2010-2012 BIENNIAL PLAN REVIEW REPORT
SUBMITTED TO THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION BY:

Puget Sound Regional Council
Regional Transportation Planning Organization (RTPO) for the Central Puget Sound Region

July 2012
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Appendix A  Projects Completed (2006-2012)
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The 2012 Action Strategy draws upon the information contained within the Transportation 2040 plan document, plus a wealth of background information. The 2012 Action Strategy focuses on the strategic actions the region plans to pursue over the next several years to advance the implementation of the plan. The 2012 Action Strategy includes a list of transportation system projects proposed for the upcoming decade: 2012-2022. The report contains the following sections (plus three appendices):

1. **Purpose and background**

   • Purpose and background
   • What’s changed since the 2010 action strategy
   • Prioritization
   • Financial strategy

2. **Mobility strategy**

   • Mobility strategy
   • Environmental strategy
   • Legislative proposal
   • Ten-year investment program

**Legislative mandates and plan requirements**

Chapter 47.80 RCW defines the roles, responsibilities, and requirements of Regional Transportation Planning Organizations (RTPOs). RCW 47.80.030 Section (2) states: “The organization shall review the regional transportation plan biennially for currency and forward the adopted plan along with documentation of the biennial review to the state department of transportation.” The 2012 Action Strategy was prepared to meet this requirement. Previous biennial action strategies were prepared in 2001 (contained within the Destination 2030 plan document), 2003, 2005, 2007, and 2010 (published as Appendix A of Transportation 2040). The next Action Strategy will be completed in 2014, in concert with the 2014 update of Transportation 2040.

**Purpose of the action strategy**

This report has a dual purpose. First, it serves as the region’s biennial plan review, reporting on plan currency and progress. Second, it identifies the region’s transportation investment strategy for the coming ten years. The 2012 Action Strategy includes a progress report on key elements of Transportation 2040; a statement of PSRC’s key messages to the Legislature; a summary of major planned investments; and a list of priority projects and programs. This document is an expression of how the region plans to move forward to implement our long range plan - Transportation 2040.

Transportation 2040 is built on the foundation of VISION 2040 and the Regional Economic Strategy. VISION 2040, adopted in 2008, serves as the region’s integrated long-range growth management, environmental, economic, and transportation strategy. Transportation 2040 will implement the VISION 2040 Regional Growth Strategy by targeting transportation investments that provide mobility for the 5 million people this region will have by 2040, ensuring that people can get to work and recreation, freight and goods movement can supply businesses and factories, and the region’s ports can continue to function as global gateways. Transportation 2040 includes investments to support growth in all parts of the region. The plan includes investments that will support the region’s major industry clusters, including Aerospace, Information Technology, Logistics and International Trade, the Military, and Tourism.
WHAT’S CHANGED SINCE THE 2010 ACTION STRATEGY?

MAP-21: MOVING AHEAD FOR PROGRESS IN THE 21ST CENTURY ACT

On July 6, 2012, President Obama signed into law P.L. 112-141, the *Moving Ahead for Progress in the 21st Century Act* (MAP-21). Funding surface transportation programs at over $105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005. MAP-21 creates a streamlined, performance-based, and multimodal program to address national transportation goals which include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

Over the coming months PSRC will be working with our federal, state, regional, and local partners to understand changes made to the national transportation program by MAP-21, and to incorporate these changes into our ongoing planning programs, including the Transportation 2040 Update, Regional Transportation Improvement Program (TIP), monitoring program, congestion management process, prioritization process, and others. Full implementation of MAP-21 requirements may take years, with required national rule-making followed by state implementation. The 2014 update of Transportation 2040 may start implementing parts of these new requirements, but it is anticipated that the next update in 2018 will fully reflect this new national direction.

Recession Impacts Continue

The national recession that began in late 2008 has produced significant negative impacts on state, regional, and local economies. State gas tax revenues are down, as are sales tax revenues, a primary source of transit funding. In response, several of the region’s transit agencies have increased fares and/or cut service to balance revenues and costs. Several still face budget shortfalls. A discussion of transit response to the recession appears on page 5.

Ferry System Changes

Responding to a legislative mandate, Washington State Ferries ceased operating Vashon-Downtown Seattle and West Seattle-Downtown Seattle passenger ferries. The King County Ferry District now operates these two routes. Last year the county expanded service on the West Seattle-Downtown Seattle route to operate all year. In 2011 the Port of Kingston commenced peak hour passenger-only ferry service between Kingston and Downtown Seattle. Still, both local ferry operators and Washington State Ferries are facing financial challenges.

Major Projects Underway and Tolling Begins

Several major highway and transit projects are underway. Construction has begun on the SR 520 Bridge Replacement and HOV program, the Alaskan Way Viaduct Replacement Project, and the extension of Sound Transit’s LINK light rail system between downtown Seattle and the University of Washington (North LINK). In addition, preliminary engineering work is underway on the extension of Sound Transit’s South LINK light rail line from Sea-Tac Airport to South 200th Street. On the highway revenue side, after some delay, tolling on the SR 520 Bridge began on December 29, 2011. Tolling and future federal funding is estimated to provide $1.75 billion toward the total project cost of $4.65 billion. Additional tolling studies are underway to determine the viability of tolling as a way to finance the Alaskan Way Viaduct, I-405, SR 167, SR 509, and other key routes.
PROJECTS COMPLETED SINCE TRANSPORTATION 2040 BASELINE (2006-2012)
While much of the Action Strategy’s focus is on investments planned for the next ten years, the biennial report also points out the region’s accomplishments. This section outlines the major projects we’ve completed since 2006, the baseline year for the Transportation 2040 plan. Using 2006 as the base year allows us to document plan investments and system performance over time, and to assess how the region is doing compared with plan forecasts. Over the past seven years the region has invested $145 million in bicycle/pedestrian/nonmotorized projects, $5.2 billion in roadway-related projects, and $4.7 billion in transit and ferry projects, for a total of over $10 billion. Below is a short list of key investments completed since 2006. For a complete, list see Appendix A.

**Highways and Arterials**
- New Tacoma Narrows Bridge
- I-405 corridor improvements (funded by the Nickel and Transportation Partnership programs). These include widening to eight lanes from NE 85th Street to NE 124th Street; widening from I-5 to SR 169 in Renton; widening and other improvements from I-90 to SE 8th Street; new braided ramps from NE 8th Street to SR 520; new NE 10th Street overcrossing; and widening from NE 195th Street to SR 527.
- SR 304 improvements in Bremerton (including new ferry traffic egress tunnel)
- SR 525 widening (I-5 to Paine Field Boulevard) plus interchange at SR 99
- Lake City Way/Bothell Way multimodal improvements
- SR 16 Burley-Olalla interchange
- SR 304 widening HOV project – north and east segments (Bremerton)
- SR 518 widening (eastbound lane) – North Airport Expressway to I-5
- Bellevue NE 8th Street widening
- SR 3/SR 305 interchange improvements
- SR 522 UW Bothell Campus South Access Project
- SR 99 widening and HOV projects (Shoreline; south King County)
- D Street Overpass freight mobility project (part of FAST corridor program)

**Transit, HOV, and Ferries**
- Expanded Sounder commuter rail service between Seattle, Tacoma, and Everett
- Central LINK light rail from downtown Seattle to Sea-Tac Airport (26 miles and 25 stations)
- New north and southbound HOV lanes on I-5 between SR 526 and US 2
- New HOV lanes on I-5 in south King County and Tacoma
- Bremerton Transportation Center and Ferry Terminal – Bus and nonmotorized enhancements
- I-90 two-way transit and HOV project
- Port of Kingston SoundRunner passenger ferry (Kingston-downtown Seattle)
- Marysville I-5 Park-and-Ride and Transit Center
- South Everett I-5 Freeway Station
- I-5 & 164th Street/Ash Way Direct HOV access ramps
- Mountlake Terrace I-5 Park-and-Ride
- Issaquah Transit Center
- Elliott Bay Water Taxi – West Seattle dock facility and service expansion (all year)
- Harper Church/Sedgwick Road Park-and-Ride (Kitsap County)
- Totem Lake Freeway Station and Transit Center/Evergreen Medical Center (Kirkland)
- SR 99 Bus Rapid Transit (SWIFT) - Everett Station to Aurora Village
- King County Rapid Ride: A line – Tukwila to Federal Way
Non-motorized

- Duwamish Greenbelt Trail (Highland Parkway SW; Puget Way SW)
- Burke-Gilman Trail extension and improvements
- Foothills Trail (Orting to South Prairie)
- Puyallup Riverfront Trail (Fife)
- Interurban Trail (missing link bridge at 44th Ave. W.; Shoreline links; Shoreline SR 99 overcrossing)
- North Creek Trail (numerous segments)
- Sammamish River Trail extension (Marymoor Connector Trail)
- East Lake Sammamish Trail – Redmond segment
- Historic Water Ditch Trail (Tacoma)
- Chief Sealth Trail – north and center segments (Seattle)
- Centennial Trail improvements (Snohomish County)

SMARTER HIGHWAYS

Washington's highways are getting smarter through the Active Traffic Management (ATM) program, now being implemented on some of the region’s major highway corridors. High-tech overhead signs display variable speed limits, lane status and real-time traffic information so drivers know what's happening ahead. This smarter highway technology will increase roadway efficiency and help drivers travel safer and smarter. The I-5 Active Traffic Management Project helps make the busiest portion of I-5 safer by reducing the numbers of congestion-related collisions, such as side-swipe or rear-end collisions. Active traffic management tools have proven effective at reducing collisions and improving traffic flow. In Europe, this technology has reduced injury collisions by up to 30% and increased roadway capacity by up to 22%\(^1\). For more information about the WSDOT Highways program visit [www.wsdot.wa.gov/smarterhighways/](http://www.wsdot.wa.gov/smarterhighways/). For a copy of the 2007 European Active Traffic Management Study, go to [http://international.fhwa.dot.gov/pubs/pl07012/](http://international.fhwa.dot.gov/pubs/pl07012/).

This technology is currently operating on northbound I-5 in Seattle and on I-90 and SR 520 between Seattle and Bellevue. The signs post variable speed limits that help warn drivers of backups ahead and smooth out traffic as it approaches a lane blocking incident. The overhead signs can also quickly close entire lanes and provide warning information to drivers before they reach slower traffic. This advance notification and variable speed limits helps reduce collisions that cause backups and stop-and-go traffic. The active traffic management program is part of a multi-pronged effort to squeeze more capacity out of the existing highway system while reducing congestion and enhancing safety. This program will be expanded to other key highway corridors (such as I-405 and SR 167) as part of the region’s ten-year transportation investment program. For additional information, visit PSRC’s Active Traffic Management web page at [www.psrc.org/transportation/its/atm](http://www.psrc.org/transportation/its/atm).

TRANSIT AGENCY RESPONSE TO THE CHANGING FINANCIAL CLIMATE

The past several years have brought financial challenges to the region’s transit agencies. Reduced sales tax revenues have forced most agencies to reduce service, cut staff and other expenses, raise fares, seek new revenue sources, and achieve new levels of efficiency. Overall, the region's transit agencies are adapting quickly to their new fiscal reality and positioning themselves for long term financial sustainability. In spite of these challenges, the region's transit agencies are still planning to provide the long term service levels contained in Transportation 2040. This section contains a brief summary of how the region's six transit agencies are addressing this issue and positioning themselves for future growth.

\(^1\) WSDOT Active Traffic Management Feasibility Study, November 2007 (go to [www.psrc.org/assets/524/ATMfeasibilitystudy.pdf](http://www.psrc.org/assets/524/ATMfeasibilitystudy.pdf))
Sound Transit – Sound Transit is continuing its development program, but has made some adjustments to the ST2 implementation schedule. Sounder commuter rail will reach Lakewood Station in 2012. The planned Sounder extension to DuPont will not occur until after 2023. The LINK light rail program has been adjusted as follows:

- **North LINK**: University LINK is under construction, and will reach the University of Washington in 2016; North LINK will reach Northgate in 2020 and Lynnwood Transit Center in 2023.
- **East LINK**: ST2 will reach Overlake Transit Center in 2023.
- **South LINK**: ST2 project will reach Highline Community College by 2023. Sound Transit is pursing funds to complete environmental work on an extension to S. 272nd Street (Redondo/Star Lake).
- **Tacoma LINK**: Future extensions of the existing Tacoma LINK would serve Tacoma Community College and Fife. The current Sound Transit budget will fund an alternatives analysis, preliminary engineering, and environmental review. Preliminary engineering is projected to be completed in the first quarter of 2014.

Pierce Transit – Pierce Transit continues to experience declining sales tax collections, and has made deep cuts in service to bring costs in line with lower revenues. System-wide, these service cuts amounted to 43% by October 2011. Bus service to Key Center, Sumner, Bonney Lake, Prairie Ridge, and Buckley either has or may be eliminated. No specific capital project changes are reflected in these service reductions. Bus fleet investment over the five-year plan time frame is entirely devoted to bus replacement, with no bus fleet expansion proposed. As of early May 2012, Pierce Transit will complete a process to shrink their PTBA district boundaries. The following communities will be removed from the PTBA: Bonney Lake, Buckley, DuPont, Orting, Sumner, and portions of unincorporated Pierce County. The smaller service area would allow Pierce Transit to allocate limited service hours to more productive routes serving areas of higher demand. This will eliminate existing Pierce Transit routes serving locations such as Sumner and Bonney Lake. However, the Sound Transit Board has approved a plan to take over bus service connecting the Sumner Sounder Station and the Bonney Lake Park-and-Ride lot within a part of Pierce County that is outside the new smaller Pierce Transit PTBA but within the Sound Transit borders. Pierce Transit is considering a future ballot measure which would ask voters to approve the utilization of the agency’s remaining taxing authority to restore service within the smaller PTBA boundaries.

King County Metro - Following the downturn of the economy in 2008, King County Metro began to address shrinking resources through a nine point action plan that reduced costs and raised revenue. Cost reductions included eliminating 100 positions and reducing or eliminating programs not directly related to putting service on the street. In 2009, at the behest of the County Council, the County Auditor’s office conducted an extensive review of Metro's operating and business practices. The audit resulted in 50 recommendations. Metro concurred with all but two. Metro has addressed the recommendations and continues to evaluate their benefit. Audit recommendations included reducing fleet replacement reserves, schedule efficiencies, changes to bus procurement and vehicle maintenance practices, and operation's staffing practices. Everyone contributed to sustaining as much service as possible -- riders paid higher fares and Metro's unions made concessions -- forgoing COLA increases and accepting furlough days. Metro also cut 75,000 annual hours of the lowest performing service.

These actions and work by the Regional Transit Task Force (RTTF) played a significant role in the state Legislature authorizing a temporary funding tool. The RTTF primary recommendation that Metro emphasizes productivity, ensure social equity and provide geographic value became the basis for a new strategic plan and associated service guidelines. The state's Congestion Reduction Charge (CRC) legislation required a King County Council super-majority or voter approval to be enacted. Council
imposed the $20 CRC in a bipartisan vote keeping Metro's financing stable until mid-2014. These actions avoided the major service cuts experienced in Pierce and Snohomish counties.

Beginning in the fall of 2011, King County Metro engaged communities from Des Moines to Shoreline in discussions about potential changes related primarily to RapidRide C Line (West Seattle to downtown Seattle) and the D Line (Ballard/Uptown to downtown Seattle) implementation. The proposals added few service hours but rather reshuffled resources. During the three-phase public outreach process Metro received over 10,000 comments. Metro adjusted proposals through the outreach process in response to comments.

In April, Metro submitted a Service Change Ordinance to the King County Council that integrates the C and D lines into the transit system. The ordinance, if adopted, makes changes to 48 routes. The proposal shifts resources from lower performing routes to adopted priorities -- increased efficiency and cost effectiveness, improved service quality, investment in areas deemed underserved, and in highly productive services. The proposals increase connections and reduce duplications. For example, the restructure implements a new route connecting West Seattle and the Rainier Valley, serving the VA Medical Center and Sound Transit’s LINK light rail stations at SODO, Columbia City, and Othello and eliminates direct downtown service that duplicates LINK light rail. In short, the proposals shift resources that are not well used to underserved areas and other places where more people will benefit.

Community Transit – Since 2009, in response to budget constraints, Community Transit (CT) has cut service by 37% and canceled all Sunday service. Following a 15% service cut in 2010, CT cut service an additional 20% in February 2012. System-wide, CT estimates their current service is equivalent to 2002 levels. Community Transit is now focusing its available resources on a more connective and productive network that is financially sustainable. The current service plan preserves higher ridership corridors and most current geographic coverage. On major corridors, Community Transit offers more departure times on a single route and maintains cost-effective service, while offering more alternatives. Community Transit’s long range plan includes more service to meet future demand, adding high-frequency bus service (including more SWIFT service) on Transit Emphasis Corridors. Community Transit has applied for CMAQ funds for additional commuter service. System-wide, park-and-ride utilization is up, and the Mountlake Terrace Park-and-Ride garage, completed just three years ago, is at capacity.

Everett Transit – Everett Transit (ET) has not made service reductions since 2009. However, due to the continued economic downturn, Everett Transit is now facing service reductions. In a move toward longer term financial sustainability, Everett Transit is proposing to reduce service in August 2012. This proposal will reduce Everett Transit’s total service hours up to 15%. The proposed reductions would maintain popular routes while reducing duplicative service, raise fares (January 2013), eliminate routes with low ridership, reduce service on weekends, and eliminate service on holidays. There are no proposed fare changes to paratransit service; however, the currently proposed reductions in service hours and scheduling would affect these customers.

Kitsap Transit – Kitsap Transit’s sales tax revenue peaked at approximately $30.5 million in 2007 and since then has steadily declined to approximately $26.0 million in 2011. In an effort to adjust to the significant decline in sales tax revenue, fares were increased from $1.50 to $2.00 in 2009 and service levels were reduced approximately 24% between years 2009 and 2010, primarily as a result of eliminating Sunday service and other select service within each of Kitsap Transit’s modes. Consequently, ridership has declined approximately 27% since 2008, and Kitsap Transit’s current service levels have declined to 2002/2003 service levels, nearly reaching its post I-695 service lows of 2000/2001. Recent
sales tax revenue growth remains flat and Kitsap Transit continues to be challenged with operating costs that exceed the growth of revenues. Consequently, Kitsap Transit remains focused on containing costs and exploring opportunities to realize greater efficiencies. Kitsap Transit’s capital program is now focused on vehicle replacement, park-and-ride facilities, and improvements to passenger ferry facilities and transit centers. Other capital projects have been deferred until grant funds become available. Without a significant rebound in sales tax revenue or increased levels of capital and operating funding assistance from the state and federal levels, Kitsap Transit’s current service levels are unlikely to be sustainable in the long-term. Kitsap Transit plans to reorganize routes to increase efficiency and reduce costs.

KEY PROJECT AND PROGRAM CHANGES IN THE 2012 PLAN AMENDMENT
In spring 2012 Puget Sound Regional Council approved an amendment to Transportation 2040. Below is a summary of key project and program changes included in the plan amendment. For a complete list of changes see Appendix C.

Major Highway Project Changes Proposed by WSDOT

SR 509 Extension – This revised project has been scaled back in light of funding limitations and reduced demand forecasts resulting from toll assumptions. Phase 1 (to be completed by 2019) would build one lane in each direction between S. 188th Street and S. 24th/26th streets, and two lanes in each direction from there to I-5. Phase 2 (complete by 2040) would widen the roadway to two lanes in each direction between S. 188th Street and S. 24th/26th and construct the Airport South Access Road with partial interchange at S. 200th Street. See also insert below. This project remains in the Constrained part of the plan.

SR 167 Extension – This revised project has been scaled back in light of funding limitations and reduced demand forecasts resulting from toll assumptions. Phase 1 (to be completed by 2020) would build one lane in each direction from the SR 167/Meridian interchange (Puyallup) to I-5; two lanes in each direction from the I-5/SR 167 interchange to the SR 167/54th Avenue interchange in Fife; and one lane in each direction from the SR 167/54th Avenue interchange to the Port of Tacoma. Phase 2 (to be completed by 2040) would widen the roadway to four lanes from Puyallup to SR 509 (Port of Tacoma), and Phase 3 (to be complete by 2040) would add one HOV lane in each direction from Puyallup to I-5. See insert below. This project remains in the Constrained part of the plan.

SR 18 at I-90 – This revised project would construct a westbound I-90 to westbound SR 18 flyover ramp and widen SR 18 to four lanes between Deep Creek and I-90. This project was moved up in time to be completed by 2020. See insert below.

I-5 near Joint Base Lewis-McChord (numerous new or revised projects) – Several new or revised projects have been identified in the JBLM Growth Coordination Plan in coordination with the city of Lakewood and WSDOT. See inserts below and Appendix C. New or revised projects include:
- I-5: Add one lane in each direction (GP or HOV/HOT) from Mounts Road to Thorne Lane
- Replace I-5 interchange at DuPont-Steilacoom Road with modern design and higher capacity
- New bridge over I-5 at 41st Division Drive
- Replace I-5 interchange at Berkeley Drive with modern design and higher capacity
• Replace I-5 interchange at Thorne Lane with modern design and higher capacity (this project is sized and designed to accommodate I-5 traffic, while not precluding a future connection to the SR 704/Cross-Base Highway)
• I-5 Auxiliary lanes and frontage road – Thorne Lane to Gravelly Lake Drive
• I-5 at SR 512 – Replaces existing interchange with modern design and higher capacity

I-5 – Olive Way to SR 520 (hard shoulder running for transit) – New project would utilize existing right-of-way and pavement section to accommodate transit vehicles during peak hours. See insert below.

US 2 Trestle – Revised project split into phases. Phase 1 (to be completed by 2020) will build a new westbound US 2 structure over Ebey Slough for future configuration of two general purpose lanes and one HOV lane. Phase 2 (to be completed by 2040) will widen the trestle to three lanes in each direction.

SR 16/Wollochet Interchange – New project would rebuild the 40-year old interchange with a modern design and higher capacity and add new on ramp.

SR 162 – This new project would widen SR 162 from two to four lanes between 96th Street and Orting.

I-405 Corridor: SR 167 to SR 169 – This revision changes the project status from Unprogrammed to Candidate, and would widen I-405 by one lane in each direction.

Bel-Red Regional Connectivity – This project revision changes the status from Unprogrammed to Candidate. This project would upgrade the SR 520/124th Avenue NE interchange (providing access to and from the east) and provide a westbound auxiliary lane between 148th and 124th Avenues NE.

I-5 Improvements

• Olive Way to SR 520: Use northbound shoulder for a peak hour transit lane.
  • Cost: $11 Million

• North 92nd Street to NE Northgate Way: Separate the northbound general purpose and HOV merge from the express lanes.
  • Cost $17 Million
SR 509 Extension

- Tolling
- Divided to two phases
- Phase 1 cost $600M retained in “constrained”
- Phase 2 cost $120M deferred to “unprogrammed”

SR 167

SR 410 to 15th St NW: Extend HOV/HOT lanes

- Cost Update
- Original Cost: $228M
- New Cost: $326M

I-5 Near Joint Base Lewis-McChord

Mounts Road to Thorne Lane

- Cost $765 Million
- Demand Management: commuter trip reduction program.
- Operate Efficiently: ramp metering, hard shoulder running.
- Strategic Capacity: interchange upgrades, add lanes.
I-90/SR 18 interchange improvement (constrained)

- Phased scope
- Retained fly over ramp from WB I-90 to WB (SB) SR 18 and associated widening on SR 18 to Deep Creek in “constrained,” phased other ramps to unprogrammed
- Original Cost: $397M
- New Cost: $154M

SR 518
Interchange improvements at Des Moines Memorial Drive

- Changed scope
- Original strategy
  - Construct tunnel ramp from SB SR 509 to EB SR 518.
  - Cost: $36 million (unprogrammed)
- Replaced strategy
  - Upgrade the DMMD interchange to allow all movements.
  - Cost: $57 million (constrained, will be phased)
3. **PRIORITIZATION** – How will prioritization affect the region’s investment strategy?

**PRIORITIZATION MANDATE**

**Transportation 2040** directed the region to change the way transportation investments are evaluated and prioritized. PSRC committees and boards captured this directive in the following mission statement, adopted in December 2010:

> [The mission of the prioritization process is] . . . To prioritize transportation projects in a manner that reinforces and implements VISION 2040. This will include the development and application of an evaluation process to prioritize projects/programs that are within the plan as well as the means for allowing projects to be entered, modified or removed.

On June 28, 2012 the Executive Board unanimously directed staff to proceed with the testing of the Prioritization Evaluation Framework.

**EVALUATION FRAMEWORK**

Over the past two years the Transportation Policy Board Prioritization Working Group, the Regional Staff Committee, and PSRC boards have been developing a new framework for evaluating transportation investments in the long-range transportation plan. The evaluation approach will provide the boards with a greater level of detail about transportation project benefits. The approach separates projects into four categories (transit, highway, arterial and bicycle and pedestrian), and would evaluate investments within each category, by decade. The approach identifies nine measures (based on VISION 2040 and **Transportation 2040**) which would be used to evaluate projects. In the future, the measures may be weighted to reflect their relative importance. Any weights will be decided by PSRC boards. Details about project prioritization can be found on PSRC’s website at [www.psrc.org/transportation/prioritization/](http://www.psrc.org/transportation/prioritization/).

4. **FINANCIAL STRATEGY** – Where are we compared to where we hoped to be?

**ECONOMIC CLIMATE IMPACTS ON TRANSPORTATION 2040 FINANCIAL PERFORMANCE**

The recession that began in 2008 has resulted in significant near-term economic impacts to state, regional, and local economies, and the government programs those economies support. The years 2000-2010 are sometimes referred to as the lost decade. Washington state’s economy, and especially the central Puget Sound region, was recovering from the bursting of the dot-com bubble in the early 2000s, then was hit by the end-of-decade recession. As a result, employment in the central Puget Sound region was nearly the same in 2010 as it was in 2000. Tax revenues supporting transportation investments have also dropped across the board. State gas tax revenues are down, as are sales tax revenues, and general fund revenues in all levels of government have also been significantly reduced.

An immediate consequence of the recent recession is that the governments that support infrastructure investment are starting from a lower revenue base. It may take years before these governments catch up with deferred investments. Looking forward, there is notable uncertainty about the revenue picture. The timing and strength of the economic recovery remain in doubt. To try to better understand future expectations, PSRC has produced a draft regional economic forecast that incorporates the recent recessionary period. The 2012 PSRC Regional Economic Forecast is produced by a new regional economic model system, which is linked to one of the best national economic models (a model by Professor Ray Fair of Yale University).
Using the new models, PSRC is forecasting growth of nearly 1,000,000 jobs between the years 2010 and 2040. As has occurred historically, the central Puget Sound region is expected to experience similar economic trends as the nation as a whole, but with a somewhat more pronounced magnitude. The rate of growth across the forecast period is not constant, and is influenced considerably by national economic conditions and trends. From 2010 to 2020, the region is expected to see a recovery from the recent recessionary period. Sometime around 2020, federal budgetary pressures are assumed to require some form of fiscal consolidation, which would result in a considerably lower rate of growth for the following decade. Finally, during the last decade of the forecast period (2030-2040), both the national and regional economies are expected to see strong growth and a strong export economy, as dividends from the previous period of fiscal retrenchment.

As compared to previous forecasts of transportation tax bases, the current forecast predicts somewhat lower transportation revenue growth (displayed in tables below) in constant dollar terms. The recent forecast has somewhat higher inflationary expectations, which in part explains the lower purchasing power of transportation revenues over the long-term.

**STATUS OF REVENUES AND FUNDING SOURCES**

Transportation funding in the central Puget Sound region draws mainly from a few primary tax bases. These include motor fuels sales, retail sales, motor vehicle market value, assessed property valuation, and vehicle registrations and licenses. In addition to taxes on these tax bases, transportation revenues are drawn from a combination of other sources, such as operating income and sources comprising city and county general funds. The first decade of Transportation 2040 (2010 – 2020) most heavily relies on these traditional financing mechanisms, with sales taxes, fuel taxes, fares and other operating revenue, along with federal contributions to regional transportation projects, comprising nearly 75% of revenues.

A number of substantial changes over the last decade have had a significant impact on current law revenue sources. In particular, the economic downturn had a dramatic effect on the revenue collected from sources such as sales taxes, causing significant cuts and delays to important services and projects in the region. The recession and uncertainty at the federal level has affected the short-term performance and long-term viability of current law sources.

**Motor Fuel Taxes.** The state motor fuel tax is the primary source of transportation investment in Washington state. Beyond the dedicated Nickel and TPA accounts, base motor fuel tax receipts are fully committed to cities and counties, retiring debt from previous investments, and safely maintaining and operating the state’s highway infrastructure, including transfers to the Washington State Ferry System. Changes in vehicle technology, increasing capital costs, and inflation continue to compromise the purchasing power of fuel tax proceeds. This path is unsustainable and new sources of reliable funding must be developed and phased in over time. Alternate approaches to collecting user fees have been discussed for many years. Technical advances have revolutionized road user fee collection approaches and may someday offer a replacement alternative for fuel taxes. As the transportation sector strives to disentangle personal and freight mobility from carbon emissions, taxes on motor fuels will become an
even less viable means of funding future investments. As shown below, fuel tax revenues have leveled off in recent years, and effective buying power has declined due to inflation and other factors.

Sales Tax and the Loss of Motor Vehicle Excise Tax. Local transit authorities’ primary source of funding is the sales tax. With the loss of Motor Vehicle Excise Tax revenues, local transit operators are increasingly dependent upon the sales tax, which is a less stable source of revenue, rising and falling with other economic factors. Due to the recession that began in 2008, local and regional transit agencies have experienced significant reductions in sales tax revenues, causing many agencies to seek new sources of funding for operations, including limited-term measures such as the “Congestion Reduction Fee” imposed on vehicle licensing in King County and fare increases regionwide. Further, agencies have undergone service cuts and reorganizations to align costs with reduced revenues. Sound Transit has also felt the impact of reduced sales tax revenues as the voter-approved Sound Transit 2 program is now estimated to be nearly $4 billion short, resulting in significant capital program reductions.

Washington State Ferries has also been affected by the loss of Motor Vehicle Excise Tax as well as the declining purchasing power of the fuel taxes. The result is an increasing reliance upon fares for operations and state budget allocation for capital investments. In 2009, Washington State Ferries developed a long-range plan identifying several stopgap measures to bridge operating revenue shortfalls, which included fare increases and fuel surcharges. The plan also identified a $1 billion shortfall in the capital program between 2009 and 2025 with no permanent solution identified. The impacts of this shortfall will be significant fleet replacement deferrals and the delay of important capital projects that will hinder the ability of Washington State Ferries to maintain existing levels of service.
City and County Sources. Cities and counties support transportation investments from a wide variety of funding sources, including state distributions of sales tax revenue. The state Legislature has authorized a number of local option taxes that have, in many instances, proved difficult to implement. At the same time, a number of tax limiting initiatives and growing demands for general fund dollars have made local commitments to transportation a challenge to sustain. As dedicated local transportation revenues have dwindled, cities and counties have demonstrated their commitment to funding transportation programs and projects through increasing contributions from general funds, sometimes at the expense of other important city functions.

A Decade of Change. A number of substantial changes over the last decade had a significant influence on transportation finance. These changes include the passage of a number of tax-limiting citizen initiatives, legislative actions to secure additional transportation funds, and the voter approval of a number of transit tax measures:

- A number of citizen initiatives placed limits on state and local taxes including, most significantly, the elimination of the statewide Motor Vehicle Excise Tax (MVET), and the limitation of property tax collections to a 1% annual growth rate, resulting in a decline of property tax rates for most taxing districts. The elimination of the MVET affected the state general fund and the Motor Vehicle Fund, which supports both highway and ferry funding. MVET funds were also used to support a city and county sales tax equalization program and were distributed directly to local transit providers and represented their second single largest revenue source after local sales tax revenue.
- Since 2000, local transit agencies have successfully garnered voter support to pass increases in the local sales tax rates that generate revenues for their transit operations.
- In 2003 and 2005, the state Legislature passed, and the Governor approved, statewide transportation funding packages that increased the state motor fuel tax and increased other fees. The state funding packages dedicated significant dollars to highway projects in the central Puget Sound region. In addition, the packages included new ferry capital funds for auto vessel replacement and terminal improvements.
- In response to the recession’s impacts on sales tax revenue, transit agencies have increased fares and some have been successful in the Legislature to raise additional revenue bridging operating budget shortfalls to maintain service. These additional resources however, have not provided sufficient funding to stave off service cuts, particularly in Pierce and Snohomish counties.
- The implementation of HOT Lanes on Highway 167, along with tolls on the Tacoma Narrows Bridge and more recently the SR 520 Evergreen Point Floating Bridge, indicate the beginning of a shift towards more direct and significant contributions to transportation finance from the users of the system.
- In 2012 legislation concerning local transportation revenue options was passed. These new rules and laws allow additional resources to be raised through local government action or a vote of the people. Amongst a variety of revenue-generating mechanisms included in the bill, it extends the currently available local transportation benefit district licensing fee from $20 to $40 through a vote of the governing body of the district. Other elements of the legislation are focused on local or countywide motor vehicle excise tax increases.

Tolling in the Central Puget Sound. In the central Puget Sound region, decision makers have been deliberately examining the problem of funding transportation through fees and tolls that apply to users of the transportation systems and services. Transportation 2040 sets out broad direction that moves the region toward a sustainable future in which investments can be made when they are needed, in a predictable manner, with revenues generated from those who benefit from the investments. This
change cannot occur overnight, but rather will only be the result of many individual steps, including legislative actions at the state and federal level. In 2007, the second span of the Tacoma Narrows Bridge opened to traffic, with tolls of $3.00 for cars paying cash, and $1.75 for cars paying with the cashless Good to Go! transponder. Toll rates increased to $4.00 for cash and $2.75 for Good-to-Go! on July 1, 2008. Washington state’s tolling experience has expanded beyond bridges to include the SR 167 high occupancy toll (HOT) lanes. This project is the state’s first HOT lanes implementation and includes variable pricing; tolls are collected using the state’s Good to Go! electronic toll collection system. Both of these projects laid the groundwork for more widely implementing user-fees on Washington highways.

Most recently, the decision to toll the SR 520 Evergreen Point floating bridge has signaled the state and regional commitment to generating revenue from users of facilities to finance the construction, maintenance, and operation of the transportation system here in the region. In 2007 the partnership of WSDOT, King County Metro, and PSRC secured a $154 million Urban Partnership grant to implement early tolling of the SR 520 bridge. The goal of the Urban Partnership program was to demonstrate the benefits of a coordinated multi-disciplinary approach to congestion management that included pricing, enhanced transit service, technology improvements, and transportation demand management efforts. Since December 2011, when tolling was implemented, the region has realized significant congestion reduction on SR 520. Further, the project has begun to generate revenues that represent a portion of the funding strategy for the construction a replacement bridge due to safety concerns related to the existing facility.

**Federal Surface Transportation Program Re-Authorization.** The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) expired in 2009. Since that time Congress has worked to develop a new multi-year surface transportation program while operating under continuing resolutions of SAFETEA-LU in the interim. Given the well-documented funding outlook for the Highway and Transit Trust Funds, there is uncertainty related to the long-term level of Federal contributions to transportation programs and projects here in the central Puget Sound region.

**Moving Ahead for Progress in the 21st Century Act (MAP-21).** On July 6, 2012, President Obama signed into law P.L. 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21). Funding surface transportation programs at over $105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005. MAP-21 creates a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. For more information see Chapter 2, page 3 above.

**REVENUE FORECAST UPDATE**

In 2012 PSRC updated the regional land-use and economic forecasts for the central Puget Sound region. In addition to incorporating updated small-area forecast data, PSRC refined the context in which the regional forecast is based by employing one of the best national economic models available (a model by Professor Ray Fair of Yale University). Additionally, relationships between the regional and national economies were refined based on evidence that as the regional economies mature, economic fluctuations increasingly reflect those of the national economy. The end result is a model system that better reflects the long-term economic performance of the region, which in turn impacts transportation revenues generated through current law sources. The updated economic forecasts will result in a slight downward revision to current law revenues. This is the result of modestly lower expectations for the primary tax bases on which transportation revenues are generated, including motor fuel and retail sales.
However, the overall impact on the Transportation 2040 financial strategy remains uncertain given that the costs of the projects will also be refined due to accelerated near-term inflation as the economy rebounds from the recession. A full investment cost update would be required to measure the true impact of the updated revenue forecast. One such update is scheduled for the 2014 minor update to Transportation 2040.

### PLAN COST UPDATE

Periodically PSRC updates the regional transportation plan to accommodate changes in project status, cost, or the addition/subtraction of investments. In 2012, Transportation 2040 was amended, which resulted in the financially constrained component of the plan decreasing by over $400 million during the overall 30-year planning horizon of the plan. However, the plan slightly increased by approximately $300 million for the near-term (2012-2022). The primary purpose of this amendment was to include projects stemming from the Joint Base Lewis-McChord corridor study recently completed by WSDOT as well as provide an opportunity for project sponsors to update key elements of investments listed in the plan, including project descriptions, costs, and completion status as well as to remove projects that have been cancelled or deleted. These updates do not affect compliance with the federal requirement that that plan be financially constrained. A complete description of the projects amended in Transportation 2040 can be found in Appendix C.

#### Impact of 2012 Transportation 2040 Amendment on 30-Year Financial Strategy

<table>
<thead>
<tr>
<th>Status Change</th>
<th>Difference to Constrained Plan</th>
<th>Difference to Unprogrammed Plan</th>
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<tbody>
<tr>
<td>New Proposed Strategies to Constrained Plan</td>
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<td>$941,701,000</td>
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<tr>
<td>New Proposed Strategies to Unprogrammed Plan</td>
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<td>Status Change from Concept (part of T2040 Alternatives) to Unprogrammed</td>
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<td>Status Change from Concept (part of T2040 Alternatives) to Candidate</td>
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<td>Status Change from Unprogrammed to Candidate</td>
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<tr>
<td>Cancelled or Deleted Projects</td>
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<tr>
<td>Updated Project Limits, Phasing, Cost and/or other Technical Information</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td>$(485,723,000)</td>
<td>$904,757,000</td>
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* Original and updated costs are both normalized (year 2008 $) before delta is calculated. For clarity, the delta is shown. NOTE parenthesis indicate negative values
Over the next ten years, Transportation 2040 calls for investing over $66 billion in the region’s transportation system. The plan identifies $20.2 billion for Sound Transit, followed by $17 billion for state highways, $11.8 billion for local transit, $8.4 billion for cities, and $4.5 billion for counties. The remaining investments ($4.1 billion) would support auto and passenger ferries, ITS and demand management programs, nonmotorized improvements, and tolling expenses. The forecast of current law revenues for 2012-2022 shows the region can expect about $44 billion in revenues, leaving a new-revenue need of nearly $17 billion. Some of these investments will help kick-start the tolling/pricing program contained in the plan, and are therefore critical to the plan’s financial success. The region’s short term financial strategy includes the following actions:

- Implement tolling on the Alaskan Way Viaduct replacement project and seek broader legislative authority to implement tolling, pricing, and HOT lanes on state highways.
- Expand high occupancy toll (HOT) lanes from the existing SR 167 pilot project to additional state highways. By the year 2020, implement HOT lanes on the following major highway corridors: I-5 from N. 145th to Marysville, I-5 from I-90 to SR 512, I-405, SR 167 from I-405 to Puyallup, SR 512 from Puyallup to I-5, SR 520 from NE 84th to Redmond, I-90 from Mercer Island to Issaquah, and SR 16 from I-5 to Gig Harbor.
- Seek additional revenue sources in four broad categories: (1) local sources, such as road levies, property, license, and impact fees; (2) transit-specific sources, including sales tax increases for local and regional transit, and increases in transit and ferry fares; (3) fuel taxes, state fees, and fuel tax replacements; and (4) HOT lanes and facility toll revenues.
- Between 2012 and 2022, invest over $27 billion (42%) in basic needs, which includes maintenance, preservation, operation, and debt service, and $38.5 billion (58%) in system expansion.

### Impact of Transportation 2040 Amendment on 2012-2022 Investment Costs

(millions of year 2008 constant dollars)

<table>
<thead>
<tr>
<th></th>
<th>Original T2040 - Constrained Element</th>
<th>2012 T2040 Amendment</th>
<th>Updated T2040 - Constrained Element</th>
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<tbody>
<tr>
<td><strong>Counties</strong></td>
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<tr>
<td>Maint./Pres./Ops.</td>
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<td>$1,984</td>
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<tr>
<td>Expansion</td>
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<td>-$39</td>
<td>$2,457</td>
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<tr>
<td>Counties Total</td>
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<td>-$39</td>
<td>$4,440</td>
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<td><strong>Cities</strong></td>
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<tr>
<td>Maint./Pres./Ops.</td>
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<td>$0</td>
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<tr>
<td>Expansion</td>
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<td>$48</td>
<td>$4,415</td>
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<tr>
<td>Cities Total</td>
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<td><strong>State Highways</strong></td>
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<tr>
<td>Maint./Pres./Ops.</td>
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<td>$0</td>
<td>$4,105</td>
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<tr>
<td>Capital Expansion</td>
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<td>State Highways Total</td>
<td>$16,955</td>
<td>$285</td>
<td>$17,241</td>
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</table>

*NOTE: Only includes those elements of financial strategy impacted by 2012 Transportation 2040 Amendment*
5. **MOBILITY STRATEGY** – How are we addressing the region’s mobility needs?

Congestion is an issue likely to become more challenging as we add 1.3 million more people and 1 million new jobs between 2010 and 2040. Congestion causes delay and personal frustration. It also affects the movement of people and goods, generates air pollutants and greenhouse gas emissions, and increases stress on critical infrastructure. **Transportation 2040** addresses congestion and mobility issues within the constraints of available revenue, while balancing the need to sustain our environment.

As the Metropolitan Planning Organization (MPO) serving the central Puget Sound region, PSRC has a federal mandate to develop a Congestion Management Process (CMP). The CMP presents a systematic approach for managing congestion. The CMP provides data on transportation system performance and identifies strategies to alleviate congestion and enhance the mobility of persons and goods to levels that meet state and local needs.² PSRC is aware that due to limited resources (financial, environment, and right of way), adding capacity will not solve all of our region’s congestion challenges. Although strategic capacity is part of the plan, our four-part congestion and mobility strategy includes other cost-effective solutions:

1. Land use planning
2. Managing system demand
3. Transportation System Management and Operations (technology and active traffic management)
4. Strategic capacity

**Land use planning:** Through VISION 2040, the region has adopted policies that target compact, mixed use development, recognizing that dense urban form can reduce the need for personal trips and reduce average trip length, resulting in improved mobility, reduced congestion, and environmental benefits. For information see VISION 2040 at [http://psrc.org/growth/vision2040](http://psrc.org/growth/vision2040).

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² For more information about federal mandates on the Congestion Management Process, see the US Department of Transportation website [http://plan4operations.dot.gov/congestion.htm](http://plan4operations.dot.gov/congestion.htm)
Managing system demand: Given constraints on roadway capacity expansion, the region is also looking toward managing the demand on the existing system. Transportation Demand Management (TDM) programs throughout the region attempt to reduce the amount of drive-alone travel and shift travel away from peak travel periods. Programs such as transit incentives, telecommuting, and vanpooling are included in the plan to provide alternative transportation options.

PSRC is in the process of updating its TDM implementation strategy, which will attempt to further integrate TDM elements into other aspects of PSRC’s transportation planning. An important component of that strategy will be the inclusion of a regional Commute Trip Reduction (CTR) plan, which is a requirement under Washington state law. The CTR component will focus specifically on trips to work sites with 100 or more employees, and will be developed according to forthcoming guidance from the state Commute Trip Reduction Board. For more information, see the PSRC website information on Commute Trip Reduction at: http://psrc.org/transportation/ctr.

Transportation System Management and Operations (Intelligent Transportation Systems): The PSRC Regional Traffic Operations Committee (RTOC) completed two projects to support signal timing coordination within the region: the Regional Intelligent Transportation Systems Implementation Plan and the Regional Concept of Operations. This collaborative work identifies the key regional arterial corridors to support the movement of transit, freight, and emergency management. More information on RTOC can be found at the committee’s website: http://psrc.org/about/advisory/rtoc. Several system management projects have been completed since 2006, including the Active Traffic Management program on I-5, SR 520, and I-90 (see also the Smarter Highways section on page 5, above). In addition, transit agencies have implemented advanced technologies to improve efficiency for transit vehicles using the region’s roadways, particularly those that support bus rapid transit service such as Community Transit’s SWIFT and King County Metro’s Rapid Ride programs.

Strategic capacity: Transportation 2040 also includes strategic capacity investments in roadway, transit, pedestrian, and bicycle facilities. In addition, VISION 2040 includes policies and actions that provide an implementation framework. VISION 2040’s Congestion Relief and Mobility Strategy (T-Action-2) states:

“The Puget Sound Regional Council will continue to advance strategies for congestion relief, including identifying the location and causes of congestion, integrating land use and transportation planning, managing demand, improving efficiency (with both system and economic solutions), and expanding roads and transit service.”

This action supports Multicounty Planning Policy MPP-T-3, which states:

“Reduce the need for new capital improvements through investments in operations, pricing programs, demand management strategies, and system management activities that improve the efficiency of the current system.”

In 2011 the region published a SMART Corridors Report tracking transportation conditions at the corridor level, including data on safety, congestion, mobility (freight, transit, car, bike, and pedestrian), and land use. The concept of “SMART Corridors” emerged from the notion that transportation serves many people and functions, and it must be closely integrated with land use and economic development planning. This land use and transportation integration must respond to emerging trends and evolving transportation needs, while balancing environmental concerns and fiscal constraint.
The VISION 2040 and Transportation 2040 monitoring programs include ongoing data collection and analysis efforts to monitor plan implementation and system performance. The VISION 2040 monitoring program received approval from the Growth Management Policy Board in spring 2012, and the first set of data and analysis will be produced in the fall of 2012. The Transportation 2040 monitoring program is currently being developed. The Congestion Management Process (CMP) assesses congestion and mobility on CMP corridors, and compares actual performance data with forecasts and goals contained in the region’s long-range plans.

**KEY MOBILITY TRENDS**

As the economy continued to improve and gas prices stabilized in 2010, congestion on the state highway system increased, although it is unclear whether this rise will continue. Overall, average travel times increased modestly in 2010, within two minutes of the previous year on most routes monitored by the state. The table below lists the top five worst morning and evening commutes in the region for 2010. The table shows two measures: (1) predicted travel times at the posted speed limit (free flow); and (2) actual travel times measured during rush hour.

The Washington Department of Transportation provides an Annual Congestion and Mobility Report that uses several performance measures (including travel time) to monitor system performance on state highways. In the PSRC region, congestion increased in 2010 compared to 2009, but overall congestion was still below 2008 levels. The 2010 commute with the most delay (measured in minutes) above free-flow conditions is on I-405 from Everett to Bellevue. During the morning peak hour the average commute on this section of I-405 took 23 minutes longer (twice the time) than it would at posted speed limits. The morning commutes on I-405 from Lynnwood to Bellevue and I-5 from Everett to Seattle were close seconds, both taking 21 minutes longer than they would in free flow conditions. In terms of percentages, the worst commute in 2010 was in the evening from Bellevue to Seattle via I-405, the SR 520 Bridge, and I-5, where a peak hour commute took three times longer (30 minutes) than it would at posted speed limits (10 minutes). However, these data do not reflect the improved flow and reduced travel times on the SR 520 Bridge which have been observed since tolling began in late December 2011. For more information, see the SR 520 Bridge Tolling section later in this chapter.

<table>
<thead>
<tr>
<th><strong>2010 Travel Time for Major Puget Sound Commute Routes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 Worst Morning and Evening Commutes</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Route</th>
<th>Travel Time at Posted Speed</th>
<th>Average Travel Time at Peak Rush Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>I-405 Lynnwood to Bellevue</td>
<td>16</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>I-5/SR520/I-405 Seattle to Bellevue</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>I-405 Tukwila to Bellevue</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>I-5/I-405 Everett to Bellevue</td>
<td>24</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>I-5 Everett to Seattle</td>
<td>24</td>
<td>45</td>
</tr>
<tr>
<td>Evening</td>
<td>I-405/SR 520/I-5 Bellevue to Seattle</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>I-405/I-90/I-5 Bellevue to Seattle</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>I-405 Bellevue to Tukwila</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>I-5/SR 520/I-405 Seattle to Bellevue</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>I-405 Bellevue to Lynnwood</td>
<td>16</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: WSDOT

The chart below shows historic travel trends measured in total daily vehicle miles traveled (VMT) and VMT per capita. During the 1980s total VMT grew faster than population (indicating more trips per person, longer trips, or both). This trend began to shift in the late 1990s. Over the past 10 years the total number of daily vehicle miles traveled (VMT) has leveled off at about 80 million miles per day, in spite of continued population and employment growth. The chart also reveals a shift in per capita VMT. Though this number was growing strongly until about 1989, per capita growth leveled off in the 1990s, and has declined since 1998. By 2010, per capita VMT had dropped to 23 miles per day, its lowest level since 1988.

Ferry ridership peaked in 1999, but since then has declined, due to fare increases and economic recession. Annual ferry ridership in 2010 is close to that of 1991 ridership levels. Seattle-Bainbridge continues to be the most heavily travelled route, followed by Edmonds-Kingston and Mukilteo-Clinton.
The figure below shows regional transit annual ridership peaked in 2008, declined slightly in 2009, remained stable in 2010, and increased in 2011. Ridership remains above 2007 levels despite cuts in service and the economic downturn. A notable trend is the growth in Sound Transit ridership since service commenced in 1999. Sound Transit ridership growth in the past two years can be partially explained by the commencement of LINK light rail service in 2009 between downtown Seattle and Sea-Tac Airport. In 2012 Sound Transit expects to carry 25 million riders on its regional express buses, Sounder commuter rail, and LINK light rail system.

Other than Sound Transit, whose share of total riders has grown steadily for the past 12 years, the region’s other transit agencies have maintained stable market shares. King County Metro ridership remained flat between 1998 and 2005, grew in 2006, 2007, and 2008, declined in 2009 and 2010, but resumed growth in 2011.

While the region has seen no job growth since the year 2000, transit ridership has grown significantly, by some 25 million annual riders, since 2005. Much of this growth has been on Sound Transit and Metro Transit services.
SHORT TERM INVESTMENTS AND ACTIONS TO REDUCE CONGESTION AND IMPROVE MOBILITY

Approximately $10 billion in transportation projects and programs has been invested in the region since 2006. Some examples of investments helping to relieve congestion and improve mobility are described below.

**SR 167 HOT lanes (WSDOT)**

Open in spring 2007, the SR 167 HOT lanes provide a new option for drivers between Auburn and Renton, an option more people are choosing every day. HOT lane use continues to grow - weekday tolled trips increased to 3,300 in April 2011, a nearly 50% increase over April 2010 and an 87% increase over April 2009.

On average, daily general purpose lane volumes have decreased 4 to 5% while total facility volumes have increased 8%. HOT lane volumes have increased 15% while speeds remained around the posted 60 mph speed limit.

Throughout the first, second and third year, HOT lane traffic flowed freely during all hours of the day. The northbound peak-hour (7-8 a.m.) HOT lane travel time has remained consistent at an average of 11 minutes since 2008. The southbound peak hour (4-5 p.m.) commute has averaged 8 minutes. General purpose lane travel times average 20 minutes northbound in the morning commute with southbound evening commute at an average of 14 minutes.

**SWIFT (Community Transit)**

In November 2009 SWIFT service began operating. SWIFT is a partnership between Snohomish County’s two local transit agencies: Community Transit and Everett Transit. Both Community Transit and Everett Transit received competitive state and federal grants to fund most of SWIFT’s capital costs (buses and stations). Everett also contributes operating funds for SWIFT. This support, plus state and federal grants and fares, pay for 90% of SWIFT’s operating costs into 2013.

SWIFT serves a 17-mile route along SR 99, Evergreen Way, and Rucker Avenue between Everett and Shoreline. SWIFT is Community Transit’s highest ridership route, carrying over 100,000 customers per month. SWIFT service met its five-year goal in the first 18 months of service. Recent average ridership is 4,500 riders per day, with SWIFT buses serving Everett to Shoreline 20% faster than local buses.

SWIFT operates every 12 minutes on weekdays from 6 a.m. to 7 p.m. and every 20 minutes weekdays from 5-6 a.m., weeknights and on Saturdays. Amenities which set SWIFT apart include pre-boarding fare payment, fast boarding through three doors, and on-board bike racks. Most station platforms are just a few inches lower than the floor of the bus, making it easy to step aboard. People who use wheelchairs enter at the front door and have an option to use a passive restraint system that doesn’t require coach operator assistance.
**Rapid Ride (King County Metro)**

Metro Transit’s new Rapid Ride bus service provides frequent trips throughout the day. Currently two of six lines are operating. The remaining lines will be in operation by the end of 2013. Everything about Rapid Ride - buses, stations, and operations - is being designed to keep people moving quickly throughout the day in these heavily used transit corridors.

**Rapid Ride A Line** – The Tukwila to Federal Way **A Line** route runs on Pacific Hwy S./International Blvd., and was implemented October 2, 2010. The **A Line** gives riders streamlined service to destinations along the route and to places where they can transfer to other buses and LINK light rail. Monthly boardings in 2011 averaged 205,000 riders. **A Line** doubled the number of service hours in 2011, with service every 10-15 minutes all day, every day. Based on a customer satisfaction survey, the **A line** has an 85% satisfaction rating. Ridership is highest during peak hours, yet ridership during non-peak day and evening hours is only slightly lower.

![Rapid Ride A Line: Times Riders are Usually on This Route](image1)

**Rapid Ride B Line** (implemented October 1, 2011) – The **B Line** connects downtown Bellevue and downtown Redmond. Monthly boardings during 2011 averaged 140,000 (based on 3 months in 2011). Metro added 50% more **B Line** service hours in 2011. The current headway adherence level is around 85% (similar to what would be considered on-time performance). Service is every 10-15 minutes all day, every day. Based on customer satisfaction survey the **B line** has an 86% satisfaction rating.

![Rapid Ride B Line: Times Riders are Usually on This Route](image2)

Metro’s planned **C Line** to West Seattle and **D Line** to Ballard will start service in September 2012.
King County Ferry District
The King County Ferry District (KCFD) now operates two passenger ferry routes formerly served by Washington State Ferries: Downtown Seattle-Vashon Island, and Downtown Seattle-West Seattle (Elliott Bay Water Taxi). Last year the county expanded to year-round service on the West Seattle-Downtown Seattle route. The Vashon route saw declining ridership between 2005 and 2009, but growth has been strong for the past two years. Ridership on the Elliott Bay Water Taxi has increased steadily since 2005, with exception of a decline in 2010. Early 2012 ridership numbers for the Elliot Bay Water Taxi are showing strong growth. From January 2012 to January 2011, demand was up 194%; February ridership was up 244% over 2011; and March 2012 numbers were up 241% above March 2011. To meet growing demand, King County Ferry District is building two larger boats. The ferry district is also building a maintenance float to accommodate its boats. This float, to be complete this summer, will be located just south of Colman Dock and Pier 50, the current docking facility for King County Ferry District passenger boats.

<table>
<thead>
<tr>
<th>Year</th>
<th>Vashon Route</th>
<th>West Seattle Route</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>175,269</td>
<td>106,913</td>
<td>282,182</td>
</tr>
<tr>
<td>2006</td>
<td>131,996</td>
<td>122,650</td>
<td>254,646</td>
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<tr>
<td>2007</td>
<td>125,033</td>
<td>161,331</td>
<td>286,364</td>
</tr>
<tr>
<td>2008</td>
<td>121,169</td>
<td>182,904</td>
<td>304,073</td>
</tr>
<tr>
<td>2009</td>
<td>110,703</td>
<td>216,196</td>
<td>326,899</td>
</tr>
<tr>
<td>2010</td>
<td>153,620</td>
<td>154,020</td>
<td>307,640</td>
</tr>
<tr>
<td>2011</td>
<td>167,619</td>
<td>216,155</td>
<td>383,774</td>
</tr>
</tbody>
</table>

Kitsap Transit Foot Ferry
Kitsap Transit operates two foot ferry routes across Sinclair Inlet: Bremerton-Port Orchard and Bremerton-Annapolis. These ferries provide a critical link into downtown Bremerton, serving local workers and shoppers, and feeding passengers to the Bremerton-Seattle auto ferry. Kitsap Transit considers the foot ferries to be a vital part of their transit system. Ridership has been strong on both routes, with steady growth. Two exceptions were drops in ridership on the Bremerton-Port Orchard route in 2009 and 2010, likely the result of the economic recession. Growth on the Bremerton-Port Orchard route resumed in 2011.

<table>
<thead>
<tr>
<th>Year</th>
<th>Bremerton-Annapolis</th>
<th>Bremerton-Port Orchard</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>110,116</td>
<td>343,495</td>
<td>453,611</td>
</tr>
<tr>
<td>2007</td>
<td>110,205</td>
<td>355,601</td>
<td>465,806</td>
</tr>
<tr>
<td>2008</td>
<td>121,162</td>
<td>403,019</td>
<td>524,181</td>
</tr>
<tr>
<td>2009</td>
<td>132,232</td>
<td>341,625</td>
<td>473,857</td>
</tr>
<tr>
<td>2010</td>
<td>133,103</td>
<td>311,193</td>
<td>444,296</td>
</tr>
<tr>
<td>2011</td>
<td>133,390</td>
<td>321,258</td>
<td>454,648</td>
</tr>
</tbody>
</table>
**SR 520 Bridge Tolling (WSDOT)**

Variable tolling began on SR 520 on December 29, 2011. Tolling on the SR 520 Bridge helps pay for the new bridge, scheduled to open in 2014. The new bridge is designed to withstand major earthquakes and windstorms, providing increased safety. When complete, it will include six lanes, with two general purpose lanes and one carpool/transit lane in each direction. The new SR 520 Bridge will have HOV lanes that will make bus trips faster and more reliable. The new bridge will also accommodate light rail in the future, and will include a pedestrian and bike path and shoulder lanes to keep traffic flowing in the event of a vehicle breakdown.

SR 520 tolling is part of a larger program to help manage congestion on the cross-Lake Washington corridor. The Lake Washington Congestion Management Program was awarded a $154.5 million federal grant to improve congestion in the SR 520 corridor. The program includes:

- Variable tolling on the SR 520 bridge
- Electronic travel time signs on I-405, SR 520, and SR 522 to inform drivers of the best route across the Lake Washington
- Smarter Highways on SR 520 and I-90 to provide drivers with information on variable speed limits and real time information
- King County and Sound Transit added over 130 daily bus trips across the bridge
- Vanpool and carpool programs to reduce single occupancy vehicles

Transit service hours on SR 520 have increased over 20%, and ridership has increased 10% since tolling began. The number of vanpools operating in the SR 520 corridor has increased 17%. Park-and-ride lots are showing similar usage to pre-tolling, with most lots remaining at capacity. By February 2012 there were 225,000 new Good-To-Go account sign-ups. Approximately 72% of the drivers crossing the bridge are using Good-To-Go passes. During weekday AM and PM peak hours, this percentage increases to 80%.

Initial results of tolling are showing the total number of vehicle trips across Lake Washington (SR 520, SR 522 and I-90) have decreased approximately 5%. The total number of trips across SR 520 is at 60-70% of pre-toll levels, with spikes just prior to each toll increase and after each drop in the toll rates. The SR 520 Bridge is now typically operating at free flow speeds during peak hours. I-90, SR 522, I-5, and I-405 have all experienced minor increases in traffic (between 2% and 5%), and average travel times on these corridors have increased by approximately 2-3 minutes.

The figures below show pre-toll and post-toll traffic volumes on SR 520 and I-90. Except for a spike during the peak hour in the Westbound PM and the Eastbound AM, post-toll traffic volumes are significantly lower than pre-toll levels.
Traffic Volume: Westbound SR 520

Traffic Volume: Eastbound SR 520
Traffic volumes on I-90 increased 5-10% after tolling began on the SR 520 Bridge. There is limited capacity on I-90 during peak periods, and congestion on I-5 and I-405 limits drivers’ ability to access I-90 to avoid the SR 520 tolls. Average travel speeds on I-90 remain within the range experienced before tolls began on SR 520. Mid-day traffic volumes show the largest increase since tolls began. This may reflect non-commute trips which are less time-sensitive.
Transportation Demand Management (TDM)

A wide variety of transportation demand management (TDM) programs have been implemented since the adoption of Transportation 2040. Long-standing efforts such as Washington’s Commute Trip Reduction (CTR) program have continued to be refined and tailored to meet evolving state, regional, and local goals through reforms such as the 2006 CTR Efficiency Act while newer centers-based programs such as those born from WSDOT’s Growth and Transportation Efficiency Center effort have fostered new approaches to managing travel demand. The region has also focused on leveraging advancements in technology as a means for trip reduction, including investments that streamline program delivery and provide a rich source of data for tracking and evaluation. For example, RideshareOnline.com has quickly become a backbone of many TDM programs around the region. The region also worked to implement innovative new strategies such as flexible carpooling (aka dynamic ridesharing) that capitalize on advances in smart phone technology as well as focus on the benefits that teleworking can provide.

In a period of great financial uncertainty, multi-agency coordination and partnerships have become extremely important to successful TDM program implementation. Two examples of a coordinated approach to demand management stand out since 2006. The first is the highly successful Snohomish County/Community Transit partnership to implement “Curb the Congestion,” which has resulted in significant mobility improvements and increased efficiency along key congested corridors in Snohomish County. The second major partnership is between PSRC, King County Metro, and WSDOT to implement the Urban Partnership program, which is a coordinated approach to managing demand on the SR 520 corridor that includes tolling, technology improvements, additional transit services, and traditional targeted TDM programs.

The period since 2006 has been marked by broader application of parking management in the region. Ranging from new and innovative real-time parking availability information in downtown Seattle to the application of on-street parking pricing in Redmond, jurisdictions are realizing the benefits of managing both on- and off-street parking more efficiently.

Sound Transit

Sound Transit continues to provide three lines of service: ST express bus, Sounder commuter rail, and LINK light rail. Sound Transit now operates 19 ST Express Bus routes serving Snohomish, King, and Pierce counties. Sounder commuter rail connects Everett, Seattle, and Tacoma, with stations in Everett, Mukilteo, Edmonds, Seattle, Tukwila, Kent, Auburn, Sumner, Puyallup, and Tacoma. Service to the new Lakewood Sounder Station is scheduled to begin later in 2012. Sound Transit now offers four daily round trip trains between Seattle and Everett (not including Amtrak service) and nine daily round trip trains between Seattle and Tacoma.

Central LINK light rail began operating in July 2009 from Westlake to Tukwila, and the 1.7-mile extension to Sea-Tac Airport opened in December 2009. Central LINK light rail serves 13 stations: Westlake, University Street, Pioneer Square, International District/Chinatown, Stadium, SODO, Beacon Hill, Mount Baker, Columbia City, Othello, Rainier Beach, Tukwila/International Boulevard, and Sea-Tac Airport. Construction of the ST2 program continues. University LINK light rail (now under construction) is scheduled to begin service to the University of Washington in 2016, with the extension to Northgate scheduled to be complete in 2021. The south extension of Central LINK is scheduled to reach South 200th Street by 2016, with the next extension to Redondo/Star Lake to follow. The East LINK project will enter final design this year, and service from downtown Seattle to Overlake Transit Center is scheduled to begin in 2023. Tacoma LINK light rail consists of a 1.6-mile route connecting Tacoma Dome Station and the Theater District/9th Street.
LINK light rail ridership has steadily increased each year. Ridership patterns have shown high weekend demand relative to weekday ridership. Seasonal ridership variations are tied to peaks in airline travel. After a drop in ridership in 2011, all lines of service showed strong growth in 2011, with total system-wide ridership reaching 25 million boardings for calendar year 2011. On-time performance was consistently highest for Tacoma LINK and Sounder commuter rail.

<table>
<thead>
<tr>
<th></th>
<th>YEAR</th>
<th>BOARDINGS</th>
<th>CHANGE</th>
<th>ON TIME PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ST Express Bus</strong></td>
<td>2009</td>
<td>12,896,712</td>
<td>NA</td>
<td>93.9%</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>12,494,546</td>
<td>-3.1%</td>
<td>87.3%</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>13,664,664</td>
<td>9.4%</td>
<td>88.7%</td>
</tr>
<tr>
<td><strong>Sounder Commuter Rail</strong></td>
<td>2009</td>
<td>2,492,362</td>
<td>NA</td>
<td>97.3%</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>2,364,290</td>
<td>-5.1%</td>
<td>97.3%</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>2,543,955</td>
<td>7.6%</td>
<td>97.3%</td>
</tr>
<tr>
<td><strong>Central LINK Light Rail</strong></td>
<td>2009</td>
<td>2,501,211</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>6,989,504</td>
<td>179%</td>
<td>80.9%</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>7,812,433</td>
<td>12%</td>
<td>86.8%</td>
</tr>
<tr>
<td><strong>Tacoma LINK Light Rail</strong></td>
<td>2009</td>
<td>889,320</td>
<td>NA</td>
<td>99.8%</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>871,793</td>
<td>-2.0%</td>
<td>99.9%</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>972,429</td>
<td>11.5%</td>
<td>99.9%</td>
</tr>
</tbody>
</table>
6. **ENVIRONMENTAL STRATEGY** – How can Transportation 2040 enhance the environment?

Transportation 2040 contains an environmental strategy designed to help the region achieve environmental goals as expressed in VISION 2040. The Transportation 2040 environmental strategy contains two key elements: (1) air quality and climate change and (2) water quality.

**Air Quality and Climate Change**

**MAJOR ELEMENTS AND KEY PRIORITIES**

VISION 2040 and Transportation 2040 are built upon a strong regional commitment to reducing the impacts of growth and transportation on the environment. This commitment includes policy guidance and prioritization of investments to reduce impacts on air and water quality, with an emphasis on protecting the quality of water in Puget Sound and reducing greenhouse gas emissions.

Transportation 2040 includes bold new steps to begin addressing climate change and greenhouse gas emissions, building on the Regional Growth Strategy, adopted in 2008, and supporting state and federal efforts.

The following outlines the PSRC region's four-part strategy to address greenhouse gas emissions.

**Land use.** This strategy builds upon VISION 2040, and will focus transportation investments in ways that support regional growth centers, compact mixed use development, transit-oriented development, and other land use patterns that can be more efficiently served with transit, walking, and bicycling facilities. The land use strategy supports an improved jobs-housing balance to reduce the number and length of work trips.

**User Fees.** Through the Traffic Choices Study, other toll research, and modeling of Transportation 2040 plan alternatives, we know roadway tolling and pricing can help reduce greenhouse gas emissions. Transportation 2040 includes a commitment to new ways of financing the transportation system, including phased implementation of HOT lanes, facility tolls, and eventually full freeway system tolling.

**Choices.** By combining efficient land use, roadway pricing/tolling, and efficient travel options, Transportation 2040 hopes to reduce the growth of vehicle miles traveled, thereby helping to reduce greenhouse gas emissions. The Transportation 2040 plan includes unprecedented levels of investment in transit, bike, and walk facilities, thereby providing the region with many new travel choices. These include implementation of Sound Transit’s long-range plan, a 90% increase in local bus service (in the Constrained Plan, with a 120% increase in the Full Plan), with a focus on frequent all-day service on heavily traveled corridors. The Constrained plan includes over 470 miles of new regional walk and bike trails.

**Technology.** Technology can play a key role in helping address climate change and reducing greenhouse gases in the region. Transportation 2040 supports development of technology to dramatically reduce tailpipe emissions. These technologies include increases in hybrid and plug-in electric vehicles, increases in overall vehicle fuel economy, alternative fuels, and reduced emissions from heavy diesel trucks.
Transportation 2040 includes programs and investments that encompass all four of these strategies. PSRC continues to work with agencies such as the Washington State Department of Ecology, the Environmental Protection Agency, the Puget Sound Clean Air Agency, the Washington State Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, other metropolitan and regional planning organizations, and additional stakeholders to monitor emerging federal and state legislation related to climate change and to continue research and analysis on the reduction of greenhouse gases from the transportation sector.

In addition to reducing the impacts from the transportation sector on climate change, it is also important for the region to address the impacts from climate change on transportation. This concept is referred to as “adaptation to climate change.” Beyond transportation, a wide variety of impacts may be expected in Washington state and the Puget Sound region. These include rising sea levels, increased flooding, an increase in the frequency and severity of storms and other weather events, droughts, wildfires, impacts to water availability and quality, impacts to crops, etc. Specific to transportation, impacts could include the accelerated deterioration of roadways, issues related to flooding and increased stormwater, bridge damage, and rail buckling.

This is an emerging area of study, but the state and region are being proactive in planning for potential impacts on transportation. These activities include the state’s work called for in Executive Order 09-05 and RCW 43.21M, which directed the departments of Ecology, Health, Agriculture, Commerce, Fish and Wildlife, Natural Resources and Transportation to work with scientific experts and stakeholders to develop an integrated climate change strategy by December 2011. King County, in collaboration with the University of Washington and ICLEI-Local Governments for Sustainability, released “Preparing for Climate Change: A Guidebook for Local, Regional and State Governments.” The King County Wastewater Division has also conducted an analysis of vulnerability of wastewater facilities to sea level rise.

PSRC prepared a report related to potential impacts to transportation infrastructure in the Puget Sound region, including the port areas which would be most affected by rising sea levels. This report was published as an appendix to Transportation 2040. As part of this document, mapping of the sea level rise scenarios produced by Ecology and the University of Washington was conducted for the region. This mapping effort was subsequently expanded under contract with the Washington State Department of Transportation for other coastal areas of the state.

PROGRESS TOWARDS REDUCING REGIONAL EMISSIONS
The Puget Sound region is working with federal, state, and local partners to achieve reductions in regional air emissions. The Transportation 2040 Project Prioritization process includes the reduction of greenhouse gases and other air pollutants as part of the evaluation framework. This new framework will be incorporated in the 2014 plan update. The next biennial Action Strategy will be published along with the plan update in 2014, and will provide an update on how the region is progressing toward improving the region’s air quality.

The region has been maintaining federal air quality standards for several pollutants, but a portion of the region was designated in nonattainment to the fine particulate standard in 2009. PSRC has worked closely with the region’s air quality consultation partner agencies — the Environmental Protection Agency, the Federal Highway Administration, the Federal Transit Administration, the Washington state departments of Ecology and Transportation, and the Puget Sound Clean Air Agency — to develop a plan for how the region will come back into attainment for this pollutant. The primary source of fine
particulate emissions in this area is wood smoke, and no additional control strategies on the transportation sector are being recommended. Vehicles and fuels continue to get cleaner, and Transportation 2040 contains extensive strategies that will continue to move the region in the right direction to maintain air quality. While the region is currently in attainment to the federal ozone standard, this continues to be a pollutant of concern. PSRC will continue to work closely with air quality partner agencies to monitor emissions of this pollutant, and any changes to the existing federal standard.

Major strides have been made in advancing the region’s four-Part Greenhouse Gas Strategy, particularly in the area of technology. Under the Land Use component, PSRC has been working on a Growing Transit Communities program to grow and strengthen communities around transit stations. Under Transportation Choices, the region continues to work on several initiatives such as transit overlay zones, a bicycle/pedestrian implementation strategy and others. Under Pricing, several studies have been completed by the Washington State Department of Transportation, and legislative actions have been taken on facilities such as the Alaskan Way Viaduct and State Route 167. In addition, tolling has begun on the State Route 520 bridge. Under Technology, significant federal actions have been taken to improve the fuel economy of vehicles and reducing emissions from fuels. These include proposed new Corporate Average Fuel Economy standards, increasing average fuel economy for passenger vehicles and light trucks to 49.6 miles per gallon by model year 2025, improving the fuel efficiency of heavy duty vehicles, and further implementation of a national Renewable Fuel Standard. In addition, actions have been taken in Washington state to advance vehicle electrification through strategies such as the West Coast Green Highway, implementation of public charging stations, PSRC’s work on electric vehicle model guidance, and others.

Both California and Oregon have passed legislation requiring regional targets for greenhouse gas emissions reductions. In California, targets have been set between 5-16% in per capita greenhouse gas emissions reductions by 2035 from 2005 levels. In Oregon, targets have been set between 17-21% in per capita greenhouse gas emissions reductions by 2035 from 2005 levels. As a comparison, Transportation 2040’s four-part greenhouse gas strategy resulted in a per capita reduction of 12% between 2006 and 2040. These figures do not include the technological improvements mentioned above, but instead reference the implementation of land use, transportation choices, and pricing strategies.

In addition, the Washington State Department of Energy published the 2012 State Energy Strategy in December 2011, which emphasizes a more efficient and coordinated transportation system as one of the greatest potentials to transform energy use to promote both jobs and climate stability. The energy strategy encourages more efficient vehicles, improvements to fuels, and reducing vehicle trips and miles traveled. Transportation 2040’s Four-Part Greenhouse Gas Strategy is well aligned with the recommendations of the State Energy Strategy.

**Water Quality**

Maintaining and improving water quality is a regional priority (see Transportation 2040 Appendix C, multicounty planning policies MPP-En-13 and 14). The transportation system is a significant source of pollutants that affect water quality. The Puget Sound Partnership Action Agenda identified several sources of water pollution from the transportation system, including land-based vehicles, planes, and recreational and commercial ships. Roads and rail systems contribute pollutants from impervious road surfaces, brake pads, oil leaks, vehicle emissions, and maintenance of rights of way. Aviation contributes emissions, de-icing compounds, and oil/fuel leaks, and ships contribute anti-fouling compounds, oil/fuel...
leaks, personal care products, pathogens, sewage, and ballast water. Vehicles — including buses, trains, and ferries — are a source of greenhouse gas emissions and particulates. Although these initially enter the air, they can also settle in and contaminate surface waters. In developing Transportation 2040, the potential impacts of different transportation systems to water quality were evaluated. A key finding was that as the region implements the system envisioned in Transportation 2040, it must do so in a way that avoids and mitigates harm to the region’s precious water resources. Transportation 2040 recommends that mitigation of transportation-related impacts to water quality can be accomplished in a number of ways. The water quality element of Transportation 2040’s Environmental Strategy includes three key parts:

**Cleaner Transportation.** Reducing vehicle miles traveled decreases the amount of pollutants generated by vehicles. The use of innovative technologies can also help control potential water pollution at the source, as could programs that promote cleaner fuels and vehicles. A combination of incentives and disincentives could be used to promote clean vehicles. Transportation programs that are designed to address issues such as congestion, emissions, fuel use, or waste management can indirectly benefit water quality through reduction of pollutants entering the environment.

**Treatment.** The treatment and detention of stormwater runoff from operating the transportation system will be particularly important, due to increased new impervious surfaces associated with preservation of existing facilities and new capacity. Potential stormwater impacts should be mitigated by designs that minimize the amount of impervious surface and use low-impact materials such as pervious pavers to manage runoff volumes. Collection, treatment and reuse of stormwater and other runoff is recommended to maximize the use of scarce water resources. Other approaches include use of natural systems such as wetlands to manage water flow, and measures to restore buffers and natural channels for streams alongside transportation facilities.

**Retrofit.** Many existing facilities lack modern systems for water quantity or quality management. As projects replace, improve, or extend existing facilities, an opportunity exists to improve their environmental performance compared to today. For example, culverts and other drainage facilities associated with transportation infrastructure can be designed and operated to facilitate fish passage. Transportation 2040 supports the opportunity for the region to create innovative, low-impact, environmentally friendly transportation infrastructure, and to address and correct the harm we have already done.

**PROGRESS TOWARD IMPROVING WATER QUALITY**

The Puget Sound Partnership was formed to identify strategies needed to improve water quality in Puget Sound. PSRC is collaborating with the Partnership and other agencies to implement the region’s water quality goals as articulated in VISION 2040 and Transportation 2040. These efforts include land use approaches to reduce the amount of runoff and improve quality of stormwater. The plan’s strategy also supports protecting and restoring the region’s watersheds by retrofitting existing transportation facilities to improve water quality, building new projects that enhance the environment, and by relying on cleaner modes of travel and alternative energy resources. As an early step, the Transportation 2040 Project Prioritization process includes an evaluation framework that would give higher priority to projects that protect natural ecosystems and improve water quality (see section 2, above – Prioritization Strategy). VISION 2040 and Transportation 2040 include monitoring programs designed to provide ongoing information on water and air quality. Over the coming years, the monitoring program should produce useful data to assess the region’s progress toward meeting environmental goals.
7. **LEGISLATIVE PROPOSAL** – How can the Legislature help to implement the plan?

**KEY MESSAGES TO THE 2012 LEGISLATURE (ADOPTED BY PSRC EXECUTIVE BOARD JANUARY 26, 2012)**

PSRC supports the recommendations of the Connecting Washington Task Force for a comprehensive statewide transportation package for consideration by the 2012 Legislature. The package furthers the implementation of the region’s long-range transportation plan **Transportation 2040**; meets state and regional growth and environmental objectives, including addressing climate change; emphasizes the basic maintenance, preservation, and operation of the current system; and supports the region’s long-term economic prosperity. PSRC supports short-term and long-term actions by the Legislature to address the following critical transportation needs:

- **Finish what has been started.** The 2003 gas tax increase and the 2005 Transportation Partnership Act made significant progress in funding transportation projects needed to support the region’s growth strategy and implement the region’s transportation plan. However, anticipated revenues have fallen short of finishing promised projects, and additional needs continue to be identified. The Legislature should ensure that project commitments made in 2003 and 2005 are met.

- **Address the transit funding crisis.** The recession has had a significant impact on local transit revenue. Even after years of efficiency savings, cost-cutting, delayed or cancelled capital programs, personnel cuts, and cuts to transit service levels, the region’s transit riders and businesses face additional unprecedented and substantial cuts to regional transit service if more revenue cannot be found. The 2011 Legislature provided limited short-term relief to King County Metro, but other transit agencies still face significant cuts to service. The region supports immediate action to provide alternative, more stable funding sources for transit, to address the current crisis of transit service cuts, as well as a longer-term solution to put transit agencies on the path toward service growth and capital investment needed to meet the state’s long-term interest in public transportation and regional objectives.

- **Provide stable and sustainable funding for Washington State Ferries.** Washington State Ferries requires a source of funding to ensure stable operations into the future that is affordable to ferry users, and is adequate to fund the WSF long-range plan for vessel replacement and terminal upgrades, including additional 144-vehicle vessels. State plans should also recognize the joint use of WSF facilities for locally operated passenger ferry systems and the role of these passenger ferry systems as a part of the regional transportation network.

- **Provide additional revenue for Local Roadway Needs.** The city and county roadway systems serve a critical state need in connecting interstates and other state highways to job centers, freight distribution hubs, and communities across the state. Cities and counties have growing needs to preserve local arterials and expand them to serve planned growth. The region supports new state transportation revenues to be distributed directly to cities and counties and practical local options to improve the condition of local transportation infrastructure.

- **Provide state funding sufficient to make significant progress in controlling storm water runoff from state and local roadways.** A healthy Puget Sound is critical to the future of the state and region. Transportation is a major source of storm water pollutants which affect the health of streams, rivers and the entire Puget Sound. We urge the Legislature to make separate investments in capital and non-capital storm water control mechanisms needed to control storm water runoff.
from roadways. State and local transportation agencies would benefit from additional state resources to build roadway projects that will reduce storm water pollution.

- **Fund locally developed priorities on state and local systems.** PSRC, working with other regional transportation planning organizations across the state, has identified regional high priority investments needed to provide a state of good repair, improve operations, and support the state’s economy. PSRC provides these regional high priority investments to the Legislature to illustrate the types of transportation investments that can be made in the near-term if funding is made available. We urge the Legislature to consider and fund locally identified transportation priorities across the state.

**REGIONAL HIGH PRIORITY INVESTMENTS FOR LEGISLATIVE CONSIDERATION**

The 2011 Legislature asked the 14 Regional Transportation Planning Organizations (RTPOs) in the state of Washington to work together to provide a comprehensive framework for sources and uses of next-stage transportation investments needed to improve structural conditions and ongoing operations and lay the groundwork for transportation systems to support the long-term economic vitality of the state. Since the Governor’s Connecting Washington Task Force was focused on new sources of transportation revenue and broad principles for its use, the RTPOs felt they could add most value by concentrating on developing, as a communication to the Legislature, an illustration of regional high priority investments which could proceed if new transportation revenue were made available. Regional Transportation Planning Organizations across Washington have been working together statewide to identify regional high priority transportation investments that could be funded with new transportation revenues. PSRC has engaged the countywide transportation groups and the transit agencies in the region in identifying regional high priority investments.

To assist in this work, the RTPOs also agreed to participate in an innovative and first-time pilot project called *Forward Washington* to develop a statewide database of regional high-priority investments using the Paladin SMARTGov software. The Paladin software provides the ability for each RTPO to input their own data, but also allows the information to be displayed at the local, regional, or statewide levels.

PSRC is coordinating this effort on behalf of the 14 RTPOs, with each RTPO entering their regional high-priority projects into the database, and working together on communicating each region’s priority transportation investments and the statewide picture. The RTPOs across the state, including PSRC, have structured this information on regional high priority investments to communicate those investment needs to the Legislature and others. The results of these efforts are now available on the *Forward Washington* website at www.forwardwashington.net/.
8. **TEN-YEAR INVESTMENT PROGRAM** – What near term investments are needed?

The region’s ten-year investment program will maintain, preserve, and operate the existing system and invest strategically in capacity expansion projects across all modes.

**MAINTENANCE, PRESERVATION, AND OPERATIONS**

As the region grows and matures, so do its transportation assets. Aging infrastructure requires regular and predictable investments in maintenance, preservation, and operations. Much of the region’s infrastructure was built many decades ago and will require significant investment to maintain, preserve, and operate the existing assets. Transportation 2040 commits, as a top priority, to funding the maintenance, preservation, and operation of our existing infrastructure in a safe and usable state.

These highly cost-effective investments help to ensure that current assets continue to function properly to sustain mobility for both people and goods. Investing in maintenance and preservation programs at the appropriate time in an asset’s lifecycle prevents more costly rehabilitation and reconstruction projects in the future. *State of Good Repair* programs represent approximately 60% of the constrained portion of the planned total costs of Transportation 2040.

The Transportation 2040 Project Prioritization framework lays out a strategic approach to addressing the region’s maintenance, preservation, and operations needs. It will establish “state of good repair” goals for key elements of the system (highways, arterials, bridges, transit, ferries, etc.). Additional information will be collected to document the existing condition of the transportation system for each key element. Using this state of good repair data, the framework would develop and evaluate potential investment scenarios (high, medium, and low). For the scenarios, future conditions will be forecast for each system element to assess the impacts of differing funding priorities. A desired regional condition level would then be chosen and funding decisions would follow.

The state of good repair planning analysis will be completed over the next two years, and results will be included in the Transportation 2040 plan update in 2014.
SUMMARY OF KEY PROJECTS AND PROGRAMS PROPOSED FOR THE NEXT TEN YEARS

Implement strategic capacity investments in the following areas:

- **Public Transportation (regional and local transit).** Implement an aggressive transit strategy. Complete Sound Transit 2 projects and light rail extensions to Everett, Tacoma and Redmond. Increase local transit service by more than 100% in peak periods and over 80% in the off-peak, while achieving operational efficiencies to reduce costs; emphasize additional all-day service with high frequencies (generally every 15 minutes).

- **State Highways.** Complete and replace the network of roadway projects necessary to support development of the centers identified in VISION 2040 and keep freight moving to support a strong economy. Rely directly on users of the new highway capacity to pay for improvement through tolling, which also has positive effects on reducing congestion and emissions.

- **Complete major projects.** Build the missing regional highway links, including: SR 167 extension, SR 704-Cross Base Highway, and SR 509 extension; replace two vulnerable structures — the SR 99 Alaskan Way Viaduct and the SR 520 Floating Bridge; widen US 2, SR 3, SR 9, SR 522, and SR 18 and complete/convert managed lane systems on I-5, I-405, I-90, and SR 16.

- **Local Roads.** Expand local roadways to support transit and improve people and freight efficiency, especially to provide access to and within centers.

- **Nonmotorized Transportation.** Focus bike and walk improvements in regional growth centers, facilities with one terminus in a center, and build facilities that complete a missing link, or within one mile of existing and planned transit station areas for pedestrians and within three miles for bicyclists, and implement “Complete Streets” practice in all the region’s urban areas.

- **Special Needs Transportation.** Address the growing need for special needs transportation and implement our federally required Coordinated Transit-Human Services Transportation Plan.

- **Automobile Ferries (state and local).** Maintain existing boats and terminals, as well as current routes and service. Some auto capacity will be added due to scheduled fleet replacement with slightly larger boats. Replace and upgrade key terminals.


- **Aviation.** The aviation component of Transportation 2040 will carry forward the adopted regional policy and build upon the recently completed statewide Long-Term Air Transportation Study (LATS).

- **Intercity Passenger Rail.** Recognize Washington state’s commitment to improving the intercity rail passenger service provided by Amtrak along the Pacific Northwest Rail Corridor over the next 20 years. Transportation 2040 also highlights the potential to develop a high-speed rail corridor linking the major cities of the Pacific Northwest region.
**TEN-YEAR INVESTMENT SUMMARY**

*Transportation 2040* is comprised of two major parts: a Constrained Plan and an Unprogrammed Plan. The Unprogrammed Plan is the full long-range vision for the region’s transportation system to the year 2040. The Unprogrammed Plan includes all projects and programs, whether or not they are funded. The Constrained Plan includes only those projects and programs which are included in the financial strategy. The Constrained Plan meets federal requirements of fiscal constraint, and is also the set of investments upon which the region’s finding of air quality conformity is based. The 2012 Action Strategy contains only Constrained Plan investments for the next ten years. These projects might be considered the region’s most immediate investment priorities.

Total Constrained Plan transportation investments planned during the Action Strategy’s ten-year time frame (2012-2022) amount to $66 billion. These investments are divided into two broad categories: (1) system expansion; and (2) basic needs (preservation, maintenance, and operations). Of the $66 billion total, some $38.7 billion (58%) will be invested in system expansion (projects and programs) and $27.5 billion (42%) is planned for maintenance, preservation, and operations covering all transportation modes. These costs include a commitment to implementing state, regional, and local bridge replacement, preservation, and maintenance projects, such as the King County Bridge Priority Replacement Program, which includes replacement of the South Park Bridge, among others. Most basic needs investments (funds required to maintain, preserve, and operate the transportation system) are not connected with specific projects; the majority of costs for this portion of the plan are developed on a programmatic basis. Notable exceptions include the Alaskan Way Viaduct and SR 520 Bridge. These two projects are included below in the State Highways section of the *Transportation 2040* System Expansion Projects list.

The System Expansion list is divided into four categories:

<table>
<thead>
<tr>
<th>System Expansion Projects</th>
<th>2012-2022 Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Highways</td>
<td>$16,350,000,000</td>
</tr>
<tr>
<td>Arterials – City streets and county roads</td>
<td>$3,363,000,000</td>
</tr>
<tr>
<td>Bicycle/pedestrian/nonmotorized</td>
<td>$521,000,000</td>
</tr>
<tr>
<td>Transit (including ferries)</td>
<td>$9,625,000,000</td>
</tr>
</tbody>
</table>

**Total Expansion Projects:** $29,859,000,000

Programs not included in project categories above $8,841,000,000

**Total System Expansion Investments:** $38,700,000,000

**Maintenance, Preservation, and Operations** $27,500,000,000

**Total Investments:** $66,200,000,000

* see appendix B for a complete list of projects.
MAJOR HIGHWAY AND TRANSIT PROJECTS IN THE TEN-YEAR INVESTMENT STRATEGY

Over the next ten years, the region will invest in a broad range of improvements to all modes of the transportation system. Below is a summary of key projects and programs planned for the Action Strategy time frame: 2012-2022. For a list of all projects and programs in the Ten-Year Action Strategy, see Appendix B. Both lists include projects planned for completion during the years 2012 through 2021. The list immediately below and the list contained in Appendix B include projects which were amended into the Transportation 2040 plan by action of the PSRC General Assembly in May 2012. These are either new projects which did not appear in the Transportation 2040 plan, or they were revised by the 2012 action. In either case, these new or revised projects are noted in the list below and in Appendix B.

- Complete the Alaskan Way Viaduct Replacement project
- Complete the new SR 520 bridge (six-lane option) plus other SR 520 improvements from I-5 to I-405
- Widen and improve the I-405 corridor
- Complete SR 167 corridor improvements in south King and north Pierce counties
- Begin work on the I-5 pavement rehabilitation project in downtown Seattle
- Complete SR 18 widening from Issaquah-Hobart Road to I-90
- Begin the SR 509 extension and I-5 improvements project (pending results of SR 509 tolling study)
- Begin work on I-5/SR 161/SR 18 Triangle improvements – Phase 1
- Complete a new interchange at SR 509 and SR 518
- Widen SR 522 from the Snohomish River to Monroe/US 2
- Complete the long-planned US 2 Monroe Bypass
- Complete improvements on SR 9
- **NEW PROJECT** – Replace existing I-5/SR 512 interchange with modern high-capacity interchange including HOV connections
- **NEW PROJECTS** - I-5 access and ITS improvements near Joint Base Lewis-McChord (JBLM) – new Dupont-Steilacoom interchange plus improvements at 41st Division Drive, Berkeley Drive, and Thorne Lane
- I-5 widening (HOV or HOT lane, auxiliary lane, frontage road) – Mounts Road to Gravelly Lake Drive
- Commence SR 704/Cross Base Highway project (completion scheduled for 2025)
- **NEW PROJECT** – SR 162 Widening - 96th Street East to Orting.
- **NEW PROJECT** – SR 16/Wollochet interchange – add new on-ramp and modernize interchange.
- Begin improvements to SR 3 in Kitsap County
- Commence improvements on the Mercer Street corridor
- Complete the planned Bel-Red Regional Connectivity projects
- Complete the remaining sections of the region’s core freeway HOV system (SR 167 in south King and north Pierce counties, I-5 in Tacoma, and SR 16 in Pierce County, from Gig Harbor to Purdy)
- Make investments required to support expansion of bus transit service (bus fleets, BRT lanes, BAT lanes, park-and-ride lots, transit centers/stations, signal prioritization, electronic fare collection, etc.)
- Expand the High Occupancy Toll (HOT) lane network as an interim step toward system tolling/pricing
- Begin two new passenger ferry routes: Seattle-Bremerton and Seattle-Southworth
- Identify funding and begin work to replace the Seattle Colman Dock and Mukilteo ferry terminals
- Make strategic investments in the walk and bike system, focused on improving access to transit facilities within regional growth centers
- Continue to make investments to support freight mobility. Complete remaining FAST projects.
- Building upon the Long Term Air Transportation Study (LATS), begin work to identify capacity solutions to meet the PSRC region’s long-range commercial airport capacity needs
- Advance a package of demand and system management strategies to improve system efficiency