PSRC's *Transportation 2040* projects \$6.7 billion in WSF state-of-good-repair needs from 2010 to 2040. To maintain current service levels, the system must replace 16 of its 22 aging vessels by 2040 and invest in preserving and restoring the other 6 boats. In addition, the region must preserve its terminal infrastructure, which includes replacing and upgrading several terminals. The plan expects \$5.4 billion of revenue for the ferry system under current laws and \$2.9 billion from new sources.

¹⁶ Metropolitan Transportation Plan for Clark County, 2011 Update.

¹⁷ Washington State Ferries Traffic Statistics.

¹⁸ Washington State Ferries web site.

Air Travel

Washington's aviation network includes 134 public-use airports used to transport people and cargo within Washington as well as to and from the rest of the world.¹⁹ According to the U.S. Federal Aviation Administration, all Washington airports enplaned 18.75 million passengers in 2012. About 16.1 million of these passengers embarked from Seattle-Tacoma International.

WSDOT's 2014 Airport Investment Study identified \$3.6 billion of eligible 20-year capital funding needs, split between likely funded (\$1.9 billion) and likely unfunded (\$1.7 billion). Federal sources share \$3.0 billion of these costs, higher than the state (\$0.2 billion) and local shares (\$0.3 billion).²⁰

Significant increased demand is expected to constrain facilities, runways, and taxiways, particularly at the State's busiest airports. According to the 2013 Washington State Airport Pavement Management System, pavement funding needs for the 95 airports documented in the study totaled \$338 million from 2012 to 2020. This amount would allow the system to meet overall condition goals and eliminate the backlog of major pavement rehabilitation projects.

Goods Movement

Goods movement requires adequate road, rail, port, and aviation infrastructure. This multimodal system connects Washington's agriculture and industry regionally, domestically, and internationally. Additional work is required to translate these system expansion needs into dollar amounts.

Freight Rail and Fossil Fuels

As post-recession freight rail volumes increase, operators look to maximize existing rail capacity without displacing trains.

Some stakeholders are concerned with growing volumes of unit trains carrying fossil fuels, such as coal, oil, and gas, as well as other petroleum-based products. These cargoes can present spill hazards and compete with other types of commodities for the system's limited capacity.

¹⁹ WSDOT Aviation Division Airport Investment Study, 2014.

²⁰ The Study does not explicitly distinguish preservation and expansion needs.

- **Roadways.** The WSDOT Freight Mobility Plan emphasizes the need to analyze and address freight bottlenecks that cause delays, create safety hazards, or are in a state of poor repair. Operationally, the state can manage the demand of these strategic freight corridors to balance capacity between high- and low-congestion periods.
- **Railroads.** According to the Washington State Rail Plan, Washington needs to better manage its existing rail capacity and infrastructure, particularly its short-line rail infrastructure. Alleviating capacity constraints will enable Washington to meet both current and future freight demands. The State will also need to mitigate impacts on communities, such as increased noise and delays at crossings.
- **Ports.** As of 2011, the combined container load of the Port of Seattle and the Port of Tacoma was in the top three nationwide. PSRC's Transportation 2040 recommends improving roadway and rail connections to the state's major ports. The plan notes that increasing off-peak cargo movements is one option to relieve congestion, though labor requirements are a potential constraint. According to the WSDOT Freight Mobility Plan, maintaining navigation channel depth is another challenge.

A 3-barge tow on the Columbia-Snake River System can move as much wheat as a unit train. The future of transportation on the river system faces environmental pressures and the rising cost and complexity of maintaining an aging dam and lock structure.



- **Aviation.** According to the Washington State Aviation System Plan, the vast majority of the State's air cargo flies through Seattle-Tacoma International Airport, Boeing Field, or Spokane International Airport. According to the plan, there are not significant air cargo constraints, although demand is expected to grow.

System Expansion and Retrofit

While system preservation is one of the State's highest transportation priorities, Washington also must look toward future expansion of its transportation system to meet its policy goals. This process includes expanding existing roads, transit lines, non-motorized networks, terminals, etc. to accommodate growing demand in the urbanizing areas of the State, extending roads and transit lines into areas of new growth, providing more complete infrastructure for emerging modes, such as bicycling, and extending transit services to larger segments of the population through service area expansions. This section identifies approximate future system expansion needs, by mode, drawn from a variety of existing sources.

Systemwide

Connecting Washington estimated \$50.3 billion was needed to improve and expand Washington's transportation system over the next 10 years. This amount would enable the transportation network to meet performance objectives in system preservation, strategic mobility improvements, system efficiency, and safety.

Roadways

WSDOT tracks unfunded roadway expansion and improvement projects. Table 8 shows unfunded investments by region and by category as of 2013. Some of the projects included in this total are short-term needs, but many are investments of 10 years or longer. Unfunded roadway system investments total \$33.7 billion. While the Northwest region has the largest unfunded investment total (\$14.6 billion), each region has cited at least \$2.6 billion in unfunded system expansion projects.²¹

²¹ While roadway projects constitute the majority of these investment totals, these figures include some ferry and transit projects too. The table excludes unfunded investments for maintenance, operations, preservation, and safety. Also, while most of these needs apply to WSDOT-operated infrastructure, the totals also include some "state-interest" projects managed by local governments or public transportation agencies.

Table 8. WSDOT Unfunded System Investments
by Region (Millions of 2013 Dollars)

	Northwest	North Central	Southwest	Olympic	Eastern	South Central	Totals
Total Needs	\$14,551	\$2,643	\$2,709	\$6,985	\$3,702	\$3,137	\$33,727

Source: 2013 WSDOT Unfunded System Investments.

Public Transportation

Rail and Bus

Public transportation is a growing priority in many of Washington’s highest population regions. Additional work is required to translate these system expansion needs into dollar amounts.

In the Puget Sound region, PSRC’s Transportation 2040 aims to augment the public transportation system to meet increasing demand and invest in paratransit, fixed-route services, and demand response services to provide better mobility for people with special needs.

In Horizon 2040, the Spokane Regional Transportation Council prioritizes additional public transportation options outside of the current Spokane Transit Authority (STA) service area, better regional commuter service, increased funding for transit options in smaller towns, and increased frequency on current routes.

According to the Clark County 2011 MTP, C-TRAN hopes to add new bus routes, increase capacity on existing bus routes, foster additional Vancouver, WA-Portland, OR connectivity, and meet additional paratransit demand for a growing population of people with disabilities.



Ferries

While the bulk of ferry system funding needs focus on keeping the current system in a state of good repair, PSRC's *Transportation 2040* reports \$1.5 billion in state-owned ferry needs from 2010 to 2040 to allow the following system expansion:

- Development of a number of new passenger-only ferry routes;
- Addition of new terminals and docks; and
- Deploying an enhanced vehicle reservation system, new pricing strategies, and a marketing campaign to increase off-peak ridership, and thus better match system demand to capacity.

Over time, growth in ferry passenger demand on the commute-oriented central Puget Sound Routes may be accommodated more cost-effectively through a combination of car and passenger ferries.



Non-Motorized Transportation

The 2008 WSDOT State Bicycle Facilities and Pedestrian Walkways Plan estimated \$1.6 billion²² in “Unfunded Bicycle and Pedestrian Projects Identified in Local Transportation Improvement Plans.”²³

Airports

WSDOT’s 2014 Airport Investment Study identifies public-use airport capital needs. WSDOT predicts approximately \$3.6 billion in eligible 20-year needs.²⁴

According to the Long-Term Air Transportation Study, Washington will attempt to meet growing aviation demand through 2030 by preserving existing airports and balancing capacity among these facilities. If capacity becomes overstretched, the State will select potential sites for new airports. At Seattle-Tacoma International, where the majority of the State’s passenger enplanements occur, expansion is physically constrained, but the airport is designing an enhanced International Arrival Facility to bolster its capacity.²⁵



Goods Movement

The State Freight Mobility Plan underscores the need to build new capacity strategically to improve the freight system’s weak points and recommends operational and capital strategies to address current needs and meet future growth. Additional work is required to translate these system expansion needs into dollar amounts.

- **Roadways.** Washington can enhance the roadway system by adding capacity strategically to fix freight bottlenecks on economic corridors and by leveraging technology to obtain truck travel information and optimize signal timing.

²² 2006 dollars.

²³ This report predates the state legislature’s addition of the sixth policy goal, Economic Vitality.

²⁴ As mentioned in section 3.2, the Study does not explicitly distinguish preservation and expansion needs.

²⁵ Port of Seattle web site.

- **Rail.** Identifying and prioritizing “first- and last-mile” connections between roads and rail that generate freight demand can stimulate economic development.²⁶ Growth in freight rail tonnage could eventually overwhelm the current rail system and necessitate expansion, according to the WSDOT State Freight Mobility Plan.
- **Aviation.** While the Washington State Aviation System Plan asserts that the State’s airports meet current capacity, cargo loads are expected to grow from 2010 to 2030. Seattle-Tacoma, which handles the largest portion of the State’s air cargo, will likely expand its cargo processing facilities. Cargo plane parking and operations constraints may hinder expansion. At Boeing Field, expanding the cargo aircraft parking apron hinges on adjacent land availability.
- **Ports.** Adding anchorages along the Columbia River would help meet increased demand.²⁷ The PSRC expects the region’s waterways to experience a 169-percent increase in twenty-foot equivalent unit (TEU) containers from 2008 to 2030.²⁸ The West Vancouver Freight Access Project currently is underway to expand the Port of Vancouver, the State’s third largest marine port.²⁹



²⁶ WSDOT State Rail Plan, 2013 to 2035.

²⁷ WSDOT Freight Mobility Plan, 2014.

²⁸ Transportation 2040.

²⁹ Clark County MTP, 2011.

Funding Trends and Options

Funding Trends and Options

While Washington has emerged from the recent economic recession, the State continues to face financial uncertainty. A mix of federal, state, and local sources fund Washington's transportation infrastructure. State and federal motor fuel taxes provide the majority of transportation-related revenues. With motor fuel taxes unlinked to inflation and dependent on consumption rates, Washington should secure alternate funding sources, or move away from a flat fixed rate tax system. As the State's transportation maintenance and expansion needs continue to outstrip revenue projections, Washington should prioritize preserving existing infrastructure and adopt user-based systems to finance system growth.

Federal Revenue Policy, Sources, and Trends

The United States federal government provides a portion of Washington’s transportation revenues. In its June 2014 forecast, the Transportation Revenue Forecast Council (TRFC) projected \$5.3 billion in federal revenue apportionments over the federal fiscal years 2014 to 2023.³⁰ This amount is less than a quarter the size of the projected WSDOT revenue over a similar 10-year period.³¹ From 2014 to 2023, WSDOT will receive approximately 84% of the federal apportionments, and local governments will take the remaining 16%.

In 2012, the federal government enacted Moving Ahead for Progress in the 21st Century (MAP-21) to secure funding for core transportation programs in fiscal years 2013 and 2014. The federal motor vehicle fuel tax and other excise taxes fund the Highway Trust Fund, which in turn funds MAP-21. From the federal government, WSDOT anticipated \$666 million in FY 2014 and \$533 million in FY 2015. Projected annual federal funds fall to \$501 million in FY 2016 and remain in the \$501 million to \$511 million per year range from fiscal years 2016 to 2023.



³⁰ The Federal fiscal year begins October 1. The Thirteen-year period of the TRFC forecast runs from October 1, 2013 to September 30, 2023.

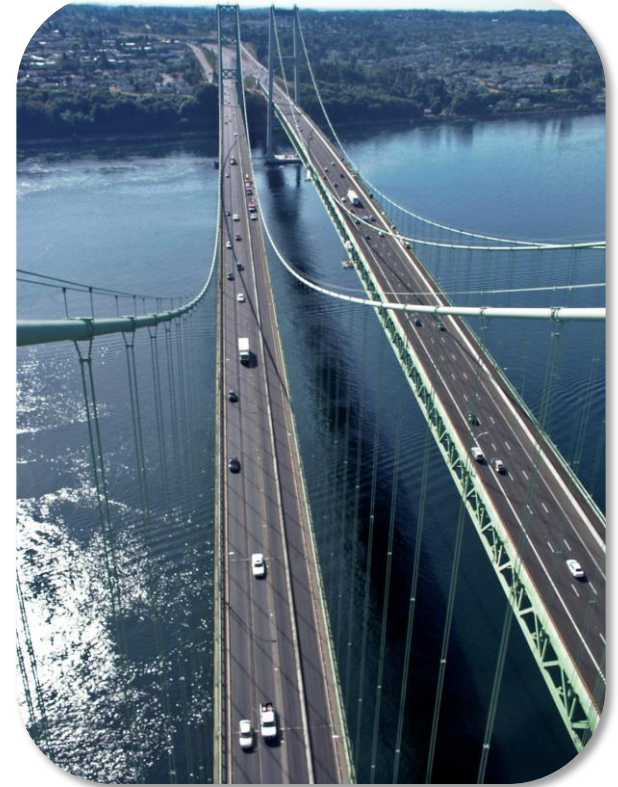
³¹ TRFC projected WSDOT transportation revenue to be \$24.1 billion total from the 10-fiscal year period spanning from July 1, 2013 to June 30, 2023.

State Transportation Revenue Sources and Trends

The Washington State government generates the largest share of Washington's overall transportation revenues. TRFC regularly forecasts WSDOT transportation revenues by source (see Table 9). In its June 2014 forecast, TRFC projected WSDOT total direct³² revenue to be just under \$38.6 billion for the 16-fiscal year period spanning from 2011 to 2027. This amount, which averages \$2.41 billion annually, is slightly more than the total revenue projected in the June 2010 TRFC forecast for the same 2011 to 2027 timeframe.

According to the 2014 forecast, motor vehicle fuel taxes constituted the majority (53%) of WSDOT-generated transportation revenues, followed distantly by licenses, permits, and fees (23%); ferry revenues (8%); and toll revenues (7%). Expected motor vehicle fuel tax revenues had accounted for 60% of state direct revenue in the 2010 forecast for 2011 to 2027. This change reflects the State's increasing need to secure significant revenue sources aside from the motor fuel tax. Projected 2011 to 2027 tolling revenues jumped to 7.1% in 2014 from 2.5% in 2010.

The June 2014 TRFC report divided the \$38.6 billion revenue figure into three distribution categories: approximately \$1.2 billion for Motor Fuel Tax Refunds and Transfers, \$6.0 billion for local uses, and \$31.4 billion for state uses. In comparison, the June 2010 report forecasted roughly \$1.2 billion for Motor Fuel Tax Refunds and Transfers, \$6.8 billion for local uses, and \$30.2 billion for state uses. Projected state revenue for local uses fell approximately 12% between the two forecasts.



³² Direct revenue excludes Federal funding and bond sales.

Table 9. 2011-2027 Programed Direct State Revenue Sources in Billions
June 2010 and June 2014 Forecasts

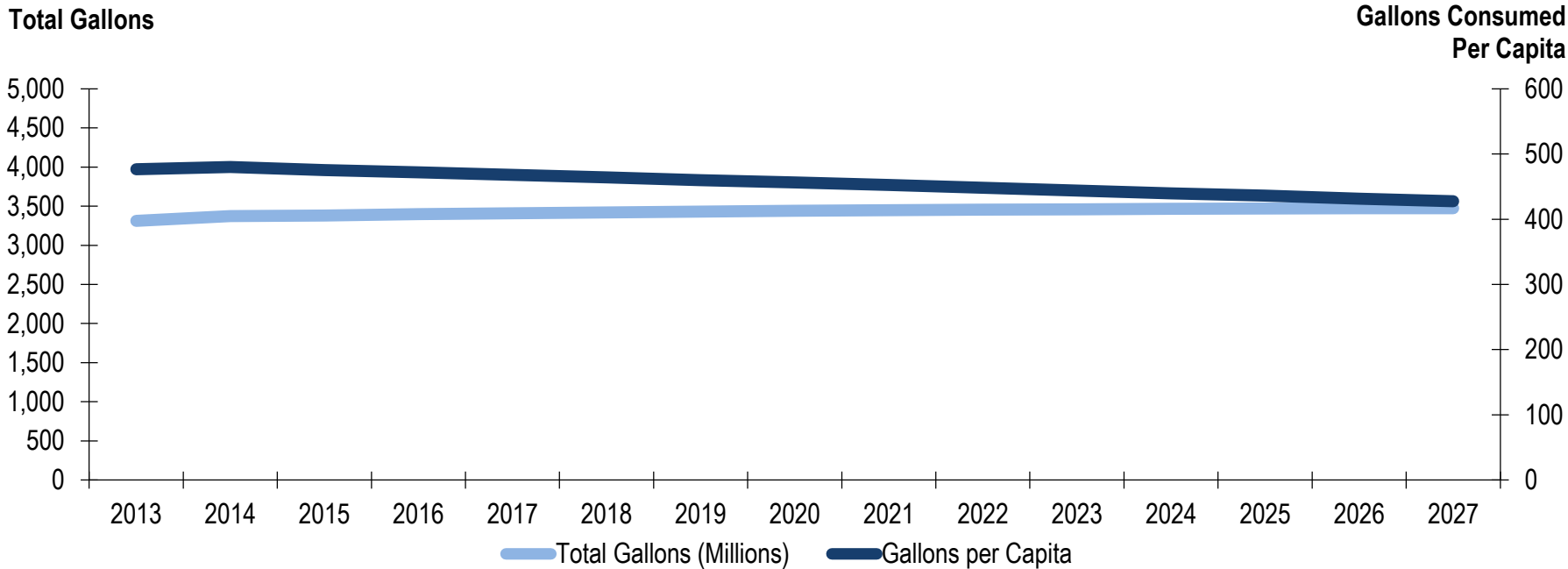
Source	June 2010		June 2014 Forecast	
	2011-2027 Totals	2011-2027 Percentage Breakdown	2011-2027 Totals	2011-2027 Percentage Breakdown
Motor Vehicle Fuel Tax	23.0	60.4%	20.5	53.2%
Licenses, Permits, and Fees	8.2	21.4%	8.7	22.6%
Ferry Revenues	2.9	7.5%	2.9	7.6%
Tolling	0.9	2.5%	2.7	7.1%
Vehicle Sales Tax	0.7	1.9%	0.7	1.7%
Aviation Revenues	0.0	0.1%	0.1	0.1%
Rental Car Tax	0.5	1.4%	0.5	1.2%
Driver-Related Fees	1.7	4.5%	2.2	5.8%
Business/Other Revenues	0.1	0.3%	0.2	0.6%
Total Direct Revenue	38.1	100.0%	38.6	100.0%

Source: Washington State Transportation Revenue Forecast Council, Transportation Revenue Forecast (June 2014, June 2010).

Washington's transportation system continues to rely heavily on vehicle fuel tax revenues. Figure 5 indicates annual statewide motor vehicle fuel consumption in total gallons and gallons per capita.

According to its June 2014 forecast, TRFC expects Washington's total consumption of vehicle fuels to rise slightly over the next fifteen years, from 3.31 million gallons in FY 2013 to 3.47 million gallons in FY 2027. Total consumption is expected to rise 1.8% from 2013 to 2014, annual increases range between 0.0% to 0.6% for the remaining years in the forecast. Washington's population is expected to grow between 1.0% and 1.2% from 2013 to 2027. TRFC projects the amount of motor vehicle fuel gallons consumed per capita to fall from 480 gallons per capita in 2014 to 427 gallons per capita in 2027.

Figure 5. Projected State Motor Fuel Consumption, Total Gallons and Gallons per Capita, Fiscal Years 2013 to 2027



Source: Calculated using fuel consumption and population growth rate data from Transportation Revenue Forecast Council's June 2014 Transportation Revenue Forecast and base year population from Washington State Office of Financial Management's November 2013 State population forecast.

Local Transportation Revenue Sources and Trends

While local governments and transit authorities receive some funding from state and federal sources, they directly generate the majority of their respective jurisdictions' transportation revenues. These local entities use property, sales, and other taxes, as well as ridership fares for funding. A lack of consolidated local data makes projecting local transportation funding difficult.

Counties

Counties levy property taxes to fund transportation infrastructure. In 2012, Washington counties obtained \$975 million for county roads.³³ Local sources, including property taxes, generated 63% of county revenue. Five years earlier, in 2007, local sources generated a slightly smaller share (62%) of county road revenues (see Table 10).

WSDOT motor vehicle fuel tax revenues accounted for approximately 22% of county revenues. Federal revenues provided less than 11% of revenue.

³³ WSDOT County Road and City Street Revenues and Expenditures, 2003-2012. The Washington State County Road Administration Board (CRAB) compiled a 2013 Annual Report that anticipated \$1.16 billion of total funding for county roads *and* bridges in 2013.

Table 10. County Road Revenues by Source, Calendar Years 2007 and 2012

Source	2007		2012	
	Amount	Percent	Amount	Percent
Property Taxes	388,324,667	44%	441,850,389	45%
Special Assessments	498,715	0%	447,607	0%
General Fund Appropriations	40,802,544	5%	86,656,676	9%
Other Local Receipts	116,106,392	13%	85,686,997	9%
Total Local Revenue	545,732,318	62%	614,641,670	63%
State Fuel Tax Distributions	162,506,113	18%	155,672,527	16%
Other State Funds	53,372,742	6%	57,544,478	6%
Federal Revenues	117,247,519	13%	109,346,839	11%
Bond Proceeds	4,403,207	0%	33,356,070	3%
Ferry Tolls	3,066,785	0%	4,215,197	0%
Total Revenues	886,328,684	100%	974,776,782	100%

Source: WSDOT County Road and City Street Revenues and Expenditures, 2003-2012.

Cities

Cities provide the majority of funding for city-owned roads and bridges. In 2012, municipalities obtained \$1.54 billion in revenue for city streets. Cities generated 76% of revenue themselves, a substantial increase from 66% five years prior in 2007 (see Table 11).³⁴ According to the Association of Washington Cities' 2013 City Transportation Overview, the three largest sources of city-generated revenue are: general property taxes, sales and use taxes, and business and utility taxes.

³⁴ WSDOT County Road and City Street Revenues and Expenditures, 2003-2012.

The federal government provided 8% of city street transportation revenues in 2012, and WSDOT covered 14%.

Table 11 City Street Revenues by Source, Calendar Years 2007 and 2012

Source	2007		2012	
	Amount	Percent	Amount	Percent
Property Taxes	388,324,667	44%	441,850,389	45%
Special Assessments	498,715	0%	447,607	0%
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Total Revenues	886,328,684	100%	974,776,782	100%

Source: WSDOT County Road and City Street Revenues and Expenditures, 2003-2012.

Public Transportation

Public transportation presents a cross-jurisdictional funding challenge. Table 12 shows public transportation revenues by source. Overall, public transportation revenue grew almost 20% from 2008 to 2012. Local governments shoulder a higher proportion of the funding responsibilities now than in the past (85% in 2012 versus 81% in 2008), as federal and state contributions to public transportation have fallen. Transit agencies often bear the costs of special needs transportation as well.

Table 12. Public Transportation Revenue by Source
2008 to 2012

	2008				2012			
	Operating	Capital	Total	%	Operating	Capital	Total	%
Local	\$1,484,129,643	\$47,303,438	\$1,531,433,081	81%	\$1,874,207,290	\$22,784,261	\$1,896,991,551	85%
State	\$19,186,918	\$23,440,696	\$42,627,614	2%	\$18,292,249	\$7,913,035	\$26,205,284	1%
Federal	\$103,331,429	\$224,894,612	\$328,226,041	17%	\$102,420,887	\$219,204,137	\$321,625,024	14%
Total	\$1,606,647,990	\$295,638,746	\$1,902,286,736	100%	\$1,994,920,426	\$249,901,433	\$2,244,821,859	100%

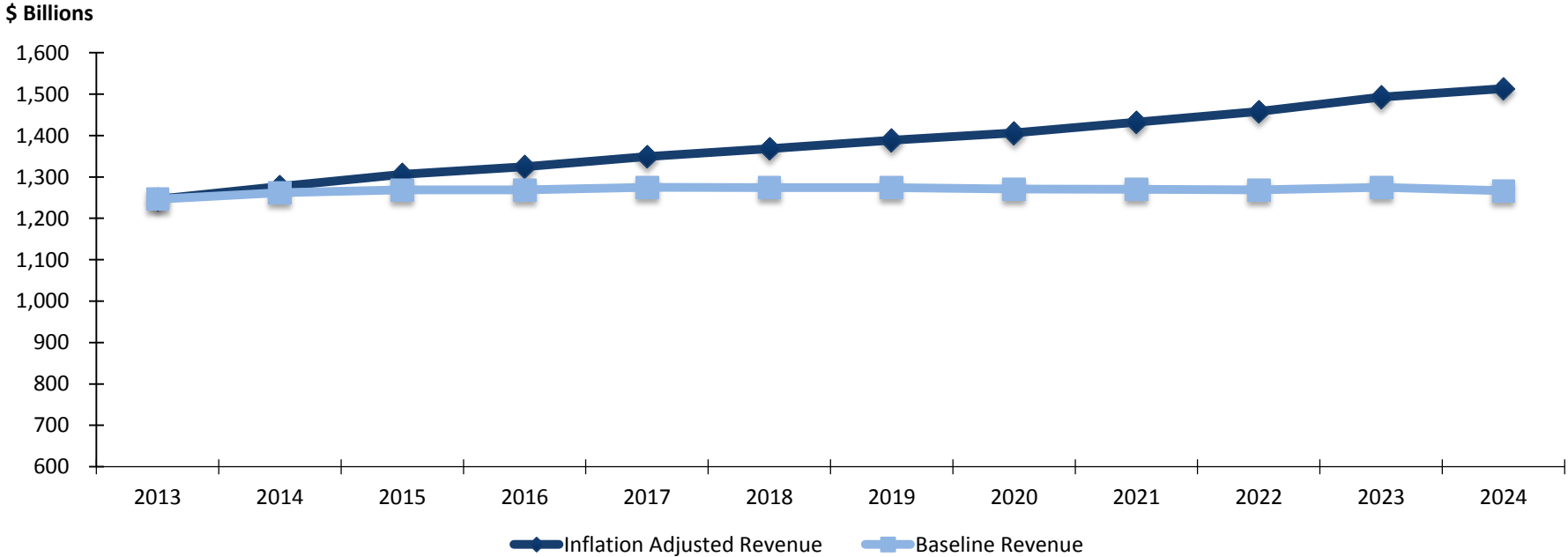
Source: 2013 WA Summary of Public Transportation.

Future Funding Scenarios

WTP 2035 examines two different scenarios *specifically regarding the state fuel tax as a primary revenue source*: 1) a baseline scenario in which the motor fuel tax does not undergo any structural change; and 2) a minimal revenue growth scenario in which incremental adjustments to the Washington State motor fuel tax are made to offset the potential reduction in real revenue caused by inflation or decline in total fuel purchases. The scenarios were chosen for several reasons. In recent years, both state and federal revenues for transportation have been flat or declining, and there has been insufficient support to promote legislation to increase either the state or federal fuel tax rates. Additionally, the state motor fuel tax is the largest single source of Washington's transportation funding, and its importance and structural vulnerability present a central challenge to the state. While other adjustments, such as annually legislated fuel tax adjustments, are possible, tying the tax to inflation permanently affords a simpler assessment of future real funding levels. Both fuel tax scenarios leave open the possibility for changes in other revenue sources such as direct user fees, local option taxes, etc., but do not assume such actions.

Figure 6 depicts projected year 2013 to 2024 state motor fuel tax revenues, based on both the baseline tax scenario and the inflation-adjusted tax scenario. The revenue and inflation projections are from the Transportation Revenue Forecast Council (TRFC) June 2014 forecast. WTP 2035 uses cumulative percentage increases in inflation to calculate inflation-adjusted tax revenues. Over the 12-year period, indexing the state fuel tax to projected inflation would garner \$16.6 billion in total revenue, a \$1.3 billion increment over the baseline scenario. Because inflation is cumulative, the switch to an inflation-linked motor fuel tax would minimally impact revenues in the short term, but assuming inflation remains positive, the adjustment has an increasingly strong impact in the out-years. In 2024, inflation-adjusted tax revenue would be \$1.5 billion, a 19% increase over the baseline tax scenario.

Figure 6. Project Direct WSDOT Motor Fuel Tax Revenue, Inflation-Adjusted Tax versus Baseline Tax 2013 to 2024



Sources: Washington State Transportation Revenue Forecast Council. June 2014 Forecast, which uses the Implicit Price Deflator.

Under Washington’s state constitution, the state motor fuel tax must be spent on roads and ferries. The state fuel tax revenue can also be used for off-road projects in cases where these projects improve highway safety and operations. Other revenue, including licenses, permits, and fees, is less restricted and can also be spent on freight rail, bicycling infrastructure, and public transportation. Regardless of which tax regime Washington chooses, the State will likely finance capitially intensive mega projects with toll-backed revenue bonds. Thus, users, rather than the public at large, will fund extensive transportation network improvement in the future.

Federal gas tax revenues provide the majority of the funding for the Highway Trust Fund. The Highway Trust Fund, which includes both the Highway Account and the Mass Transit Account, disburses funds to state governments, such as Washington. Similar to the Washington State motor fuel tax, the Federal motor fuel tax is not linked to inflation, which will likely limit the real revenue that it can

generate. Already, Highway Trust Fund expenditures outpace revenues. The Federal Congressional Budget Office expects FY14 Highway Account direct revenues to be \$33 billion and spending to be \$45 billion. FY14 Mass Transit Account direct revenues will likely total \$5 billion compared to \$8 billion in spending.³⁵ The Highway Trust Fund will require continued contributions from the general fund, which totaled \$54 billion since 2008 as of May 2014.

TRFC provides an Alternate Federal Funds forecast, in which WSDOT's federal funding changes proportionally to the State's projected fuel gallons consumed rather than falling off in FY15 and beyond, as discussed above in this section. Under the Alternate scenario, the federal government would disburse 25% to 34% more funds to WSDOT each year from 2015 to 2027.³⁶ TRFC's Alternate scenario is more conservative than the inflation-linked tax scenario, as the former presumes only that Washington's revenues will mirror gasoline consumption without being linked to inflation.

Federal and state motor fuel tax revenues fund some city- and county-operated infrastructure. Therefore, linking these taxes to inflation would also likely benefit city and county governments.

Aside from gas tax revenue, cities secure the majority of their funding from property, sales, and business/utility taxes. The June 2014 Washington State Economic and Revenue Forecast predicts retail sales tax receipts to grow 6.1% in FY14 and 4.8 to 4.9% each year from FY15 to FY17. It also forecasts Business and Occupation taxes to fall 1.3% in FY14 before growing from FY15 to FY17 at rates of 3.7 to 5.1% per year. While this forecast applies to state rather than local taxes, these trends provide a rough sense of how sales and business tax streams are expected to change. Sales and business taxes adjust to inflation, so these projections would likely not vary between the two scenarios.

³⁵ Testimony on the Status of the Highway Trust Fund and Options for Financing Highway Spending.

³⁶ June 2014 forecast.

County transportation depends predominantly on the county roads property tax levy. Without voter approval, property tax levies can only grow by the lesser of 1) the inflation rate or 2) 1% per year. For each dollar of tax levied, counties, cities, and road districts are the highest priority recipients and receive \$0.59.³⁷ According to the Washington State Economic and Revenue Forecast, state property tax levies are expected to range from 1.8 to 2.4% per year from FY14 to FY17. While not equivalent to the county road levy, these percentages are meant to depict overall property revenue trends. Property tax revenues often exceed 1% of previous totals because of additions of assessed property, payment of past due taxes, and voter-approved increases. That said, counties would be better positioned to meet their road needs if tax levies were tied to inflation.



If local revenues do decline in real value, governments can turn to additional sources, such as locally approved sales taxes generated by Transportation Benefit Districts. King County, for instance, levies a countywide sales tax, some of which helps fund King County Metro and Sound Transit.³⁸ Sound Transit also receives revenue from property taxes and license fees. Transit systems also have the option of increasing fares.

³⁷ A Legislative Guide to Washington State Property Taxes, 2014.

³⁸ King County Office of Economic and Financial Analysis, March 2014 Sales Tax Revenue Forecasts.

Delivering Results

There is substantial evidence for the need to improve the financial health of Washington's transportation system, including Voice of Washington Survey responses and outreach conducted for WTP 2035. Stakeholders addressed nearly every mode of transportation – highways, local roads, rail and bus transportation, ferries, aviation, freight railroads and waterways – and every jurisdictional level, federal, state and local. Two themes must be recognized as essential to achieving sustainable financial health and security of the Washington's transportation system: improved effectiveness from expenditure of existing revenues, and augmentation and leverage of those revenue sources to keep pace with legitimate transportation demands of a growing economy and population.

Efficiencies and Reforms

Washington should continue to seek improved efficiency in the planning, delivery and operation of passenger and freight transportation systems and services. Through improved accountability for expenditures, performance management, practical design methods (see sidebar), and technology-based efficiency gains, all transportation partners need to seek to extract the maximum possible benefit from existing funding sources and levels.

Practical Design Framework

Practical Design allocates limited resources to maximize statewide benefits and includes:

Project-specific purpose and need statement with specific performance targets.

State-specific factors. WSDOT aims to deliver projects more programmatically and efficiently through:

- Applying design standards flexibly.
- Enhancing standards to ensure the right standards apply to the right projects.
- Focusing on goals/outcomes from inception and ensure designers understand them.

Combining Similar Projects to streamline methods and learn from experience.

Designing Incremental Improvements with Long-term Benefits through limiting project scopes in the short term but targeting the same higher priority goals.

Revenue Enhancements

Even with improved efficiency and effectiveness of transportation-related expenditures, there remains a real need to address challenges that include an aging infrastructure, future increases in travel demand to support a growing population and economy, uncertainty of federal funding, potential future decline in total gas tax proceeds as fleet fuel economy continues to improve, and the very likely decline in real purchasing power of gas tax revenues due to a number of factors, including inflation. Washington should consider a range of options for enhancing the variety and size of alternative revenue sources, as well as innovative financing mechanisms to increase the leverage of available funds. In addition to reiterating the previous WTP 2030 funding recommendations, WTP 2035 assesses the current status and future outlook for Washington's transportation funding and highlights several additional funding options.

Innovative Finance

A third general strategy, that of more innovative or aggressive financing methods, is also important to consider. While not a source of additional funding, financing methods are available that can accelerate needed investments by borrowing against anticipated future revenue streams. While debt financing does increase the State's future debt obligations, it also allows improvements to be delivered sooner than would be the case with a "pay as you go" approach, and thus the benefits of the investment begin to accrue sooner as well. An innovative finance approach is an important aspect of the overall challenge of paying for needed maintenance, preservation and expansion of the many components of Washington's transportation system.

Several options for increasing revenues are presented below.

A. Increase fuel taxes and vehicle fees

Given likely declines in state and federal vehicle fuel tax revenues, Washington seeks more reliable transportation funding. In each of the last three years (2011 to 2013), WSTC has surveyed state residents regarding their perceptions of the transportation network, need for revenue, potential revenue sources, and priorities for the network. The Voice of Washington Survey (VOWS) has provided key insights into public perceptions of transportation funding across the State.

WSTC conducted 5,673 valid interviews for the 2013 VOWS and weighted results by demographics and RTPOs.³⁹ In 2013, 59% of respondents agreed that the State “needs additional revenue to keep our transportation system safe, effective, and properly maintained,” down slightly from 62% in 2012, and even with 59% in 2011. In 2013, 60% of respondents supported “raising some taxes and fees to increase funding for those transportation elements they feel are important,” an increase from 51% in 2012.

B. Continue assessment of road usage charges.

Many states and regions are investigating new revenue sources in which road users are charged a fee based on their usage of the roadway system. In Washington, the legislature directed the WSTC to assess whether road usage charges could viably replace the State’s gasoline tax revenues.⁴⁰ The assessment examined three possible implementation options for a road usage charge. The time permit method would charge a flat fee to operate a vehicle for an unlimited distance over a discrete time period. An odometer charge system would collect per-mile fees based on odometer readings. An automated distance charge would collect per-mile fees based on readings from in-vehicle technology that distinguishes between in- and out-of-state travel.

The study determined that **road use charge systems would cost more to operate than the gas tax system, but would generate greater and more stable net revenue over the next 25 years.** Offering drivers choices for method of payment would improve public approval and mitigate privacy concerns. Gas tax increases would provide more net revenue than road use charges in the short term, but without subsequent increases, gas tax revenues would fail to keep pace with transportation costs. Road usage charge systems would be more equitable across different fuel sources and fuel efficiencies.

C. Use tolling strategically (similar to WTP 2030 funding recommendation #7). Tolling and other user-based fees can pay for projects and back financing through revenue bonds. WSDOT established a Toll Division in 2009 to oversee the new statewide tolling system. The system both generates revenue and manages congestion for the transportation network. Currently, WSDOT has three tolling facilities: the SR 250 Bridge, the Tacoma Narrows Bridge, and on the SR 167 HOT lanes. WTP 2030 forecasted that WSDOT

³⁹The 2011 VOWS used Addressed Based Sampling and was representative of Washington State adults ages 18 and above. In 2012 and 2013, WSTC sent web surveys to previously recruited VOWS panel members to participate in the survey.

⁴⁰2014 Business Case Evaluation Final Report.

would obtain 3% of revenue from tolling from 2009 to 2025, but current TRFC⁴¹ projections have pushed this figure to 7% for the 2013 to 2022. WSDOT is looking to expand tolling further. The agency plans to open facilities on I-405 and SR 99 and is conducting tolling studies on I-90 and the SR 509/I-5/S-167 Gateway.⁴²

D. Local governments could continue to use Transportation Benefit Districts to abate revenue shortfalls (similar to WTP 2030 #6). Cities and counties can form Transportation Benefit Districts with independent taxing authority to help fund local roadways, transit, and other infrastructure. With federal and WSDOT financial support uncertain and property taxes capped, local governments can use this instrument to fill funding gaps. Councilmanic action can create Transportation Benefit districts that generate some revenue, but, beyond a certain point, revenue increases require voter approval.

E. Explore viability of Tax Increment Financing. Tax Increment Financing (TIF), a value capture mechanism, funds projects that are expected to increase the value of nearby properties, and thus increase tax revenue. Local governments borrow against these expected revenues to finance the projects. Washington is one of two states that cannot implement TIF. Washington's property tax system is the primary barrier to TIF, and although some work-arounds have been authorized, they have been limited in number.

Presented below for reference are the Funding Recommendations included in WTP 2030.

⁴¹ February 2014 Transportation Economic and Revenue Forecasts.

⁴² WSDOT Toll Division Annual Report FY 2013.

WTP 2030 Funding Recommendations

1. **Maintain the viability of the fuel tax by indexing it to the Consumer Price Index** (or construction costs).
2. **Offset declines in fuel consumption resulting from more fuel efficient vehicles** by increasing the fuel tax rate annually or adding a percentage-based transportation assessment fee of 2% to the price of fuel.
3. **Maintain the viability of licensing and permit fee revenues by indexing them to inflation.**
4. **Modify weight fees by eliminating the passenger vehicle registration deduction and increasing truck weight fees.**
5. **Adopt in-lieu-of fees for electric and other high mileage vehicles.**
6. **Support local funding options recommended by the JTC *Implementing Alternative Transportation Funding Methods* report**, including:
 - Authorizing cities to create street maintenance utilities;
 - Allowing Transportation benefit districts (TBDs) to impose license fees; and
 - Amending authority for counties and cities to impose a fuel tax.
7. **Use tolling to supplement gas tax revenues.**
8. **Fund ferry long-term capital needs with vehicle excise or similar tax.**
9. **Increase ferry fares and other operating revenues to close the ferry operating funding gap.**
10. **Impose formula-driven ferry fuel surcharges when warranted** to prevent unexpected fuel price increases from adversely affecting ferries.