Chapter 5: Regional Transportation

Introduction

Redmond has a two-part role in regional transportation. First, many of the city's transportation facilities are part of the regional travel network. Redmond's streets carry regional pass-through traffic in addition to serving local circulation and access needs. Second, Redmond has interests in and relies on regional transportation projects and services that are the responsibility of other public agencies, including the Washington State Department of Transportation (WSDOT), Sound Transit, and King County Metro. Redmond participates in regional transportation policymaking in a variety of settings, including standing committees (e.g., Eastside Transportation Partnership, King County Regional Transit Committee, and King County Growth Management Planning Council), task forces (e.g., the SR 520 Bridge Replacement and HOV Program, and I-90 Tolling), and representation on major regional transportation policy bodies (e.g., the Puget Sound Regional Council, Sound Transit Board).

This chapter identifies Redmond's regional transportation issues and interests, and the actions needed to support the Transportation Master Plan's (TMP) strategies to prepare for light rail, strongly support urban centers, increase travel choices and mobility, improve neighborhood access, and increase freight mobility. Examples include: supporting Sound Transit 3 planning to extend East Link light rail to Downtown Redmond; implementation of the SR 520 Multimodal Corridor Study, improving regional corridors and increasing access to Redmond's urban centers through better highways, streets, and trails; more effective transit connections between regional transit and jobs and housing, eliminating gaps in transit service between neighborhoods; and greater use of technology for the movement of people, freight, and goods. These actions also support the achievement of the City's vision.

The intent of this chapter is to support Redmond's elected officials, staff, and community members as they advocate for the city's regional transportation interests and build strong, effective regional partnerships. A regional transportation system that functions efficiently is critical to the economic vitality of Redmond and the region. After identifying the city's issues and interests in the next section, the chapter concludes with recommendations for advancing these as part of the TMP's Three-Year Action Plan.

Regional Transportation Issues and Interests

Redmond's key regional transportation issues and interests are contained in this section and are divided into the following issue areas: Corridors; Public Transit; Funding, Planning, Maintenance, and Security; The Environment and Sustainability; Parking; and Technology. The following table summarizes the TMP strategies supported by each issue area.

Table 1. Support for TMP strategies.

Issue Areas:	TMP Strategies:				
	Prepare for light rail	Support urban centers	Improve neighborhood access	Increase travel choices and mobility	Improve freight mobility
Corridors	X	X	X	X	X
Public transit	X	X	X	X	
Funding, Planning, Maintenance and Security	X	X	X	X	X
Environment and Sustainability		X		X	
Parking	X	X		X	
Technology		X		X	X

Corridors

Critical corridors that provide regional access to Redmond for commuters, residents, visitors, and movers of freight and goods include SR 520, I-405, I-90, and Eastside arterials. Regional trails along highways and in separate rights-of-way are also critical corridors that provide bicycle and pedestrian access to the city for commuters, residents, and visitors. Achieving Redmond's interests as described below would support all five TMP strategies.

SR 520

The 12.8-mile SR 520 corridor is Redmond's primary regional transportation connection linking the city with the University District and Downtown Seattle. SR 520 is a prime corridor for new development which will create high-paying jobs and help grow the state's economy. Redmond's adopted Comprehensive Plan accommodates significantly higher-density residential and employment growth along portions of the corridor.

Investments in the SR 520 corridor will improve travel comfort, reliability, safety, and transit connections. The investments include: the new SR 520 bridge, continuous high occupancy vehicle (HOV) lanes, new freeway lids, rebuilt interchanges, a complete bicycle and pedestrian trail, and increased transit service across the SR 520 bridge to complement tolling. The new SR 520 bridge (with some modifications) will be able to accommodate a future light rail alignment.

The state legislature set the cost of the SR 520 Bridge Replacement and HOV Project improvements at $4.65 billion (2009, excluding light rail). With $2.43 billion in secured funding for the new SR 520 bridge and Eastside improvements, the state is working to identify additional funding of $2.22 billion to complete planned

improvements in Seattle. Furthermore, funding will be necessary for projects identified in the SR 520 Multimodal Corridor Study discussed below.

Issues and Redmond's Interests

Complete funding for the SR 520 Bridge Replacement and HOV Project

Additional funding is needed to build the section of the project in Seattle between I-5 and the west approach to the new SR 520 bridge. Projects in this segment include additional vehicle lanes, a new SR 520/Montlake interchange, a bicycle and pedestrian trail, and arterial transit stops, some of which connect with the University of Washington Husky Stadium Central Link light rail station.

Complete and Implement the SR 520 Multimodal Corridor Study between I-405 and Avondale Road

Build identified projects over time including:

- The Overlake Access Ramp and Trail Connection at the SR 520/148th Avenue NE interchange and the remaining half of the SR 520/124th Avenue NE interchange in Bellevue to provide critical safety and mobility improvements.
- Grade separation of the SR 520 bicycle and pedestrian trail at NE 40th Street, NE 51st Street, 148th Avenue NE, and through the SR 520/I-405 interchange. This will significantly decrease conflicts between bicycles, pedestrians, regional transit service and vehicles; decrease delay for all modes; and improve access and connectivity to multiple job centers.
- Grade separation of the East Lake Sammamish Trail at the SR 520/SR 202 interchange. Completion of this trail would fill in the final missing link creating a continuous regional trail from Ballard to Issaquah around the north end of Lake Washington.
- Determination of the final design of the eastern terminus of the SR 520 corridor in Redmond.
- Related to this corridor study, the City supports additional engineering analysis to determine:
    - Timing of transition from 2+ to 3+ person use of the HOV lanes and their optimal location (inside or outside lanes).
    - Need for HOV direct access connections with the local street network.
    - How to efficiently and effectively manage traffic on the SR 520 corridor, especially through the SR 520/I-405 interchange.

SR 520 High Capacity Transit Plan

Implement the *SR 520 High Capacity Transit Plan*. A key element of this plan for Redmond's interests is the development of the Montlake Multimodal Center and the Evergreen Point Freeway Station (as part of the *SR 520 Bridge Replacement and HOV Project*). The Evergreen Point Freeway Station will become the main transfer point between the Eastside, Downtown Seattle, and the University District. The plan states that good transfer connections, including rider amenities, such as real-time bus arrival information, high service levels, and a well-designed transit station at Evergreen Point Station, are necessary for quality transit service.

Future high capacity transit in the SR 520 corridor

Support Sound Transit's study of Link light rail transit between Redmond, Kirkland, and the University District as identified in Sound Transit 2.

I-405

While Redmond's primary regional transportation connection is the SR 520 corridor, the City supports continued implementation of the *I-405 Corridor Program* approved in 2002. The $10.9 billion (2002) plan calls for a range of both transportation capital projects and services for the 30-mile corridor between Renton and Lynnwood, including: adding up to two new lanes in each direction; developing a BRT line with stations and expanded transit centers; improving key arterial streets; creating 1,700 new vanpools; building 5,000 new park and ride spaces; building eight new bicycle and pedestrian crossings over the freeway; and increasing local transit service by up to 50 percent.

As of 2012, over $1.5 billion in projects have been completed in Kirkland, Bellevue, and Renton. These include construction of auxiliary and general-purpose lanes, braided ramps at the I-405/SR 520 interchange and a new I-405/NE 10th Street Bridge. Further projects are under review, and projects on SR 167 (through Kent and Auburn) and SR 512 (between Puyallup and Tacoma) are under consideration as additions to the *I-405 Corridor Program* paralleling I-5.

Issues and Redmond's Interests

Fund I-405 Corridor Program projects and services

Support continued funding of planned corridor projects and services that provide critical mobility and safety improvements. Ensure that planned projects bring I-405 up to current environmental standards. Support Sound Transit 2 (ST2) study of bus rapid transit in the I-405 corridor to examine service and capital improvement needs and identify opportunities to enhance service and connections to Redmond. Of particular importance is a funding plan that allows for planning, designing, and constructing a complete interchange at I-405 and SR 520 which is currently a current bottleneck for HOV, transit, and general purpose traffic on SR 520.

Freeway-to-freeway HOV connections where strategically needed

Full freeway-to-freeway HOV connections, particularly in the critical SR 520/I-405 interchange area, carry significant expense and would have major visual impacts on surrounding neighborhoods. These connections should be considered and compared to other capital improvements and prioritized in light of other needs.

I-90

As part of the Sound Transit East Link Project, the existing I-90 two-way HOV lanes will be relocated to the outer roadways in both directions between Seattle and Bellevue. This will allow the East Link light rail alignment to be located in the center roadway. In another section of I-90 between Bellevue and North Bend, WSDOT completed the *I-90 Bellevue to North Bend Corridor Study* to identify short- and long-term projects to address safety and mobility over the next 20 years. I-90 is not only the state's key east-west corridor connecting western and eastern Washington, it is also identified in ST2 as a study area for the future extension of high capacity transit between south Bellevue and Issaquah.

Issues and Redmond's Interests

Implementation of ST2

Support relocating the I-90 two-way HOV lanes to the outer roadways and construction of the East Link light rail line in the center roadway.

Improvements to I-90 east of Bellevue

Support consideration of a potential future high capacity transit line between Seattle and Issaquah as part of a subsequent phase of the Sound Transit Link light rail system. Support identification and consideration of funding for projects yet to be identified that improve highway, transit, HOV lanes, freight operations, and projects that increase seismic safety and reduce natural hazards (landslides).

Tolling

Support concurrent tolling of I-90 and SR 520 to fund capital improvements, manage traffic operations to reduce congestion, and minimize diversion of traffic to other highways and arterials.

Eastside Arterials

In addition to the SR 520, I-405, and I-90 corridors, Redmond's arterials also provide connections between the city and regional destinations, especially to east King County and Snohomish County. Arterials such as Willows Road, Redmond-Woodinville Road, and Avondale Road are used by drivers as alternatives to congested highway corridors such as I-405. Other Redmond arterials are significantly impacted by regional pass-through traffic. These include 148th Avenue NE, Bellevue-Redmond Road, Union Hill Road, West Lake Sammamish Parkway NE, and many streets in Downtown Redmond and Overlake. Residential neighborhoods are adjacent to most of these streets, and many streets pass through important local commercial areas. For Redmond the challenge is ensuring that arterial corridors are well-designed and compatible in scale with the City's land use and community character goals.

Issue and Redmond's Interest

Manage access to and through Redmond

The City does not believe it can or should mitigate continued traffic growth from suburban and rural areas in east King County, particularly those outside the urban growth area boundary. Continuous expansion of Redmond's arterials to compensate for an insufficient network of regional roadways outside Redmond is detrimental to the city's community character and quality of life. For this reason, Appendix D calls out the maximum number of traffic lanes for each corridor beyond which the local street arterial system will not be widened. The City supports limited expansion of local streets and highways to accommodate regional traffic, consistent with the Buildout Plan.

Regional Trails

The TMP's street, bicycle, and pedestrian modal plans identify how Redmond plans to provide for the access, circulation, and mobility needs of bicyclists and pedestrians. The modal plans identify connections both as part of the street network and as separate trails that connect local and regional destinations. Existing regional trails in and around Redmond include the Sammamish River Regional, East Lake Sammamish, Tolt Pipeline, Redmond/Puget Sound Energy, Bridle Crest, SR 520, Evans Creek, and Bear Creek trails.

Issues and Redmond's Interests

Redmond Central Connector

The City is currently developing the Redmond Central Connector, a multimodal corridor within the former BNSF right-of-way through Downtown Redmond and along Willows Road. The Central Connector provides a link to local and regional parks and trails, accommodating existing and planned City and regional public projects. The

City's interest is that the Redmond Central Connector includes the following features consistent with the adopted master plan:

- Extend to the north city limits and tie in directly with BNSF trail/Kirkland cross town corridor
- Pedestrian-oriented connection that accommodates bicycles in Downtown and a bicycle-oriented facility outside of Downtown that links to the Bear Creek and East Lake Sammamish regional trails to the east and the Sammamish River Trail to the west in the near term, eventually extending north to NE 124th Street and tying into the Cross Kirkland Corridor.
- Access to park space that activates Downtown, providing opportunities for art and community engagement.
- Existing and future utility easements by Puget Sound Energy, Cascade Water Alliance, and King County.
- The City's regional stormwater trunk line, low impact development infiltration opportunities, and accommodation for other existing and proposed City utilities.
- Planned north-south street crossings and bicycle and pedestrian connections to be developed by the City and private developers.
- The extension of East Link light rail to the terminus at the proposed Downtown Redmond Station.

Bicycle and pedestrian connections between Redmond and Seattle

The *SR 520 Eastside Transit and HOV Project* will extend the SR 520 Trail for bicyclists and pedestrians to connect with the new SR 520 bridge and Montlake interchange. However, a portion of the trail in Bellevue is located outside the SR 520 right-of-way, on circuitous arterial streets around the SR 520/I-405 interchange. The City supports a direct connection of the trail within the SR 520 right-of-way through the SR 520/I-405 interchange. In addition, the City supports full grade separation of this important regional trail from Redmond to Seattle including 148th Avenue NE, NE 40th Street, NE 51st Street, and Leary Way. These grade separations are also included in the SR 520 Multimodal Corridor Recommendations.

Safety for bicyclists and pedestrians

Ensure that bicycle and pedestrian facilities located on city streets, in separate alignments and connecting to freeways, are well marked and safe. Grade separate regional trails crossing arterial streets to reduce conflicts between vehicular traffic and bicyclists and pedestrians. In addition to the SR 520 Trail, grade separate East Lake Sammamish Trail through the SR 520 and SR 202 interchange and where it crosses over Bear Creek.

Public Transit

Public transit connects Redmond residents, jobs, and visitors with the rest of the region, operating on local streets and regional corridors to provide mobility and access for people to get to a variety of locations. Transit also provides walking and biking access to regional trails and local paths that are adjacent to or within a short walk of bus routes.

In Redmond, driving and transit are two key travel options. Should someone choose to drive from Redmond to Downtown Seattle, the trip route is typically by way of the SR 520 freeway, which is relatively open except during congested morning or afternoon rush hours. However, should one choose to travel by bus, the trip can become more complicated; transit options range between limited (only during morning and afternoon peak hours) to frequent all-day service, with access to transit routes varying by neighborhood. Transit riders may have a one-seat ride, or may need to drive or transfer to other bus or rail lines to reach their destination. As

identified in the *Comprehensive Plan* and TMP Strategies, Redmond needs transit service that is competitive in terms of travel time, reliability, comfort, and convenience with driving.

The Transit section of the TMP identifies issues and interests that are focused on improving transit service to more effectively meet the mobility needs of the community consistent with four TMP strategies: preparing for light rail, support for urban centers, travel choices and mobility, and neighborhood access. General transit issues and interests are identified next and are followed by two subsections that do the same in relation to transit services provided by King County Metro Transit and Sound Transit.

General Transit Issues

Transit services must:

- Provide very frequent all-day service and connections that are necessary to support the Downtown Redmond and Overlake urban centers. These urban centers are focal places for jobs and housing and are where additional residential and employment growth will be concentrated. Frequent service from downtown Redmond and Overlake to downtown Bellevue and downtown Seattle also helps to prepare for future light rail service that will serve the same travel market.
- Connect Redmond's neighborhoods to urban centers and urban centers to the region with frequent all-day service. Connections such as these support the community by creating real travel choices.
- Be designed to close critical service gaps where service is missing or infrequent and where there are poor first mile/last mile connections and circulation among neighborhoods. For example, there is no first mile/last mile connection between regional transit serving the Bear Creek Park and Ride and surrounding jobs and housing. There are no connections between the Education Hill and Bear Creek neighborhoods, particularly along Avondale Road.
- Support transfers to frequent regional service by minimizing wait time between routes.
- Be based on a network of direct and frequent transit corridors, with fewer off-route deviations (for example, Route 930 along Willows Road) creating a simpler, more understandable system of origins and destinations.

Transit supportive capital improvements must:

- Improve transit access, speed, and reliability. This includes funding and construction of HOV access lanes that connect Redmond streets to SR 520 and arterial HOV access lanes, where necessary and effective, to allow transit and high occupancy vehicles (HOVs) to avoid congested areas while accessing SR 520. In Overlake these connections should emphasize transit access to HOV lanes near the SR 520/NE 40th Street and SR 520/NE 51st Street interchanges. In Southeast Redmond, the emphasis should be on both transit and HOV access in the SR 520/SR 202 interchange areas.

King County Metro Transit

On July 12, 2011, the King County Council approved the *Strategic Plan for Public Transportation 2011-2021* (Strategic Plan) and the *King County Metro Service Guidelines* (Service Guidelines). The Strategic Plan identifies Metro's transit vision, mission, goals, objectives, strategies, and a performance measurement system. The Service Guidelines are intended to allow Metro to manage the transit system and make decisions about expanding and reducing service based on productivity and determine if revisions to transit service are necessary.

The Service Guideline's focus is on managing the transit system by establishing target service levels for transit corridors based on productivity, social equity, and geographic value. However, the 2011 Metro Service Guidelines understate the transit needs on the Eastside. They do not identify all of the transit service needs today nor in the future, result in service to meet these needs, or identify service to address growth. In addition, allocation of Metro transit service in the current period of declining revenue could result in an estimated 27 percent decrease in Metro service to Redmond, which could significantly decrease service levels.

Issues and Redmond's Interests

Metro Transit service

Overall, the City's interests with respect to Metro Transit are to achieve an interconnected transit network on the Eastside between urban centers, neighborhoods, and the regional transit spine. More specifically, this includes:

- Frequency of service to/from and within urban centers, such as between Overlake and Kirkland, Overlake and East Bellevue, and an express connection between Downtown Redmond and Bellevue.
- Connections from neighborhoods to urban centers and the regional transit spine by, for example, maintaining local service that connects to neighborhoods such as Education Hill and Idylwood, providing all-day service for neighborhoods such as Willows, and filling gaps in service where none exists today, such as portions of Education Hill, Idylwood, North Overlake, and Southeast Redmond.
- Implementation of alternatives to fixed route service, such as Dial a Ride Transit, or other innovative lower cost services, as an integral part of a comprehensive transit system:
    - Less productive fixed route service (local/hourly) may be candidates for alternative transit service;
    - Areas where service is not provided today may be candidates for alternative transit service;
    - Alternative transit service pilot projects are implemented and lessons learned are used to develop and incorporate alternative services into the transit system operated by Metro Transit;
    - Alternative transit services and performance measures are incorporated in decisions to allocate service throughout the transit system in all funding scenarios, not just when revenue is growing.
- Balance between existing needs and needs resulting from growth:
    - Add service for all service addition priorities, and not in order of Service Guideline priorities. Service added for growth cannot occur only after the other priorities have been met;
    - Identify transit service that is necessary to serve growing employment and residential areas in Redmond and the Eastside;
    - Update the Service Guidelines to reflect, rather than understate, Redmond's transit needs in terms of service hours, frequency, and geographic coverage.
- Collaboration with Metro to improve transit planning and operations:
    - Address gaps in service, including the lack of first mile/last mile connections, between regional transit routes, and connections to jobs and housing;
    - Value actions jurisdictions have taken, or will take, to create transit-friendly environments;
    - Expand transit partnerships and coordination with jurisdictions and their plans for growth;

- Continue stakeholder involvement, including development of solutions and service refinements;
- Support development of a Metro long-range plan for transit service, in addition to near-term changes.

Transit supportive capital improvements

- Continue to identify local improvements that improve transit speed and reliability.
- Work to improve access to transit through development of patron loading and unloading zones, implementation of parking management techniques, and potentially development of small-scale leased park and ride lots.
- Support development of a park and ride facility in north Sammamish to increase transit access for those in east King County to help reduce the high level of demand on Redmond's existing park and rides.

Transit revenue

Ensure that there is a fair balance between transit taxes collected from Redmond and the Eastside, and transit service provided.

The following table lists the King County Metro reports and plan updates to be delivered between 2012 and 2015 and the issue areas to be addressed. These reports and plan updates are one of the ways in which the City can pursue its interests both by City staff participating in the various working groups and through elected officials serving on regional transportation boards and committees.

Table 2. King County Metro Transit Reports and Plan Updates, 2012-2015.

Action	Due
Annual Service Guidelines Report Corridors analyzed-All Day & Peak Network ▪ Over- and under-served corridors ▪ Route performance ▪ Changes since last reporting period ▪ Connectivity with other transit providers ▪ Potential changes to Strategic Plan and Service Guidelines	Annually on March 31
Strategic Plan & Service Guidelines Update ▪ Adoption of updates to the Strategic Plan & Service Guidelines ▪ The 2013 Update at a minimum includes: o Changes that may be necessary to achieve the 5-Year Implementation Plan, and o Changes necessary to address the results of the collaboration process focused on the methodology for adding service ▪ The 2015 Update - re-adopt or address unanticipated issues	Annually on April 30

Alternative Service Delivery: Five-Year Implementation Plan ▪ Review of best practices ▪ Stakeholder involvement ▪ Constraints ▪ Recommendations ▪ Local service needs ▪ Costs/benefits of options ▪ Strategies to build ridership ▪ Timeline	June 15, 2012 (Informs the April 30, 2013, Strategic Plan and Service Guidelines Update)
Refine guidelines methodology ▪ Incorporate input from local jurisdictions ▪ Factors, methodology, and prioritization of service additions ▪ Align factors used to serve/connect centers in All-Day & Peak Network ▪ Additional service priority for centers	October 31, 2012 (Preliminary Report) The final report is part of the April 30, 2013, Strategic Plan and Service Guidelines Update
Biennial Report on Strategic Plan Performance Measures (KC Ord. 17143, Section 5) Review of performance measures of objectives, strategies, and peer comparisons	March 31, 2013 and 2015 (Part of the Annual Service Guidelines Report)

Sound Transit

On November 4, 2008, voters approved *Sound Transit 2* (ST2), a $17.8 billion[1] rail and bus expansion of the regional transit system. The Eastside's share of ST2 includes $6.4 billion to build the East Link light rail line between Seattle, Bellevue, and Redmond-Overlake, add approximately 49,000 hours of regional express bus service, and add parking and transit facilities. ST2 also funds three planning studies of future light rail connecting Redmond, Kirkland, and the University of Washington (in the SR 520 corridor), future light rail connecting South Bellevue to Issaquah, and development of bus rapid transit service in the I-405 corridor.

While ST2 did not fund construction of East Link light rail between Overlake and Downtown Redmond, funding helped identify light rail alignments, station locations, and to conduct preliminary environmental review in the likelihood that this connection would be included in the next phase of regional transit investments.

Consistent with the TMP strategies, the City should advocate and work with Sound Transit for regional transit improvements service described below.

[1] Year of expenditure, 2009-2023, including inflation.

Issues and Redmond's Interests

Extension of the East Link Project to Downtown Redmond

Complete East Link Project between Overlake and Southeast Redmond and Downtown Redmond (Segment E) by 2030. Support continued work on the design of this segment and seek funding for its construction as part of the next phase of high capacity transit investments.

Final design, permitting, and construction of the East Link Project

Continue to work with Sound Transit to ensure that the East Link Project is designed to be consistent with *Redmond Comprehensive Plan*, *Redmond Zoning Code,* and other City development regulations. Work to ensure that project delivery is consistent with the ST2 plan approved by voters and that East Link service to Overlake begins in 2023.

Overlake Transit Center Station

As the interim terminus of the East Link Project (Segments A through D), the Overlake Transit Center Station has the potential to draw significant vehicle traffic into Overlake from those seeking access to the East Link light rail service. The City's interest is to discourage additional vehicle traffic in Overlake by supporting bicycle, pedestrian, and transit access to the Overlake Transit Station. Early development of the East Link Southeast Redmond Station and the planned 1,400-space parking structure, with frequent direct bus service connecting to light rail at the Overlake Transit Center Station, could mitigate some traffic impacts by drawing traffic from Sammamish and east King County away from Overlake.

Overlake Village Station

Secure complete funding to build a pedestrian/bicycle bridge across SR 520 to connect the Overlake Village Station with employment and housing.

Regional Express Bus Service

Regional Express Route 566 (between Overlake, Downtown Bellevue, Renton, Kent, and Auburn) should be extended to Downtown Redmond in preparation for the extension of light rail north from Overlake, to support the Downtown Redmond urban center. With the arrival of East Link to Overlake, direct express bus service, Route 545 or equivalent, between Downtown Redmond, Southeast Redmond, to destinations in Seattle via Overlake along SR 520 needs to be continued. These connections will be critical to support growth and regional travel needs to and from these neighborhoods, and to address traffic impacts due to the interim terminus of East Link at the Overlake Transit Center Station

Funding, Planning, and Maintenance

Redmond relies on regional, state, and federal funding leveraged with local funds to provide transportation programs, projects, and services (see Chapter 7 - Transportation Facilities Plan, for more details). Adequate funding is threatened by unreliable and declining revenue sources (e.g., gas taxes paid per vehicle mile of travel will continue to decline as more fuel efficient vehicles and electric vehicles replace older vehicles). To meet the funding challenge, additional stable local, regional, state, and federal revenue sources are needed to build and maintain regional transportation facilities. One of the keys to successfully achieving funding is to have Redmond's *Comprehensive Plan* and the TMP in alignment with the Puget Sound Regional Council's (PSRC) *VISION 2040* and *Transportation 2040* that guide the four-county region (King, Pierce, Snohomish, and Kitsap). This alignment helps Redmond to successfully compete for regionally distributed federal grant funds

that are leveraged with City and private funding to pay for regionally significant improvements such as the NE 36th Street Bridge in Overlake completed in 2011.

The issues and interests in this section primarily support three TMP strategies: support for urban centers, improving neighborhood access, and improving freight mobility.

Issues and Redmond's Interests

User fees

Existing user fees, such as ferry and bus fares, help support the state ferry system and public transit. Truck weight fees are a traditional street and highway funding source and have been in place for many years. However, new applications of user fees, also called value pricing, road pricing, and, more commonly, tolling, are already playing a greater role in raising transportation revenue. New variable tolls are providing revenue to construct the new SR 520 bridge. As part of the 520 Tolling Implementation Committee's report to the state legislature in 2009, tolling of both the SR 520 and I-90 bridges was considered. The legislature authorized tolling of the SR 520 bridge and will be studying I-90 in 2013 and 2014.

The City supports tolling of regional transportation corridors including SR 520 and I-90 to improve and balance traffic flows across Lake Washington in addition to raising revenue, and should support the use of toll revenue to help meet increased demand for transit. Tolling and user fees for freeways and regional arterials in the central Puget Sound region are important strategies contained in the adopted PSRC *Transportation 2040* plan. These strategies help to pay for improvements, maintenance and operations, and help make transit and carpooling more convenient and cost competitive (see also Parking below).

State and federal revenue

Both PSRC and WSDOT are involved in planning and funding regional transportation facilities and connections that serve Redmond. It is important that Redmond work directly with agency staff and elected officials at the regional, state, and federal level to ensure that Redmond receives funding from federal and state sources for transportation improvements that support the City's mobility, access, and circulation needs.

Maintenance

Increasingly there is recognition that the transportation system, particularly streets, highways, and bridges, needs to be adequately maintained. The City recognizes this need and supports greater funding for maintenance and replacement of transportation facilities due to age and hazards arising from human and natural causes including:

- Ongoing maintenance and repair of regional trails, arterials, highways, and bridges.
- Resurfacing travel lanes and trails and ensuring that bridges have adequate earthquake structural support. In Redmond, this includes arterial bridges crossing the Sammamish River at Redmond Way, NE 85th Street, NE 90th Street, and NE 116th Street.
- Federal and state planning for a safe and secure transportation system, participation in regional emergency management planning and community preparation for catastrophic disaster and smaller emergency situations.

Environmental Sustainability

The City can take further action to advance environmental sustainability goals by supporting alternative sources of energy for motor vehicles and reducing pollution generated by our current transportation system.

Development of alternative energy sources for motor vehicles can reduce petroleum dependence and pollution, leading to a healthier and more sustainable future. The transportation system currently uses 71 percent of all petroleum consumed in the U.S., and 95 percent of the transportation system is powered by petroleum. Growth in vehicle miles of travel in Washington has far outweighed the state's population growth. Between 1980 and 2008, Washington's population grew by 60 percent from 4.1 million to 6.6 million, while vehicle miles of travel grew 92 percent, from 28.9 to 55.6 billion miles per year in the same time period.

In terms of pollution, the transportation system is the source of 45 percent of greenhouse gases generated in Washington, significantly higher than the national rate of 28 percent. Surface water runoff is the leading pollutant in regional waterways, affecting Puget Sound, Lake Washington, Lake Sammamish, and the Sammamish River. Regional transportation projects such as the *SR 520 Bridge Replacement and HOV Project* and the *I-405 Corridor Program* incorporate improvements that minimize water runoff impacts and are good examples of the environmental benefits of planned regional transportation facilities.

The issues and interests below support two TMP strategies: support for urban centers and increasing travel choices and mobility.

Issues and Redmond's Interests

Alternative Fuels

Fund and actively support locating, permitting, and constructing facilities that provide energy to alternative fuel vehicles.

Air quality improvements

Reduce pollution from ozone and particulates in addition to greenhouse gas emissions. The City can leverage its infrastructure investments that improve air quality by seeking public and private sector partnerships. For example, the City supported the early development of infrastructure for the delivery of alternative non-fossil fuels, such as recharging stations for electric vehicles, as a way improve air quality.

Water quality improvements

Improve the management of surface water quantity and quality in conjunction with transportation investments and by seeking public and private sector partnerships. For example, the City is working with Sound Transit and property owners to develop a regional stormwater retention/detention system in Overlake in coordination with the Sound Transit East Link Project.

Parking

Developing and managing parking in Downtown Redmond and Overlake, including parking pricing and location, is necessary to provide effective access and mitigation of traffic impacts in neighborhoods surrounding planned East Link light rail stations. The parking issues and interests below support three TMP strategies: preparing for light rail, support for urban centers, and increasing travel choices and mobility. Parking pricing is also supported regionally in the PSRC *Transportation 2040* plan and combines with regional tolling to encourage more travel choices by transit, carpooling, walking, and biking.

Issues and Redmond's Interests

Access to light rail service

Redmond's Downtown and Overlake urban centers are characterized by dense, mixed land uses connected by a multimodal transportation network. Consistent with the urban character of these places, primary access to East Link light rail service will be by pedestrian, bicycle, and bus connections rather than driving.

Locating future parking facilities

Locate future parking facilities in lower density areas outside Redmond's urban centers where vehicular traffic and access to transit is better accommodated. A park and ride facility in Southeast Redmond will improve access to light rail service from the surrounding lower density suburban and rural areas of Sammamish and east King County.

Accommodating demand for park and rides

To support increasing demand for existing park and rides, parking management techniques, and strategies that provide alternatives to parking, such as improved local transit, first and last mile services, or designated pick-up and drop-off areas, should be implemented.

Technology

New technology is available to improve mobility and manage the regional transportation system and provide travel time information to drivers, transit riders, bicyclists, and pedestrians. The City can effectively promote technology through policies, codes, and other actions that support better management of regional highway, transit, and trail networks. Technology issues and interests primarily support three TMP strategies: support for urban centers, increasing travel choices and mobility, and improving freight mobility.

Issue and Redmond's Interest

Improve the efficiency of the regional transportation:

Apply Intelligent Transportation System (ITS) strategies to manage congestion, increase travel reliability, and provide travel information for transit, traffic incidents, and alternative travel routes:

- Integrate traffic signals, transit preemption, alerts on electric signs, and navigation systems on local and regional arterials.
- Study the extension of automated traffic management (ATM) systems for the region, beyond use on freeways, but also for transit and arterial operations.

Implementation

Implementation actions are to annually review the TMP Regional Transportation Chapter to:

- Maintain a current list of City issues and interests based on the most current local, regional, and state transportation policies and legislation.
- Ensure that the chapter is coordinated with the City's annual legislative agenda.

A complete update of the chapter will be provided with each update to the TMP.